A Practitioner's Guide to Establishing Effective Resource Programs



SERVICE LEADERSHIP COLLABORATION EXCELLENCE

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Overview

Certified special education teachers who are assigned to a resource program have the responsibility of meeting the individual needs of the students on their assigned caseload. Resource program teachers will support their caseload students by:

- monitoring the delivery of programs and services
- monitoring student progress of academic and behavior goals and objectives
- designing individualized instructional needs of each student according to Individualized Education Programs (IEPs) requirements

The special education teacher assigned to the resource program will wear many proverbial instructional hats that may range from:

- Conducting individual to group direct instruction
- Developing supplemental instruction
- Providing skill remediation and tutorial supports
- Teaching required core subjects that they are qualified to teach
- Consulting with general education instructional and administrative staff on behalf of needs of the assigned caseload.

"Knowledge is power, but enthusiasm pulls the switch"

— Ivern Ball

By Michigan Rule, the Role of the Resource Program teacher is defined as...



Michigan Administrative Rules for Special Education (MARSE) R 340.1749a Elementary level resource program

(1) (a) Provide direct instruction to students on the resource teacher's caseload and may assign grades or other evaluative measures for this instruction. (b) Provide support to the general education classroom teachers to whom special education students on the resource teacher's caseload have been assigned. Time shall be allocated to the resource teacher to carry out this responsibility. 3) The elementary resource program teacher may provide supplemental instruction to students on his or her caseload. (4) The elementary resource teacher may evaluate general education students within the same building who are suspected of having a disability and, therefore, may serve on the initial multidisciplinary evaluation team.

MARSE R 340.1749b Secondary level resource program

(1) (a) Provide direct instruction for special education courses approved for graduation by the local educational agency. The teacher may assign grades or other evaluative measures for this instruction. (b) Provide support to the general education classroom teachers to whom special education students on the resource program teacher's caseload have been assigned. Time shall be allocated to the resource teacher to carry out this responsibility. (3) The secondary resource teacher may provide supplemental instruction to students on his or her caseload who are enrolled in general education classes. The teacher shall not teach a class and offer tutorial assistance at the same time.

Overview—continued

The workload of the special education teacher assigned to the resource program is extensive. The intent of this document is to provide assistance by outlining a framework to support the resource program teacher in designing and delivering intensive and effective instruction services. The information presented is grounded in special education rules, regulations, best practices, and current research that will support the resource program teacher's broad knowledge about common deficits in today's classroom and the instructional approaches/strategies that works for each. In addition, this framework will help in the facilitation of both the delivery of research based strategies that are aligned with each caseload student's cognitive abilities and points of entry for learning that will ensure skill development and academic success. Once studied and used, it is the intent that resource program teachers will reflect on and refine their approaches to delivery of specialized instruction, services, and supports.



Universal Design of the Resource Program

(Common threads that can be shared by all districts)

Special education programs and services are an integral part of the total educational system within any school district and it is not intended to become a separate system outside of that community of learning. The specific function of special education within the school is to fulfill the unique educational needs of children who are eligible for programs and services and effectively fulfilling those required needs as written in a student's individualized education program. It is also important to note that it is the duty of both the **general and special education school staff** to play an equal role in meeting those educational needs. One vehicle to bridge these supports is known as the special education resource program.

The resource program is intended to support the individualized needs of a student with a disability. It is for the student who qualifies for some form of specially designed instruction and accommodations in an individualized, small, or large group setting for a portion of the day or week. These individual needs are not cookiecutter, but defined by each individual student's IEP. For illustration purposes and to provide clarification, a student's IEP may state that a minimum of 3 hours a week is required to support the individual student's academic or behavioral needs. The special education teacher (s) may determine that the best approach to servicing the needs of this student will be delivered in time increments of 45 minutes four (4) times per week within the general education ELA classroom and pull-out times within the special education resource program/ room.

Sometimes this form of support is called:

- **Pull-out:** Support delivered to the student by the resource program teacher outside of the general education class. This support is primarily used for direct instruction.
- **Push-in:** Support delivered to the student by the resource program teacher within the general education class. This support model is mostly used for supplemental supports, accommodations, or direct instruction via co-teaching.

These types of supports ensure that students with disabilities are educated and serviced in the least restrictive environment (LRE). The selected method of delivery used will vary on the developmental readiness of the student, the demands of the coursework and the recommendations of general and/or special education teaching staff. Generally, effective resource programs provide a combination of both pull-out and push-in methods.



Organizing a Resource Program

Setting up the physical structure of your building level resource program is not a personal choice. The overall design of the setting must be based on the academic and behavioral needs of the current student population. In general, most resource programs may be designated to a space within a building that mimics the same setup of any general or special education self-contained classroom. Traditionally, this means having a teacher's desk/chair with desks for students to complete their academic tasks. The resource program's setting needs to be multi-faceted and in support of the learning and instructional needs of the students it serves. The following are several classroom layouts that one can consider:

1. Station Oriented Areas

In this model, the room arrangement is divided into stations that contain specific content area materials. For example, there might be a reading center, math center, computer center and writing center etc., in which specific children go to work on their IEP goals.

2. Whole-Group and Small-Group Teaching and Learning Area

In this model, the resource program setting has defined areas for whole-class teacher lead lessons/ activities. This room arrangement will also have specific areas for small group instruction, and student-led gathering areas for the continuation of general education course discussions or collaborative learning experiences/projects.

3. Reading & Writing Areas

This is a place for students to read or write independently or with a partner. It should provide comfortable seating, a variety of books, and a quiet, secluded atmosphere.

4. Testing Area

Many of our students' IEPs require extended time on testing and other reading/writing activities, this area will provide the quiet space needed to satisfy this obligation. When designing this space, be mindful of its proximity to entry/exit doors. Many effective resource programs will design this area in the back of the room.

The resource program setting must also include materials to support the learner's access to the general education curriculum. The following are items that effective resource program settings display:

- Textbooks in accessible forms (CD, Web base, Large-print, Braille, etc.)
- Posted visuals of test taking strategies
- Posted procedures for obtaining supplemental supports from the teacher
- Design an accessible area for supplementary materials such as graphs, dictionaries, organizers, calculators, rulers, etc.

Once areas for learning have been created, the resource program teacher will need to establish procedures for:

- obtaining and maintaining copies of each general education teacher's class syllabus that outlines pacing of required tasks and expectations for participation, homework, projects, etc.
- monitoring student attendance and participation in resource program services
- monitoring general education assignments and progress

Maintenance of Student Records

Student records must be updated regularly and confidentiality must be maintained. Resource program teachers will need to establish a record keeping system that honors confidentiality, but allows access by other relevant staff who will be responsible for the delivery of services as identified in the IEP. The following is a list of what minimally needs to be in the official file:

- Current IEP
- Most Recent Evaluations
- Most Recent REED
- Service Logs
- Current Class Schedule
- Current Grades
- Current Progress Reports
- Accommodations Log

Note: Resource program staff may also include in the student file logs of parent communications, general education staff correspondence, and classroom observation notes for academic or behavioral planning.



Communication, Collaboration, and Consultation

Communication, collaboration, and consultation between special and general education teachers are the strongest feature of the resource program. The resource program that embraces open communication, collaboration that leads to a team approach to servicing students, and consulting on academic and behavioral outcomes with educational peers, will create an optimal academic, social, and behavioral environment that will translate into successful educational experiences for both students with disabilities and their general education teachers.

Parent involvement and communication is also a valued component of the resource program. When parent/ teacher relationships are established and fostered, the students benefit via improved academic and behavioral success. Relationship building with parents/guardians may begin by addressing these essential questions:

- 1. What are the expectations for studying and learning this year?
- 2. What will the child's daily schedule look like?
- **3.** How much and what kinds of homework will the child have from general/special education classes?
- **4.** What can parents do to support their child's learning at home?
- 5. How can parents help at school?
- 6. What's the best way for us to communicate?
- **7.** What information can parents share with you to help you better understand their child?

Defining the Supportive Role of the Resource Program

One factor that may need to be explored is defining the role of the resource program general education staff at the building level. Requesting time from the building level administration to define the purpose of the resource program may be needed during the beginning of each academic year. The following is an illustration that may be used as a tool in supporting you in defining the resource program purpose to your educational peers.

The Resource Program: A Service, Not a Place		
It is	It is NOT	
A service where the resource program teacher modifies and accommodates instruction and develops aligned supplementary materials needed to support the general education standards and expectations. Materials may consist of, but are not limited to, the following: study guides, notes, visual charts, vocabulary builders, etc.	A service where the resource program teacher develops an alternative curriculum/standards in lieu of the general education curriculum expectations.	
A direct instruction environment, in which remedial and tutorial supports are provided as needed or defined by the IEP	A place where the student can escape the demands of the general education setting	
An eye-catching learning opportunity where the general education curriculum is used and valued, but doesn't attempt to duplicate or replace the authenticity of the general education setting.	A detention center, a place for crisis intervention, or a study hall.	



Resource Program Schedules: A Template to Consider

In order to begin to map out the work that will need to be done, the teacher assigned to the resource program will need to engage in the following tasks:

- Review the individual academic and behavioral needs of the students assigned to the resource program
- Select the appropriate instructional and noninstructional tasks that are necessary to fulfill the goals/objectives, supplemental aids, and services of each student's IEP

Once the above tasks are completed, it's time to develop actual schedules of support that will work as a blueprint for building structure, consistency, and accountability for the implementation of each student's IEP. The resource program teacher will need to collect information from multiple sources. It is important to review and have copies of the following data:

- Copy of the students' most current IEPs. This will determine what services are required to be provided. Develop a chart that indicates the duration and frequency of those services. Your required service logs must align with those IEP services. Doing so will serve as documented proof of the delivery of each service.
- Copy of the students' related service providers and their service schedules (SSW, PT, OT, SLI, etc.). Your service provider roster should include the dates, times, and services to your students that will be provided.

- Copy of any general education teacher's schedule with whom the students will be assigned to that includes the subject and hour/ time of the class. This will allow resource program teachers to plan for push-in and pull-out supports. This data may be used as a determining factor when the assignment of a co-teacher is needed.
- Create a list of subjects that will need to be taught via the resource program. This roster will be based on the total number of students in need of specially designed instruction for deficit areas in ELA and Math.

Once all data has been collected and reviewed, it's time to design the foundation for delivery of services. Most resource program teachers will develop three different types of schedules that they will utilize to support students' success. These schedules should be posted or placed where they are easily accessible for implementation and viewing by administrators and/or other relevant staff.





Schedule Types

Daily/Weekly Resource Program (Room)
 Schedules

This schedule shows the activities that will happen during the course of the academic day within the boundaries of the resource program. Schedules should be posted and visible for visitors/students. Activities can be identified as academic support, direct instruction periods, tutoring/remediation, extended time for tasks/projects, tests. Anyone should be able to tell what subject or activity will be occurring by looking at this schedule. The daily resource program schedule shows the flow of the activities within the room for that specific day or week. (Schedule items may include: Co-teaching assignments, direct instruction, IEP meetings, consultation meetings, etc.).

• Special Education Teacher Assignment Schedules

These schedules are needed so building-level staff members know the location of the special education teacher at any given time of the day. The benefits of this schedule support the awareness of which students will be working directly with the resource program teacher and where that instruction will take place. (Schedule items may include: co-teaching assignments, direct instruction, IEP meetings, consultation meetings, etc.).

Individual Student Schedules

Special education teachers must know the whereabouts of each of their students in order to ensure that the required components of the IEP are being implemented. These schedules should include class/subject, time and location, and general or special education teacher's name. Student schedules should also include the student's Individualized Education Program information such as required supplemental aids, duration and frequency of services by type (Resource, OT, SL, etc). It is important to note that not all of your students' schedules will look alike due to their individual needs. Elementary students may have just one or two general education staff that the resource program teacher must collaborate with. While secondary students may have up to six general education teachers as well as a range of extracurricular staff the resource program teacher may need to monitor. Maintaining individual student schedules can be a support to students. It allows the student to anticipate the next class/ subject or activity. In addition, students that have a copy of their academic schedules, allows for the development of self-advocacy skills that supports transitioning from teacher guided directions to independent work. This builds their understanding of their role in academic success.

	Sample Daily/Weekly Resource Program Schedule for Mr. W. Robinson				
Student	What	Where	When	How	Comment
Michael Tammy James	Direct Instruction for IEP Goal/ELA	Resource Room	8:20 – 9:20	Small Group	IEP Objective will be addressed
On behalf of Elizabeth Mark James Ahmad	Co-Teaching with ELA Teacher Mr. Glenn	Room 101	9:35-10-35	Tag-Team Approach to Narrative Text and Writing Task	IEP Objective will be addressed
Elizabeth Mark James Ahmad	Direct Instruction: Continuous of ELA lesson	Resource Room	11:55-12:45	Small group and individual writing time needed for Mark and Ahmad	Extended time needed for writing assignment
	•	Lui	nch	•	
On behalf of Caseload	Preparation for ELA assigned reading tasks	Resource Room	1: 30-2:30	Create guided reading lesson for Mr. Glenn's Co-teaching class and gather notes for students	Push in supports first 20 minutes in ELA classes and then pull out for extended time on required project based learning task for three students.
Classroom Data Walks	Collect progress reporting data from GE staff	Mr. Glenn Ms. Jackson Ms. Hussain Mr. Stemple	2:30-3:00	Using progress reporting charts	Two students not doing well, based on data collected.
On Behalf of Caseload	PLC with ELA team	PLC meeting place 207	3:00-Until	Providing notes of student needs from IEPs and progress reports	Two students not passing ELA due to missed accommodations and missing assignments.

	Sample Special Education Teacher Assignment Schedule				
Time	Special Ed. RP Teacher	Where			
	Mr. Robinson	Resource Program Direct Instruction: Room 127			
	Ms. Law	Co-teaching with Ms. Clover's Rm. 201 (ELA)			
7:45	Ms. Green	Departmentalized Core Subject Math: Room 105			
	Ms. Crawford	Resource Program: Push-in supports to ELA			
	Ms. Roby	Test and guided reading lesson prep: Teacher's workroom			
	Mr. Robinson	Co-teaching with Mr. Glenn: Room 101 (Science)			
	Ms. Law	Resource Program Direction Instruction: Room 127			
8:50	Ms. Green	Departmentalized Core Subject ELA: Room 105			
	Ms. Crawford	Departmentalized Core Subject ELA: Room 105			
	Ms. Roby	Resource Program Room (Direct Instruction): Room 127			
	Mr. Robinson	Resource Program Direct Instruction: Room 127			
	Ms. Law	Co-teaching with Ms. Clover: Rm. 201 (ELA)			
9:45	Ms. Green	Departmentalized Core Subject ELA: Room 105			
	Ms. Crawford	Resource Program: Push-in supports to ELA			
	Ms. Roby	Test and guided reading lesson prep: Teacher's workroom			
	Mr. Robinson	Push in supports to students assigned to Science: Rm. 109/10			
	Ms. Law	Co-teaching with Ms. Lucchese: Room 209 (Math)			
10: 50	Ms. Green	Resource Program Direct Instruction: Room 127			
	Ms. Crawford	Co-teaching with Mr. Taylor: Room 111 (Math)			
	Ms. Roby	Push in supports to students assigned to ELA: Rm 211/15			
	Mr. Robinson	Lunch			
	Ms. Law	Resource Program Push-in supports to ELA: Rm. 102/03			
11:45	Ms. Green	Departmentalized Core Subject: ELA: Room 105			
	Ms. Crawford	Lunch			
	Ms. Roby	Co-teaching with Ms. Mitchell: room 102: ELA			
	Mr. Robinson	Co-teaching with Mr. Glenn: Room 101 (Science)			
	Ms. Law	Lunch			
12:50	Ms. Green	Lunch			
	Ms. Crawford	IEP team meetings (see IEP schedule for details)			
	Ms. Roby	Lunch			
	Mr. Robinson	Resource Program Support Times: Room 127			
	Ms. Law	Resource Push-in supports for Math: Room 201/202			
1:55	Ms. Green	Lunch			
	Ms. Crawford	IEP team meetings (see IEP schedule for details)			
	Ms. Roby	Resource Program Direct Instruction: Room 127			
	Mr. Robinson	PLC: Science			
	Ms. Law	PLC: ELA			
2:50	Ms. Green	PLC: Social Studies			
	Ms. Crawford	PLC: Math			
	Ms. Roby	PLC: ELA			

Sample Student Schedules: Elementary				
Student	Eligibility	Class Assignments (Days, Times, etc.)	Related Service (Type, Duration, Frequency)	
Michael	 SLD-Reading Comp and Long-term retrieval Language concern 	 Ms. Porter's Class (Core Subjects) Mr. Stemple's Class (PE and Homeroom) 	 OT, 2x per week, 30 minutes Mondays and Thursdays SL, 3x per week, 45 minutes Wednesdays 	
Kiesha	 SLD-Reading Fluency and Processing Speed 	 Mr. Taylor's Class (Core Subjects) Mr. Taylor's Class (Art and Homeroom) 	• SL, 4x per month, 45 minutes Wednesdays	

Sample Student Schedules: Secondary				
Student	Eligibility	Class Assignments (Days, Times, etc.)	Related Service (Type, Duration, Frequency)	
James	 Eligibility: SLD-Reading Comp and Long-term retrieval Language concern 	 Mrs. Clover: English 3 Mr. Taylor: Earth Science Ms. Porter: Algebra 1 Lunch Ms. LaPointe: Creative Writing Ms. Woods: World History Ms. Hagle: Math Essentials (RP) 	• SL, 3x per week, 45 minutes Wednesdays	
Deborah	 Eligibility: SLD-Reading Fluency and Processing Speed VI secondary impairment: Macular degeneration/ 20/80 Articulation concern 	 Mrs. Clover: English 3 Mr. Taylor: Earth Science Ms. Porter: Algebra 1 Lunch Ms. LaPointe: Creative Writing Ms. Woods: World History Ms. Hagle: Math Essentials (RP) 	 SL, 4x per month, 45 minutes Wednesdays VI Teacher Consultant 2x per week, 30 minutes (low vision aides needed) 	

Creating Specially Designed Instruction—A Process, Not an Event

Designing instruction for students with disabilities is a process that consists of reviewing the current needs of each student on the caseload. Specially designed instruction for children with disabilities is a requirement under the IDEA. This is the federal law governing special education programs. It requires staff to provide the necessary instructional services to support the development of academic and behavior skills of students with disabilities.



IDEA Regulation 300.39 Special Education is defined as...

(a) General. (1) Special education means specially designed instruction, at no cost to the parents, to meet the unique

needs of a child with a disability, including— (i) instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and (ii) instruction in physical education. (2) Special education includes each of the following, if the services otherwise meet the requirements of paragraph (a)(1) of this section—(i) speech language pathology services, or any other related service, if the service is considered special education rather than a related service under State standards;

When special education teachers are comfortable with the content to be taught, they are able to identify which standards are considered as priority by their district, which parts are most interesting to their students, and which skills/concepts will be easiest (or hardest) for their students to learn. The more experienced special education teachers are with content and the capability of their students, the better they will be able to plan for each of their students' cognitive journey through each of the tasks or skills that will be unfamiliar to them.

Determination of Necessary Approaches

Once the content standards are unpacked and essential questions are reviewed, now the special education teacher's attention must turn to his/her knowledge of the students and their developmental stages. This is done by careful consideration of characteristics such as intellectual ability, interest in the subject, and general motivation to learn. The teacher selects learning approaches that complement the learner's characteristics while ensuring success with the content. A teacher who uses cognitive strategies effectively, will have an easier time connecting the learner to the expected student tasks. A strategy should be chosen because it is the best strategy for BOTH the learner's characteristics and the task and/or content that needs to be mastered.



The Role of RP Teachers in Instructional Supports for Their Caseload Students

The special education teacher assigned to the resource program will need to have a clear understanding of how to connect the general education's course requirements and expectations, specific tasks with the needs of the student with a disability.

A Starting Point... What are the learning needs of students assigned to the resource program?

The special education teacher's role in the resource program may be challenging at times. Resource program teachers are responsible for designing and implementing direct and supplemental instruction to meet the specific needs of the students they service in order to maximize each student's learning potential. Defined by IDEA regulation, special education is meant to provide the necessary instructional services to support the development of academic and behavior skills of students with disabilities.



Individuals with Disabilities Education Act (IDEA) Regulation 300.39 Special Education is defined as...

(a) General. (1) Special education means specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, including—(i) instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and (ii) instruction in

physical education. (2) Special education includes each of the following, if the services otherwise meet the requirements of paragraph (a)(1) of this section—(i) speech language pathology services, or any other related service, if the service is considered special education rather than a related service under State standards;

In order to provide the necessary services, the special education teacher assigned to the resource program must truly take into consideration the overall nature of the learner (the student with a disability) in relationship to making teaching and learning effective and productive. If teaching is to be interpreted as a process of motivating, guiding, and facilitating the learner's access to learning, then special education teachers must have a rigorous knowledge and understanding of the physical, mental, and emotional makeup of those children assigned to their caseload or those they are assigned to teach. See Appendix 1 for the "Common Learning Deficits that Impact Teaching and Learning".

The following is an instructional framework illustration for steps to take when developing specially designed instruction and accommodations specific for students with disabilities. This also provides awareness of the service and location for specific students.

A Framework to Consider: A Strategic Approach to Planning Specially Designed Instruction, Supports, and Services

The primary role of a special education teacher assigned to the resource program is to ensure the effectiveness of the delivery of instructional services and supports in the least restricted environment (LRE) are in place. Determining which best practices and interventions are most effective and efficient for ensuring optimal student achievement is a fundamental concern of special education teachers in this era of accountability. The following framework will support the resource program teacher in the process of organizing the blueprint of the delivery of effective specially designed services and instruction. The list below are suggestions that resource program teachers can utilize to support the alignment of instructional services and scheduling. There are four components of reviewing student output.

- **conducting a data analysis** to determine individual student supports
- develop and implement a teaching blueprint based on the instructional needs and strengths of the student and requirements of the content standards or teacher expectations
- monitor the effectiveness of the instructional services for the purpose of adding, revising, or eliminating
- document the student's progress with individual IEP goals/objectives and general education expectations. (See checklist for progress monitoring in the Appendix section)



A Next Step... Direct or Indirect Resource Program Services?

Based on the review of students' data, the special education teacher's next step will be to determine the necessary instructional supports that will promote academic and behavioral success for their students. Each teacher assigned to the resource program must determine the appropriate approach needed to fulfill the requirements of each student's IEP. They will need to incorporative sufficient time to prepare and complete required IEP service documentation and collaborate with their general education peers. One approach is to organize students' service needs into two broad categories, direct and indirect. This will ensure IEP compliance and successful academic outcomes for your caseload students.

Direct Service is specially designed individual or group instruction provided to the child based on the IEP present level narrative and measurable goals and objectives. Indirect Services provide for consultation with the child's general education classroom teacher. Collaboration exists to meet the needs of the student. This could mean adjusting the environment and/or modifying the methodology, materials, or whatever is necessary.

There are a magnitude of direct and indirect instructional and non-instructional services that become the responsibility of the special education teacher assigned to the resource program. These tasks may include, but are not limited to, the activities the right:



Indirect Non-Instructional Services

- Develop strategies to meet the needs of students with a variety of disabilities.
- Confer with parents, administrators, evaluations specialists, social workers, or other professionals to develop and implement individual education programs (IEPs).
- Develop instructional materials for students requiring modified instruction.
- Modify teaching methods or materials to accommodate student needs in the general education environment.
- Evaluate student work and provide feedback to general education staff and parents.
- Establish rules or procedures governing student behaviors as identified in the IEP.
- Develop constructive and cooperative working relationships and maintain them over time.
- Schedule academic activities and projects on behalf of students.
- Communicate with supervisors, peers, or paraprofessionals — providing information to administration and co-workers by telephone, in written form, e-mail, or in person on behalf of their students.
- Document/record information enter, transcribe, record, store, or maintain information in written or electronic/magnetic form.
- Align IEP goals and objectives and instruction/ strategies — Establish long-range objectives and specifying the strategies and actions to achieve them.
- Maintain accurate and complete student records as required by law, district policies, or administrative regulations.

Direct Instructional Services

- Provide instructional supports and accommodations according to the students' IEPs.
- Provide direct instruction in the core academic subjects that has been identified as an area of need for students' with IEPs.
- Provide instructional support such as reading test questions or taking notes for students' with IEPs.
- Provide supplementary instructional services to students' with IEPs that require modified and adjusted assignments.

Provide a variety of techniques, such as phonetics, multisensory learning, or repetition to reinforce learning and meet students' varying needs during direct instruction times.

- Provide individual supplemental supports to promote students' educational, physical, or social development.
- Work on specific goals and objectives with individual students.

All services and supports provided directly to the student will fulfill the requirements of the service hours as stated in the student's IEP.

Cycle of Planning, Implementation, Reflection, and Adjustment of Instruction: A Framework to Consider



The cycle of teaching is a complex, intellectual, physical, and emotional activity that requires the special education teacher to understand a few basic components to ensure effective teaching and learning is taking form. Those components consist of:

- General Pedagogical Knowledge and Skills
- Developmental Stages of Children and Their Learning Styles
- Parental Awareness and Participation

The expertise that is required for special education teachers is to acquire a deep understanding of the skills and concepts embedded in teaching methods and their respective strategies must be a high priority in order to obtain true student growth and teacher professional development. Such depth of understanding is acquired over time and thrives in environments that are rich in professional collaboration and inquiry between all educators and support staff. This section of the document provides a sampling of tools of support that guide professional practice and improve the craft of the special education teacher.

Cycle of Planning

Planning is the prerequisite to teaching. Simply stated, having a clear sense of where students are headed and how they will get there provides the focus, direction, and urgency that will allow the resource program teacher to ensure significant academic gains. During the phase of planning, the special education teacher must contemplate a few steps prior to developing a lesson plan. Those steps should include:

- Special Education Resource Teacher collaborating with Gen. Ed on identifying the priority/power standards (The big idea skills/concepts students are to learn, master, and apply).
- Breakdown (Unwrapping) the priority standards by identifying the skills (verbs) and concepts (nouns) in each standard.
- Determining the rigor of each priority standard by examining its skills (verbs) and concepts (nouns) based on Bloom's Taxonomy and/or Webb's Depth of knowledge scales.
- Aligning common assessments, instructional practices, lessons, and activities/assignments to the nouns (concepts) and verbs (skills) for each priority standard.

Effective teaching is a dynamic mixture of expertise in a vast array of instructional strategies combined with a profound understanding of the individual students in class and their needs at particular points in time.

> —Marzano (2007) The Art and Science of Teaching

Cycle of Planning: Why Develop Lesson Plans?

Many districts often require teachers to turn in lesson plans and to complete them in a certain format. It is important not to fall into the trap of completing lesson plans simply to meet the district or individual school's requirement. Rather, teachers should plan lessons or units of study in order to ensure that they are taking the most thoughtful approach possible to help students reach their academic goals or targets. The format of choice should consider working for explicit and intentional teaching and the academic needs of students by ensuring they actually accomplish the objectives to be learned. Regardless of format, every effective lesson should build toward the achievement of the objective that is connected to longterm instructional or IEP goal. This alignment focuses instruction, ensuring that planning is strategically leading students toward success.

Cycle of Planning: What to Teach?

A lesson plan is the teacher's road map of what students will need to learn. Before planning any lesson, identify the learning objectives for the students and the subject to be taught. Many special education resource program teachers are assigned to teach core-content subjects in areas they are highly qualified to teach. The primary rationale behind resource program teachers teaching core-content classes is to provide instruction for those students with disabilities that require more support then can be provided within the boundaries of the general education class.

When designing effective and appropriate learning activities, a successful lesson plan addresses and integrates these three key components:

- Objectives for student learning
- Teaching/learning activities
- Strategies to check student understanding

Specifying concrete objectives for student learning will help the special education teacher with determining the kinds of teaching and learning activities that will be needed for a particular class or individual student. These activities will later define how the learning objectives have been accomplished.

Cycle of Planning: Who's Being Taught?

One factor to ponder during the planning stage is to review who's receiving the instruction. Special education teachers assigned to the resource program must remember that they will encounter students with varying abilities, ranging from students with mild impairments who require limited accommodations to students' who have more severe needs. Therefore, the special education teacher assigned to the resource program must keep these points in mind:

- Most students who receive resource services represent high incident disability categories (i.e. SLD, EI, OHI, etc.) and require accessibility to the general curriculum.
- Students with disabilities with common cognitive learning deficits benefit from intensive, wellsequenced, teacher-directed instruction. This teacher driven approach to instruction is highly structured, intensive with an emphasis on carefully planned lessons for small learning increments.
- IEP G/O's should be targeted (when possible) in the authentic learning environment of general education classrooms to maximize a student's full potential.
- Special Education should supplement, not supplant classroom instruction.

Cycle of Planning: Remember to Teach Key Vocabulary

Determine the key vocabulary students will need to learn and apply during instruction for each common core standard. Factors to consider are:

- Student learning can be inhibited due to limited vocabulary, rather than intrinsic ability.
- Students in high poverty areas enter school with less verbal interactions than socio-economically advantaged peers.
- 80% of vocabulary is learned through the context of authentic reading.

Cycle of Planning: Essential Questions

Determine the essential questions and corresponding big ideas that students need to answer and understand to construct meaning from each given lesson or unit of study. In Dr. Grant Wiggins work, "Understanding by Design", he reminds teachers that "essential questions" have a few different implications. Essential questions have the following impact:

- Causes genuine and relevant inquiry into the big ideas and core content.
- Provokes deep thought, lively discussion, sustained inquiry, and new understanding as well as more questions.
- Requires students to consider alternatives, weigh evidence, support their ideas, and justify their answers.
- Stimulates vital, on-going rethinking of big ideas, assumptions, and prior lessons.
- Sparks meaningful connections with prior learning and personal experiences; creating opportunities for transfer to other situations and subjects.

Cycle of Planning: Summative Assessment

Summative assessments take place after the learning has been completed and provides information and feedback on the level of mastery the student achieved. Questions in the summative assessment must align to a given curriculum content standard. Priority standards should generally represent 3-4 assessment questions.

Other factors to consider:

- The end of the unit summative assessment should be created before planning and delivering instruction.
- The summative assessment should align to the end of the unit learning goals students need to attain.
- A clear end in mind, instructional practices and learning practices will prepare students for the summative assessment and allow teachers to make instructional decisions that are more responsive to student learning.
- Optimally, instruction practices as well as formative and summative assessments should provide students multiple experiences and opportunities to show their learning.

At times, the special education teacher assigned to the resource program will need supplementary materials to support the development of concepts and skills required for the mastery of standards, careful selection of materials related to the grade-level standards and activities should be observed.

Cycle of Implementation: UDL Considerations

Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all students based on scientific insights into how humans learn.

Universal Design for Learning (UDL) Guidelines

The UDL Guidelines can assist general and special education teachers when planning for specially designed instruction and accommodations to reduce the barriers of learning, as well as optimize levels of support, enabling independence, to meet the needs of all students. The three principles of UDL, as put forth by the Center for Applied Special Technology (CAST), the designers of UDL, call for:

- Multiple means of representation, to give learners various ways of acquiring information and knowledge
- Multiple means of engagement, to tap into learners' interests, offer appropriate challenges and increase motivation
- Multiple means of action and expression,
 to provide learners alternatives for demonstrating what they know

—(CAST, 2009, p. 1)

The following are examples of how these three principles can be utilized within any general or special education setting:



Engagement (The Student is the Focus)

Student engagement is essential to the learning process. In this principle, student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in content subjects and/ or classes.

This principle makes it clear that if students are not engaged in the content, then the information being presented is inaccessible. Ensuring student engagement can become challenging because everyone has their own learning goals, interests, backgrounds and are most likely motivated by different things.

In order for students to become fully engaged, teachers must find ways to incorporate a student's interests and natural abilities to support acquiring new and prior knowledge and working with new materials that will establish a more memorable learning experience. Below are examples of how using students' senses can support engagement that leads to more meaningful learning:

• Using the sense of vision:

incorporating movies, images, physical actions, symbols, and text into a learning activity.

• Using the sense of taste:

incorporating foods and drinks that are salty, sweet, bitter, or sour to teach a concept.

• Using the sense of touch:

incorporating temperatures of hot, cold, or textures such as soft, hard, bumpy, rough, smooth to help students understand new learning as it relates to making predictions, establishing hypothesis, and analyzing information.

Using the sense of smell:

incorporating fragrances, food aromas, dirt, oils, gasoline, flowers, chemicals, plants to make connections to learning.

• Using the sense of hearing:

incorporating music, the human voice, sounds from animals, machines, motor vehicle, the elements of wind and fire to recall key details and sequencing.

• Using the sense of intuition:

using instincts to guide learning, anticipate next steps, and make predictions throughout the learning process.

Representation: (Make that connection!)

Stimulate students by connecting the dots. Students differ in the ways that they perceive and comprehend information that is presented to them. The principle of Representation tells us that by showing the same material in different ways, learning opportunities are increased for all. Teachers must use various ways to represent the content such as:

• Using various forms of communication:

verbal speech, text to speech, speech to text, digital text, enlarged text, or the written words

- Using visual representation: numbers, graphic organizers, illustrations, pictures, symbols, manipulatives, videos
- Using auditory: sound, music, rhythm, beats

Knowing your students' academic needs and being able to identify their deficits in relationship to their documented disability will support you in providing appropriate specially designed accommodation.

Action & Expression: (Show & Tell)

Provide opportunities for students to showcase their knowledge using their multiple intelligences! Encourage creativity. Students may choose to express what they have learned in a multimedia fashion such as:

• Visually:

illustrations, images, drawing, e-Book, graphics, movie, video, digital story, animation, photo story, PowerPoint

- Musically:
 create song, play an instrument
- Bodily-kinesthetically:
 dance, physical game, movie trailer, short film, and a music video
- Linguistically: create a story, develop lyrics to a song, poem, essay, book, and interviews
- Auditorilly:

a verbal compare and contrast using narrative art, a podcast, memo recording, poem

Cycle of Implementation: Keep It Authentic!

One can debate that authentic learning is a vital part of an education in the 21st Century and is the starting point for special education teachers to support and motivate the at-risk student. Using an authentic instruction approach to teaching provides multiple opportunities for learning that are grounded in real world transferable knowledge and skills. Too often the delivery of content is abstract, disconnected and decontextualized and our students, primarily those with disabilities, cannot afford a classroom with those traits. Psychologist and Educator, Fred Newmann (1993) states that authentic instruction can be a model for high-quality instruction and outlines five major components of this teaching process:

Higher-order thinking

Higher-order thinking requires students to manipulate information and ideas in ways that transform their meaning and implications. For example, this occurs when students combine facts and ideas in order to synthesize, generalize, explain, hypothesize, or arrive at some conclusion or interpretation. When students engage in higher-order thinking, they must solve problems and develop new meanings for themselves.

Depth of Knowledge

Depth of knowledge means that students deal with the significant concepts or central ideas of a discipline. Students use knowledge to understand arguments, solve problems, or construct explanations.

☑ Connectedness to the world beyond the classroom

This third feature of authentic instruction connects the classroom to some "real world public problem" or personal experience that the student can relate to.

Applied Conversation

This feature involves considerable discussion and interaction about the ideas of a topic that develop and build on ideas presented by others in the conversation. It involves the sharing of ideas and multiple exchanges in which students and other participants develop shared understanding of a theme or topic.

Social Support for Student Achievement

This last feature involves the development of "high expectations, respect, and inclusion of all students in the learning process." Social support is more than token acknowledgement or praise for participation. It occurs when teachers convey high expectations for all students and encourage all students to participate in the learning experience.

	 Big ideas can be adult and/or student worded. Big ideas can be worded as "I can" statements.
BIG	 Big ideas are the three or four foundational main ideas, generalizations, or conclusions that link to the unwrapped standards.
IDEAS	• Big ideas are the concepts the students discover and state in their own words so as construct meaning.
	• Big ideas help students scaffold their understanding so they can make further generalizations and connections to other units of study within and across disciplines.

Effective special education teachers use best practices to engage students in the learning process. Successful classroom teachers share the opinion that students will learn and retain more information if they can relate to the lesson. Making learning student centered by allowing students a say in the selection of materials and some control over the manner of completion can make a world of difference.

The following learning activities are suggested as considerations for lesson planning. They include a variety of ways to present lessons that will engage students in the learning process:

Ways to Present Lessons That Will Engage Students in the Learning Process			
Learner/Learning- Centered Lesson	Learner/Learning Centered Lessons are activities which address students' interests across the curriculum and allows for investigation of their own questions.		
Experiential Lessons	Experiential Lessons are active, hands-on, concrete experiences provided throughout the lesson.		
Holistic Lesson	Holistic Lessons allow for the presentation of whole ideas, events, and materials in a purposeful context.		
Expressive Lessons	Expressive Lessons provide students with the opportunity to apply a range of communication outlets such as written speeches, written compositions, drawings, poetry, dance, and other dramatic formats.		
Reflective Lessons	Reflective Lessons give students the opportunity to ponder and debrief their experiences.		
Social Lessons	Social Lessons allow students to engage with their thinking with each other in a problem solving manner.		
Democratic Lessons	Democratic Lessons allow students the opportunity to choose activities for learning.		
Collaborative Lessons	Collaborative Lessons provide opportunities for students to work with one another to complete an assignment or project.		

Standard Lesson Structure Consists of...

	Parts of a Standard Lesson		
I.	The Opening What students will learn and why it is important		
п.	Introduction to New Material The explicit explanation		
III.	Guided Practice Interactive instruction between teacher and students		
IV.	Independent Practice Students are provided with an opportunity to practice using new information and concepts.		
v.	The Closing Students are provided with an opportunity to practice using new information and concepts.		

Explicit instruction is a method of teaching that involves clear and definite instructions and/or demonstrations given to students to improve the

learning process. With explicit instruction, each single step of a particular topic or concern is explained to the students. Students do not experiment with concepts and tasks on their own or ask questions except when needed. From the start of the learning process, the goal and purpose of each step in the process is explained and discussed with the students. It is believed that students will respond better and learn more effectively if they are guided with clear instructions each step of the way. In most cases, explicit instruction is compared with other methods of teaching like student participation, active learning, internships, seminars, recitation, and workshops, among others. The entire notion of 'IDEA' (Individuals with Disabilities Education Act) requires specifically designed instruction for students with disabilities to meet their unique educational needs at no cost to the parent, and direct (explicit) instruction approaches that are considered to be scientifically-based and validated and have been shown to work. Students with cognitive learning deficits benefit from intensive, well-sequenced, teacher-directed instruction. This teacher driven approach to instruction is highly structured and intensive with an emphasis on carefully planned lessons for small learning increments. At times, scripted lessons that can be rapidly-paced interaction between the teacher and students. One key component to explicit instruction is correcting mistakes immediately with frequent progress monitoring, assessments, and adjustments. Studies have shown that a combined model of direct instruction and strategy instruction can positively influence academic performance for students with learning disabilities (Swanson, 2000). When a teacher gives specific instruction to a student with special needs, not only does it help the student further understand what the instructions of the lesson are, but the student feels more included and more a part of the classroom when he/she sees this kind of attention. It transmits a positive feeling to the student that the teacher cares about their learning and well-being, and that they are no different from any other child in the general education classroom. Explicit instruction allows the children to reach mastery as soon as they are able to. In explicit instruction, classroom skills are taught in a sequence until the students have reached automaticity, and they are able to apply their knowledge in new learning tasks and situations. This is especially good for students with special needs because with guided instruction by the teacher, the students can take the time they need to understand the lesson to the point of mastery of the knowledge, and they not only know how to perform the tasks, but they can apply them in a variety of situations because the conceptual knowledge is fully understood.

Cycle of Reflection

When planning and implementing lessons or units of studies, it is extremely important to reflect on the time allotted for each step of the instructional cycle. With careful planning and intentional blueprinting of the steps of instruction, the expected outcomes will be met. Scheduled time of reflection can occur during natural or scheduled breaks within the lesson. This reflection time is used to monitor the following instructional and behavioral performance:

- Students are or are not grasping the skills/concepts of the material.
- Students are or are not engaged from "Bell to Bell"
- Instructional time has run out and specific components of the learning objectives have not been covered, so what are possible options?

Cycle of Adjustment: The Bottom Line Is to Reach the Objective

While there are many ways to structure and approach the teaching and learning, the main focus should be on having students demonstrate their mastery of a given learning target. By being clear about behavioral expectations, focusing activities on the learning task, ensuring that all students are participating, and providing opportunity for guided and individual practice, students will be much more likely to achieve common core academic and IEP goals.

Questions to Consider for Measuring Student Progress

The ultimate goal of specialized designed instruction is to ensure that students with disabilities are successful with their individualized learning goals and objectives, as well as successful in attaining proficiency on district content standards. In order to measure learning outcomes, special education providers must design methods for monitoring student progress. Teachers need to teach and assess. Regular informal and formal monitoring of student's progress in the general education and special education settings must be incorporated as a part of the daily routine of the special education teacher. Special education teachers are responsible for teaching/monitoring the development of those missing skills/concepts on an ongoing basis so that they will know where their students are at any given time in relationship to the specified individual learning outcomes. This on-going monitoring of progress is also the way special education teachers determine whether their instructional approaches and strategies are working for all students and which students need additional supports. Monitoring the progress of students in this fashion ensures that special education teachers continue to align what is taught with identified areas of weakness/deficit. Teachers need to establish regular monitoring cycles to ask these essential progress questions:

- What do students need to know and do?
- 2 How are students currently performing?
- What evidence identifies the students' current academic and behavioral progress?
- What evidence suggest the student is:
 - Making progress toward a grade-level expectation or long-term goal?
 - Making progress toward mastery of a targeted skill?
- 5 What are the next steps needed to support student success?

These essential questions may also assist local districts in the design of assessments that will intentionally measure the performance growth of students with disabilities and enable teachers to make informed instructional decisions regarding teaching and re-teaching specific skills/ concepts.

This Progress Monitoring Checklist is designed to guide the development of a district or building level student growth monitoring tool that will measure the skill development of students' with disabilities.

Progress Monitoring Checklist				
Questions to Ponder	Yes with Evidence of "How"	No with Explanation of "Why" not		
What assessment/ progress monitoring tool is used to establish baseline data and growth?				
Are the student's learning expectations clearly communicated?				
What are the strengths and weaknesses of the tool?				
Does the progress monitoring tool gather data? Will it assist a teacher in knowing if instruction has been effective?				
Does the progress monitoring tool provide data about the student's growth in the general curriculum over time and across a wide range of skills?				
Which assessment / progress monitoring tool provides outcomes based information/data?				
Does the progress monitoring tool allow for parent input?				
Is the data provided easily communicated and teacher friendly for interpretation?				
Does the progress monitoring tool provide data to assist in measuring and reporting progress toward IEP goals and objectives?				

Specially Designed Instruction Planning Considerations for Special Education Teachers

Specially Designed Instruction (SDI) is adjusting, as suitable, the content, methodology, or delivery of instruction to address the unique needs of the child with a disability and to ensure access of the child to the general curriculum standards and expectations. SDI is "what the teacher does" to instruct, assess, and re-teach for the student with a disability to make progress in the general curriculum.

The following are examples of research-based specially designed instructional practices that all special education teachers and related service providers should consider when developing individualized or group instruction:

A Explicit instruction

Explicit instruction is a systematic instructional approach that includes a set of delivery and design procedures derived from effective schools research merged with behavior analysis. As a part of explicit instruction, teachers monitor student progress to guide decisions for scaffolded supports. *** (see pages 18-25 in this guidance document for additional details of explicit instruction)

Explicit Strategies

Special education teachers must support students in learning new concepts or skills by teaching them to follow a set of procedures or steps. The steps should reflect a well-organized and effective way to complete an assigned task and/or to apply a new concept. Simply telling students to "brainstorm before writing" does not provide enough guidance. Using explicit strategies offers specific direction in determining the purpose and outcome of a task's expectation and outcome. When a student is introduced to a new concept or procedure, the following steps should be modeled by the special education teacher before any attempts by the student is made:

- Teachers need to look at the instructional materials and evaluate the use of explicit steps and strategies. If explicit strategies are included:
 - · Are they clearly described?
 - Do they have narrow or broad applications?

2. Think of the needs of new students.

- Would they be able to use the strategies that are included?
- Would they need more assistance?
- 3. Instructional materials may need to be modified and/or accommodated by adding steps and strategies for accessibility.
 - Finding strategies that are just right is not an easy task. Try them out with students and revise them if they don't work.
 - Monitor the student's progress to determine if an additional step and/or a new strategy is needed.

B Scaffolded Instruction

Scaffolding was first suggested in the works of educational theorist Lev Vygotsky. It is an effective instructional strategy that has been proven over time. Scaffolded Instruction is "the systematic sequencing of prompted content, materials, tasks, and teacher and peer support to optimize learning" (Martha Larkin, Using Scaffolded Instruction To Optimize Learning, 12/2002). "This means a gradual decrease in supports and a gradual increase in student responsibility with the responsibility for learning shifting from the teacher to the student." (Rosenshine & Meister, 1992). Scaffolding Instruction describes specialized teaching strategies geared to support learning when students are first introduced to a new subject.

- Scaffolding gives students a context, motivation, or foundation from which to understand the new information that will be introduced during the coming lesson.
- Scaffolded instruction is utilized when students are acquiring new knowledge, and skills are taught by engaging students in tasks that would be too difficult for them to complete on their own.
- Scaffolding provides supports to students until they can independently apply the new skill or strategy with progress being measured in small incremental steps. Teachers initially provide extensive instructional support, or scaffolding, to continually assist students in building their understanding of new content and process. Once students internalize the content and/or process, the student assumes full responsibility for completing the task.
- Scaffolding provides students with help they need and allows them to complete a task with assistance before they are able to complete it independently.

• The goal of scaffolding is to support students until they can apply the new skills and strategies independently. This means a gradual decrease in supports and a gradual increase in student responsibility with the responsibility for learning shifting from the teacher to the student." (CEC article, "Providing Support for Student Independence Through Scaffolded Instruction" by Martha Larkin, Sept/Oct, 2001.)

Steps for Use of Scaffolds

Scaffolding for learning may be provided through verbal prompts and cues, visual highlighting and diagrams, or other types of assistance used by students to begin to build their knowledge and proficiency. Students need support to help them until they are able to use the knowledge and skills on their own. Prompting and guidance needed must be faded if students are to become more independent. It is important to remember to provide only those supports that are needed. Supports are gradually decreased (faded) to transfer responsibility for learning from the teacher to the student (independence). Use caution not to remove the scaffolding all at once or prematurely; student performance data will guide instructional decisions.



1. Adjust level of difficulty during guided practice by:

- starting with adapted material (Note: level of complexity will be gradually increased)
- completing part of the task/activity for the student
- providing a form of cueing system (e.g., visual cue card)
- presenting learning materials in small steps
- determining student errors, areas of difficulty
- 2. Provide multiple means of student practice (Scaffolding should inspire students to want to learn more and increase their understanding)
 - teacher led
 - reciprocal teaching (dialog between teacher and student by summarizing, question generating, clarifying, and predicting)
 - cooperative groups

3. Provide multiple variations for feedback

- teacher-led
- checklists
- models of student work samples

4. Increase level of student responsibility (So they can make choices about how to proceed with the learning process)

- fade prompts and models
- gradually increase level of complexity of material
- reduce student instructional support, including number of adaptations, intensity, level of groupings, etc.; for example, Teacher/Student One-on-One → Teacher Small Group → Teacher Whole Group → Peer Small Group/Cooperative Group → Individual
- combine steps of skill through practice
- check for student mastery level of skill

5. Independent Practice (Little time is wasted in scaffolding lessons, all learning goals are achieved efficiently)

- provide large amounts of practice
- facilitate application to new situations
 (Adapted from Educational Leadership, ASCD, April 1992 and
 Scaffolding, LearnNC, 2009)

Strategies to consider for scaffolding

- A maximum amount of support is provided when students are given total physical assistance or completed copies of assignments. For motor skills, this is quite often the case. You might position a student's hand and arm and guide them through the correct movements for hammering a nail.
- Giving the students copies of the lecture notes instead of requiring them to take notes
- Providing starters or incomplete statements and have the students add the rest (e.g., Cloze Procedure)
- Showing students an example of the desired outcome before they complete the task
- Modeling the thought process for students through "think aloud" talk
- Offering hints or partial solutions to problems
- Using verbal cues to prompt student answers
- Teaching students chants or mnemonic devices to ease memorization of key facts or procedures
- Facilitating student engagement and participation
- Displaying a historical timeline to offer a context for learning
- Using graphic organizers to offer a visual framework for assimilating new information
- Teaching key vocabulary terms before reading
- Guiding the students in making predictions for what they expect will occur in a story, experiment, or other course of action
- Asking questions while reading to encourage deeper investigation of concepts

- Suggesting possible strategies for the students to use during independent practice
- Modeling an activity for the students before they are asked to complete the same or similar activity
- Asking students to contribute their own experiences that relate to the subject at hand
- Giving students an outline, diagram, or study guide
- Using structured patterns or plans to help students learn
- Using oral reading and embedded questions to help students process material in textbooks
- Identifying page numbers where topics are discussed or answers to questions can be found
- Using color-coding or underlining to highlight important ideas or key steps
- Using peer tutoring or cooperative learning to provide support for students
- Incorporating activities that provide guided practice before expecting students to perform skills or use knowledge independently



G Strategy Instruction

Strategy Instruction is a method of teaching student's techniques, principles, or rules applicable in many learning situations that guide them to complete tasks independently. The learning strategies provide the means for the student to learn how to problem-solve and complete tasks independently.

----Special Education, Contemporary Perspectives for School Professionals, Third Edition, by Marilyn Friend, 2011.

1. Determine if the student has the background knowledge for the strategy to scaffold to independent use.

2. Explicitly teach the strategy:

- Introduce the strategy what it is, why it will be beneficial, etc.
- Model how to use the strategy
- Guided practice begins with small, simple tasks/materials, so concentration can be on learning the strategy
- Guided practice with classroom activities/ assignments with teacher prompts
- Minimal guided practice with student initiating the strategy independently using a visual cue
- Provide corrective feedback using progress data (e.g., checklist, progress charts, etc.)
- Student independence is increased through gradual removal of prompts and cues (scaffolding - fewer, increments of time, etc.)
- Student uses the strategy independently without supports

For additional state level information for scaffolding, see *"Effective Instruction for Elementary Struggling Readers: Research-Based Practices*, 2003, Introduction Section).

D Structured Overview (e.g., graphic organizers)

Structured Overview is a verbal, visual or written summary. It can also be an outline of a topic. It is the process of "organizing and arranging topics" to make them more meaningful.

The purpose of a Structured Overview is to help students place new ideas in context. Because ideas are simplified, it is easier for students to see "the big picture." In addition, connecting new ideas to information students already understand makes it easier to retain. There are three main ways in which structured overview can be used:

1. Verbal Summary:

When introducing a new concept, the teacher starts by highlighting the new ideas to be learned in a few simple sentences. Then the relationship between these ideas and the ones the students already know is discussed. The structured overview takes the role of an advanced organizer.

2. Written Summary:

The approach is the same as the verbal summary, but students have a written record of the ideas. Generally a combination of verbal and written Structured Overview is more effective than either type alone.

3. Visual Structured Overview:

Venn diagrams of concepts, semantic maps, semantic organizers, webs, and charts are all methods visual Structured Overview. When accompanied by explanation, visual overviews are often very effective at helping student connect ideas.

—Adapted from Special Education, Contemporary Perspectives for School Professionals, Third Edition, by Marilyn Friend, 2011.

Mnemonics

Mnemonic instruction is a set of strategies designed to help students improve their memory of new information. Mnemonics instruction links new information to prior knowledge through the use of visual and/or acoustic cues. Mnemonics are memory devices that help learners recall larger pieces of information, especially in the form of lists like characteristics, steps, stages, parts, phases, etc. Many types of mnemonics exist and which type works best is limited only by the imagination of each individual learner. The nine basic types of mnemonics presented in this handout include Music, Name, Expression/Word, Model, Ode/Rhyme, Note Organization, Image, Connection, and Spelling Mnemonics. (*9 Types of Mnemonics for Better Memory*, Dennis Congos)

Here are a few examples:

Music Mnemonics

How many lyrics to songs do you remember? How did you come to remember them? The same method you used to recall song lyrics also can work just as well in academics. Music can be used to help students recall important details to main ideas and many learners have made songs out of information when a list of items must be learned. Advertising on radio and TV uses music to help potential customers remember their products when shopping. With sufficient repetition of commercials, advertisers have discovered that when shoppers see their product in the stores, often the shopper will start reciting phrases from the commercial or start singing the lyrics to the promotion melody. The results have been increased sales of the product.

You can make a song or jingle using any type of music you choose for any list of items. Music Mnemonics work best with long lists. For example, some children learn the ABC's by singing the "ABC" song. Other children learn all the states in alphabetical order using the "50 Nifty United States" song.

Name Mnemonics

In a Name Mnemonic, the first letter of each word in a list of items is used to make a name of a person or thing. Sometimes, the items can be rearranged to form a more recollectable name mnemonic. Examples:

ROY G. BIV = colors of the spectrum (Red, Orange, Yellow, Green, Blue, Indigo, Violet.)

Pvt. Tim Hall = Essential amino acids (Phenylanine, Valine, Threonine, Tryptophan, Isolucine, Histidine, Arginine, Leucine, Lysine.

Expression or Word Mnemonic

This is by far the most popularly used mnemonic. To make an Expression or Word mnemonic, the first letter of each item in a list is arranged to form a phrase or word. Examples:

In English, the 7 coordinating conjunctions are For, And, Nor, But, Or, Yet, So = **FANBOYS**.

The order of operations for math is Parentheses, Exponents, Multiply, Divide, Add, and Subtract = **Please Excuse My Dear Aunt Sally**.

Review for Fluency and Generalization

The need for review is very critical for students with disabilities. Students need a variety of opportunities to practice what they have learned. Many students may have difficulty generalizing newly acquired knowledge and skills in subsequent classroom situations and in situations outside of the classroom. Below are guidelines about the importance of review:

Review for Fluency and Generalization			
Conduct Multiple Performance Reviews	Students will become more aware of what they are doing correctly and what they need to change when observations and assessments occur frequently.		
Provide Guided and Independent Practice	Guided practice involving the use of prompts and assistance will help students remember what they are supposed to do.		
Work Towards Mastery	Reducing the use of prompts or reminders is necessary when students are ready to perform independently.		
Give Meaningful Feedback	Feedback will help students become aware of what they are doing correctly and what needs to be changed.		
Practice Skills in a Variety of Contexts	Opportunities to promote generalization in different settings as well as maintenance of the desired level of proficiency and fluency must be provided. Single exposures are never sufficient to attain proficiency.		
Section 2

Specially Designed Instruction and Accommodations Lesson Planning Considerations Tool

Below is an instructional planning tool that will support the resource program teacher in creating specially designed instruction and selecting specially designed accommodations for their caseload students assigned to the resource program. This tool is not a lesson plan, but a guide to support the development of one. This tool can be used in conjunction with district level lesson planning templates or as a guide to support a special education teacher's input in developing supplemental or co-teaching lessons in a special education setting or general education classroom. *(refer to the previous pages of this guidance document for instructional strategies and the appendix for explicit accommodations for students with specific learning needs.

Lesson Title	Course	Date
Common Core State Standards:		
Identify which standard is being taught.		
IEP Goals and Objectives to Consider:		
Make sure to review students' required IEP G/Os prior to planning to ensure align	nent to CCSS and Deficits.	
Specially Designed Accommodations/Modifications Pe		
Make sure to review students' required IEP accommodations/modifications under	supplementary aids and services prior to pla	anning).
Lesson Objectives:		
What will you be teaching? (List content and language objectives). Example: Can	be written in "I Can" statements, or student	will be able to (SWBAT).

Big Ideas for Enduring Understanding	Essential Questions (EQ):
 Identify which concepts you want your students to learn and master, e.g., Have students identify how characters develop and change throughout the text. Have students identify the different ways characters respond to challenges. Having students summarize the text will increase comprehension and understanding 	An essential question frames a unit of study as a problem to be solved. It should connect students' lived experiences and interests to disciplinary problems in the world. EQ should connect what they learn back to the real world, where they can put their new understandings to work.
Anticipatory Set:	
Teach vocabulary for text you are using. Give some background information to help on board as a large group or have students individually make a chart. What do I kno	
Skill Focus:	Vocabulary Focus:
Identify the skills students will need to master the content standards— Example: Identifying Central Theme/Idea in a variety of texts	Identify the vocabulary that will be used during the specific text.
Universal Design for Learning Considerations:	
Provide multiple means of representation, expression, and engagement.	
 Use advanced organizers (e.g., KWL methods, concept maps); Make explicit cross-curricular connections (e.g., teaching literacy strateg exploration and new understandings; Embed prompts to "stop and think" before acting as well as adequate sp. Embed prompts to "show and explain your work" (e.g., portfolio review, Provide checklists and project planning templates for understanding the Provide text to speech options Use visual images and videos 	art critiques)
Identify On-line Supports to Specially Designed Instruct	ion:

Ways to Gain/Maintain Attention: How will you gain and maintain students' attention? Consider need, readiness, learning style, novelty, meaning, or emotion. Cognitive (Psychological) Deficit To Consider in Teaching and Learning: Identify your students' area of need and determine the impact the deficit (s) has on the mastery of the skill (located within a MET summary or Present Level Narrativa determine the instructional approach that will be used to support each students acquiring of that skill (s), and identify the instructional strategies that work best to maintain or reinforce the newly emerging skill or concept. IEP CCSS related Goal/Objective Sentence Starters for the development or revision of current G/Os. By	Assessment (Formative and Summative):		
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Section 2

SPECIALLY DESIGNED INSTRUCTION

Sample Lessons Using the Cycle of Planning, Implementation, Reflections, and Adjustments

This section consists of sample units/lessons that are designed using the framework of the Cycle of Instruction and Teaching Model presented in the previous section. During the 2014-15 school year, selected special education resource program teachers across Wayne County accepted the charge of using their expertise in the areas of ELA, Math, and Science, to dig deep into the standards to discover the skills and concepts needed for students with disabilities to become grade-level proficient and continue to progress in the general education curriculum, as well as demonstrating progress with their IEP goals and objectives. Each subcommittee, ELA, Math, and Science worked diligently producing common core state standards (CCSS) Vertical Skill Progression Charts and companion lessons/units to support the special education teacher's understanding of designing specialized instruction for their caseload students. The CCSS Vertical Skill Progression Chart for Mathematics and English Language Arts were built on the premise that students with disabilities could master the anchors of the common core standards if prerequisite skills were first introduced, modeled, and assessed. The CCSS Vertical Skill Progress Charts are indeed a work in progress. It is the intent of the ELA and Math sub-committees to continue the work to support fellow special education resource program practitioners with their duty to provide guality, effective, and timely instructional support to students on their caseloads. Each chart describes the progression of a standard across a number of grade levels, informed both by research on children's cognition and by the logical structure of ELA and Mathematics, as well as the required skills and concepts that are needed to master the standard. The Depth of Knowledge rating was also included to support the special education teacher's understanding of Level of Complexity for each task.



"My primary responsibility as a special education teacher is to find a way to encourage, engage, and educate whoever shows up Monday through Friday. In order to do so, I must be prepared."

—Lois Mae Vaughan-Hussain, Ed.S

ELA: INSTRUCTIONAL DESIGN AND IMPLEMENTATION

A Note from the ELA Subcommittee:

As one of the branches of the WRESA Resource Program Teacher Committee, our team was given the task of connecting the common core standards to effective teaching in the resource program. Initially we were overwhelmed with the task. However, as we delved into the common core standards, we realized it was not as intimidating as originally thought. Our next step was to determine which standard to focus on and to consider the answer to the following question: What is a common area in which students struggle under the category of reading? Many students have comprehension difficulty particularly with retelling, summarizing, identifying key details and themes. The answer to this question led our team to select Anchor Standard Two under Literature K-5 Key Ideas and Details. Once we selected the standard from which we would build our lesson plan, our team created a road map that consists of an alignment chart that unfolds Standard Two from kindergarten through twelfth grade. The resource program provider must be aware of each student's entry skills and abilities, and that their skills move fluidly within grade level standards. The alignment chart that follows identifies Standard Two prerequisite skills and concepts at each grade level. From there we developed a lesson plan for grades five, eight, and eleven/ twelve. Our mission has been to connect the results of our collaborative efforts with educators so they are able to provide quality instruction with sound instructional practices.



MEET THE ELA RESOURCE COMMITTEE



Virley Law



Virley Law is a dynamic educational consultant with almost 20 years of experience in education. She has extensive training and experience in classroom management, coaching, consultation, presenting, and facilitating professional development. She began her career as an elementary teacher and has held other positions including Special Education Teacher for

students with Learning Disabilities K-12 and Resource Room Teacher at all levels. Virley holds a B.A. and M.Ed. in Special Education in Learning Disability. Virley is a lifelong learner. She enjoys ongoing professional development opportunities and attends various workshops and in-services. Virley is committed to the belief that each individual has a unique set of talents, abilities and interests that can be enriched and developed with the proper guidance. She serves with the heart of children, parents and all others in mind, on the journey to help transform lives.



Lynne Roby



Lynne Roby believes each moment matters, so making each moment count is her daily mantra. She has been in the field of education for over 20 years as a special education teacher for the Grosse Pointe Public School System. She began her career in a center-based school for students with emotional impairments, where she worked for 9 years. Currently, she is a resource room teacher at the elementary level, as well as the department chair.

She received her teaching certificate from Marygrove College, specializing in students with emotional impairments, and her Master's in Education with an endorsement in learning disabilities from Wayne State University. Lynne resides in Grosse Pointe Park with her husband and two children. She works hard to build connections at all levels in education professionally, as well as personally. She sees partnering with parents and colleagues as the building blocks necessary to assist in helping students reach their goals. Believing that there is no expiration date on potential, she strives to hold the standards and expectations high for all students. Being a lifelong learner is a personal goal she models daily and tries to instill in her students.



Dawn Babich



Dawn Babich is an educator who trumpets the power of exceptional teaching that results in quality learning. Having had many teaching experiences in a multitude of diverse settings, she began her career as an elementary teacher over 20 years ago. She then specialized in the

field of Learning Disabilities, which led to her serving students in grades K-8, with most of her experience as a resource support for middle school students. Dawn holds a B.A. and M.Ed. in Curriculum and Instruction in the Inclusive Setting. She seeks opportunities that enhance her knowledge and experience in working not only with students who have learning difficulties, but also with teachers who are charged with teaching to the needs of all learners. Dawn is a native Detroiter who truly feels that her purpose in Special Education is to uplift and enlighten students and fellow teachers.



Cynthia Greene

DETROIT PUBLIC SCHOOLS COMMUNITY DISTRICT

Cynthia Greene is an enthusiastic and highly respected educator of 29 years. She was born in Brooklyn, New York, the oldest of five children, and raised in

Detroit, Michigan. She is a proud product of the Detroit Public School System. She attended Eastern Michigan University where she earned a Bachelor's of Science Degree in Cognitive Impairments and a Master of Arts Degree in Learning Disabilities. Over the course of her career, Cynthia has taught in a variety of educational settings. She has taught first, second and third grade at a small private school, she was a substitute teacher in a center – based school for adults and she has taught history/driver's education at a Middle School in Saginaw, Michigan. Most of her teaching career has been with the Detroit Public Schools where she has taught self-contained Cognitively Impaired students and Resource at the elementary school level. She currently teaches middle school subjects for students with mild Cognitive Impairment at Brewer Academy in Detroit, Michigan. Cynthia's quiet presence is a strong force that exemplifies effective leadership. Through her dedication and hard work, she paves the road to success for struggling students.



Shekenia Mann



Shekenia Mann is an Assistive Technology Consultant with Wayne ATRC and Crisis Prevention Intervention Trainer. She practiced as a school social worker and taught as special education resource teacher in Lincoln

Park Public Schools. Ms. Mann specialized in teaching social skills, reading interventions, and implemented Positive Behavior Support (PBS). Her motives, the same as they were when she was a girl, are to create positive learning environments and inspire young minds to be free thinkers. With a Certificate in Photography from College of Creative Studies, a Masters in Social Work from Wayne State University, and a Masters in Education from the University of Detroit Mercy, Ms. Mann served five years at Edward Cerveny Middle School as a language arts instructor to seventh and eighth grade students. She also taught reading, writing, arithmetic and social studies to adolescents in grades sixth through eighth as a teacher for students with learning disabilities. Devoted to improving learning environments for children, Ms. Mann worked on the City of Detroit recreation department transition team, and assisted the Boysville of Michigan organization in creating a census of adjudicated youth, then developing an alternative program for their needs within adult facilities throughout the state. Ms. Mann's enthusiasm for young people prompted her to volunteer as a Michigan lobbyist for children's issues for two years, with that endeavor leading her to coordinate the Wayne county conference for a state collaborative effort on juvenile justice. She has also dedicated time to the Dove's Family Development Institute Timbuktu Academy of Science and Technology by providing individual and group counseling to elementary school children, in addition to performing psycho-social assessment and availing corrective resources to each client and their family. A true altruist, Shekenia Mann has remained consistent and zealous about her overall goal to empower today's youth by enriching their learning aptitude, so that they may also see themselves in a career that can influence the world.

CCSS VERTICAL PROGRESSION ALIGNMENT CHART FOR ELA: A WORK IN PROGRESS

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
к	RL. K.2 With prompting and support, retell familiar stories, including key details.	• Retell	 A familiar story with key details with prompting and support Key details 	 Level One: Name, Tell, 5 W's 	 Ability to attend, Expressive/ Receptive Skills, Ability to recall, Sequence of Events: Beginning, Middle, End or 1st, 2nd, 3rd
1	RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson	 Retell Demonstrate understanding 	 Key details of a story A story's central message or lesson 	• Level One: Retell, Recall, Identify	 Identify/ retell key details with prompts and supports
2	RL.2.2 Recount stories, including fables and folktales from diverse cultures and determine their central message, lesson, or moral	RecountDetermine	 Stories including fables and folktales from diverse cultures Their central message, lesson or moral 	 Level One: Retell Level Two: Infer 	 Demonstrate understanding of central message or lesson of a story
3	RL.3.2 Recount stories, including fables, folktales and myths from diverse cultures; determine central message, lesson, or moral and explain how it is conveyed through key details in the text.	 Recount Determine Explain 	 Stories including fables, folktales and myths from diverse cultures Their central message, lesson or moral How their message, lesson or moral is conveyed through details in the text 	 Level One: Recall Level Two: Infer Level Three: Draw Conclusions 	 Text to text connections Identify central message, lesson or moral of story
4	RL.4.2 Determine a theme of a story, drama or poem from details in the text; summarize the text.	 Determine Summarize 	 A theme of a story, drama, or poem from details in text A text in their own words 	 Level One: Recall Level Two: Summarize Level Three: Construct, Cite Evidence 	 Identify central message, lesson or moral of story Summarize how central message, lesson, or moral is conveyed using key details

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
5	RL.5.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text	 Determine Summarize 	 Theme of story, drama or poem from details in text How characters respond to challenges How the speaker in a poem reflects upon a topic The text in their words 	 Level One: Recall Level Two: Summarize Level Three: Draw Conclusions, Cite Evidence 	 Determine theme Summarize using details
6	RL. 6.2 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	 Determine Summarize 	 Theme or central idea of a text and how it is conveyed through details Text distinct from personal opinions or judgments 	 Level One: Recall Level Two: Summarize Level Three: Infer 	 Determine characters' response to challenges or how speaker reflects on topic Summarize using details
7	RL. 7.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	DetermineAnalyzeSummarize	 Theme or central idea of a text A text development of theme or central idea over course of text The text objectively 	 Level One: Recall Level Two: Summarize Level Three: Infer, Formulate Level Four: Analyze 	 Determine how a theme or central idea is conveyed through details Summarize using details from text
8	RL. 8.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	 Determine Analyze Summarize 	 A theme or central idea of text The development of the theme or central idea of a text, including its relationships to the characters, setting, and plot The text objectively 	 Level One: Recall Level Two: Summarize Level Three: Formulate, Construct Level Four: Analyze 	 Analyze development of theme or central idea throughout text Summarize using details from text

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
9	RL.9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	 Determine Analyze Summarize 	 A theme or central idea of text The development of the theme or central idea of a text, including how it emerges and is shaped and refined by specific details The text objectively 	 Level One: Recall Level Two: Summarize Level Three: Formulate, Construct Level Four: Analyze 	 Analyze development of theme or central idea throughout text including its relationship to characters, setting and plot Summarize using details from text
10	RL.9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	 Determine Analyze Summarize 	 A theme or central idea of text The development of the theme or central idea of a text, including how it emerges and is shaped and refined by specific details The text objectively 	 Level One: Recall Level Two: Summarize Level Three: Formulate, Construct Level Four: Analyze, Critique, Create 	 Analyze development of theme or central idea throughout text including its relationship to characters, setting and plot. Summarize using details from text.
11	RL.11-12.2 Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	 Determine Analyze Summarize 	 Two or more themes or central ideas of a text The development over the course of text including How they interact and build on one another to produce a complex account The text objectively 	 Level One: Recall Level Two: Summarize Level Three: Formulate, Construct Level Four: Analyze, Critique, Create 	 Analyze development of theme or central idea throughout text, including how it emerges and is shaped and refined by specific details. Summarize using details from the text.

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
12	RL. 11-12.2 Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	 Determine Analyze Summarize 	 Two or more themes or central ideas The development over the course of text including How they interact and build on one another to produce a complex account The text objectively 	 Level One: Recall Level Two: Summarize Level Three: Formulate, Construct Level Four: Analyze, Critique, Create 	 Analyze development of themes or central ideas throughout text, including how the emerge and are shaped and refined by specific details. Summarize using details from the text.



ELA Teaching and Learning Planning Considerations

Directions: Below is an instructional planning tool that will support the resource program teacher in creating specially designed instruction for their students. This tool is not a lesson plan, but a guide to support the development of one.

Lesson Title: Determine a Central Idea/Theme	Course: ELA	Date:		
Core Content and Process Standards: Key Ideas and Det	ails			
CCSS. ELA-Literacy. RL. 5-2: Determine a theme of a story, characters in a story or drama respond to challenges or how the text.		-		
Resources to View Prior to Teaching Theme:				
https://www.youtube.com/watch?v=9H6GCe7hmmA				
http://www.weareteachers.com/blogs/post/2014/09/03	/11-tips-for-teaching-about-	theme-in-language-arts		
This link provides 11 tips for teaching theme as well as som of identifying theme in a variety of texts.	e easy ways to get students to	begin their understanding		
Lesson Objective(s): What will you be teaching? (List cont	ent and language objectives).			
Example: Can be written in "I Can" statements.				
I can identify the theme of a text.				
I can retell a story.				
I can summarize a story.				
I can analyze my character's choices and responses to	o a situation.			
Big Ideas for Enduring Understanding	Essential Questions (EQ)			
Identify which concepts you want your students to learn and master, e.g.,	An essential question frames to be solved. It should conne	ct students' life experiences		
 Have students identify how characters develop and change throughout the text. and interests to disciplinary problems in the world. EQ should connect what they learn back to the real world, where they can put their new understandings to work. 				
 Have students identify the different ways characters respond to challenges. 				
 Having students summarize the text will increase comprehension and understanding. 	How is identifying the ce important to understand			
	Have you had a similar e	xperience like the character?		

Anticipatory Set

Teach vocabulary for the text you are using. Give some background information to help students begin to make connections and build knowledge. You can do a KWL chart on board as a large group of have students individually make a chart. What do I know about the topic? What do I want to know? What did I learn? On-line supports:

https://play.kahoot.it/#/k/6166dd99-aa82-4316-af64-5ac43fbd8a3b

https://quizlet.com/_1qt0mt	https://quizlet.com/_1qt0mt			
Skill Focus	Vocabulary Focus			
Identify the skills students will need to master the content standards:	Identify the vocabulary that will be used during the specific text.			
Example: Identifying Central Theme/Idea in a variety of texts	Example: theme, summarize, determine, analyze, infer, draw conclusions			

Universal Design for Learning Considerations

Provide multiple means of representation, expression, and engagement.

- Use advanced organizers (e.g., KWL methods, concept maps);
- Make explicit cross-curricular connections (e.g., teaching literacy strategies in the social studies classroom; Provide interactive models that guide exploration and new understandings;
- Embed prompts to "stop and think" before acting as well as adequate space
- Embed prompts to "show and explain your work" (e.g., portfolio review, art critiques)
- Provide checklists and project planning templates for understanding the problem, setting up prioritization, sequences, and schedules of steps

Identify On-line Supports to Supplement Instruction:

http://www.englishworksheetsland.com/grade5/2dramathemes.html

http://www.ereadingworksheets.com/free-reading-worksheets/theme-worksheets/ht

http://www.scholastic.com/teachers/lesson-plan/ant-bully-storia-teaching-guide#.VkYKJKsgETk.mailto

http://www.fcrr.org/studentactivities/c_044c.pdf

Assessment (Traditional/Authentic)

How will you know students have learned the content?

Example: Have each student write on an index card the definition of one of the vocabulary words and share with a peer partner for review. Teacher will call on students to share their new learning.

Ways to Gain/Maintain Attention (Primacy)

How will you gain and maintain students' attention? Consider need, readiness, learning style, novelty, meaning, or emotion.

Example: Teacher determines seating arrangement/partnerships, choose text of interest to the students, choose text at appropriate level

Cognitive Deficit To Consider in Teaching and Learning

Identify your students' area of need and determine the impact the deficit (s) has on the mastery of the skill; determine the instructional approach that will be used to support each students acquiring of that skill (s), and identify the instructional strategies that work best to maintain or reinforce the newly emerging skill or concept.

Example#1: Reading Comprehension in Integrate and Interpret

Having difficulties with comparing and contrasting information or actions by characters; examine connections across parts of text; consider alternatives to what is presented in the text; use mental images

Instructional Approach: Guide students through focused, high-quality discussion on the meaning of text.

Teachers should develop higher-order open-ended questions that encourage students to think deeply about what the text means rather than simply recalling details. Questions should reflect what teachers want students to draw from the text, including implicit as well as explicit information. They generally should not be simplistic ("What is the boy's name?") or ask just for an opinion ("Did you like the story?"). Typical higher-order questions include:

- Why did _____?
- What do you think _____?
- If you were the author _____?
- What does _____ remind you of and why?
- What makes you say that?
- What happened in the book that makes you think that?
- Can you explain what you meant when you said _____?
- Do you agree with what _____ said? Why or why not?
- How does what you said connect with what ______ already said?
- Let's see if what we read provides us with any information that can resolve _____'s and _____'s disagreement.
- What does the author say about that?

Example#2: Long Term Retrieval: Declarative (explicit)

Difficulties recalling and retelling information from the text

Instructional Approaches: What to do-

- Students will use their own words to rephrase definitions/descriptions. Students think of familiar examples things that you can relate to or have experienced.
- Students will use familiar acronyms, acrostics, analogies, codes, musical jingles and rhymes.
- Students will relate new information to knowledge from other past and/or present to life experiences
- Students will relate theme(s) to everyday practice.

Instructional Strategy:

Active Participation- Have students read what is underlined, highlighted, or written in the margins. To consolidate this information in long-term memory, they can make outlines or use graphic organizers.

IEP CCSS related Goal/Objective Sentence Starters

By _____ when given a text at _____ level the student will independently identify the central theme of a text within three out of four times.

By the third week of the semester, when given an informative text at _____ level, the student will identify and describe the setting within two out of three trials.

MATHEMATICS: INSTRUCTIONAL DESIGN AND IMPLEMENTATION

A Note from the Mathematics Subcommittee:

As members of the Mathematics Resource Teacher Committee, we were given the task of connecting math standards with effective instruction in the classroom and providing support to students with disabilities. The opportunity to unpack the standards, evoked the excitement that we could offer supports to our fellow colleagues and possibly answer questions to why math education has become intimidating to teachers and students alike. Resource program teachers assigned to teaching math may ask the overarching guestion, "What is a common area in which students struggle in mathematics?" Educators may not always agree with what standard in math is the most important, but most will agree that the ability to recall basic math facts fluently is necessary for students to attain higher-order math skills. In order for students to acquire math skills, explicit, well

planned instruction is necessary. As resource program teachers assigned to teach math, we must develop and adopt a recursive process of planning, implementing, providing feedback, adjusting lessons and reflecting upon the instruction we are providing to our learners. The math committee unpacked one of the power standards in mathematics kindergarten through 12. During this process, we were able to identify prerequisite math skills as well as future skills that math learners will need in order to generalize information throughout the grades. We call this process vertical alignment. The attached vertical alignment chart consists of identified target standards, prerequisite skills and concepts, and depth of knowledge levels. Using the gathered information found in the vertical alignment we conducted a lesson study, identified and incorporated assistive technology supports, determined key deficits in math instruction with the hopes of creating positive outcomes for the many frustrated students in our classrooms.



MEET THE MATHEMATICS RESOURCE COMMITTEE



Sarah Crawford



Sarah Crawford is an elementary school resource room teacher for Hamtramck Public Schools with 17 years of experience. Endorsed in both Cognitive Impairments and Specific Learning Disabilities, she has worked in both the elementary and secondary setting. Her expertise lies in

accommodating curriculum, reading intervention, RTI and co-teaching in the mathematics classroom. She has worked in curriculum development and school improvement at the county, school and district levels. Her personal passions include birding, playing the guitar and piano, and spending time with her family and dogs.



Mary Demyanovich



Mary Demyanovich is currently teaching for Woodhaven-Brownstown School District as a Learning Resource Center pre-Algebra and Algebra I math instructor. Prior to this position she developed and ran a basic classroom

program for middle school students with emotional impairments for eight years. Her greatest success has been not allowing her past to define her but allowing it to fuel hard work to improve the lives of others. Mrs. Demyanovich is passionately intense about her role as an educator holding a long history of working with people with disabilities personally and professionally. At the present she is interested in ways to improve mathematical knowledge of students in a way that all learners can generalize the information into everyday problem solving. Throughout her career of 18 years, inspired by her faith in God and motivated by the frequent and ever-changing educational climates Mrs. Demyanovich prides herself as actively trying to be a part of the solution, not the problem. At age 18, Mrs. Demyanovich became a paraprofessional for students with severe cognitive impairments and began attending Eastern Michigan University. Mary studied at Eastern Michigan University with a focus in Special Education for students with Emotional Impairments, and Physical Education. By age 19, she held 2 coaching jobs, and attended college. During her time at Eastern Michigan University she volunteered as a mentor for adults with disabilities, held leadership positions for two years on campus as a resident advisor as well as a Multi-Cultural Peer Advisor, and competed on the Women's Cross Country and Track and Field teams at Eastern Michigan University. Two years after graduating with her Bachelor's Degree of Science in Education she earned her Master's in the Art of Teaching at Marygrove College.



Natalie Hagle



Natalie Hagle is dedicated special educator with almost 10 years of experience in education. She has a firm belief that all children can learn. How each child learns or how fast they learn or what they learn may vary, but there is no child that can't learn. She has her own personal story about being a child with a disability, a parent of a child with a disability, and

currently is a teacher of student with disabilities who facilitates and promotes inclusion as a part of who she is as a person. She began her career as a middle school self-contained Emotional Impaired teacher and has held other positions including Special Education Resource Teacher in grades 5th grade through 12th grade. Natalie holds a B.S in Special Education in Emotional Impairments K-12 with a minor in Mathematics K-8 and M.S.Ed. in the area of Inclusion education. Natalie is committed to being a lifelong learner and enjoys learning new information that she can use in her classroom. Her mission is to make a difference in the lives of her students. Her students come to her with little confidence in their math abilities and she wants them to make an attempt to understand math so, they can be successful in their life adventures.

CCSS VERTICAL PROGRESSION ALIGNMENT CHART FOR MATHEMATICS: A WORK IN PROGRESS

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
К	K.OA.A.1 Represent addition and subtraction with objects, fingers, mental images, drawings1, sounds (e.g., claps), and acting out situations, verbal explanations, expressions, or equations.	• Represent	 Addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations 	• 1 and 2	 Knowledge of number sense. Connection between numbers and symbols Nnumber comparison How to represent each number in objects, fingers (and so on) Vocabulary Adding to (add) Taking from (subtract) Putting together More/less
1	1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	• Represent	 Addition and subtraction within 20. Word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions Utilizing manipulatives/ drawings Equations to represent problems Using symbol to represent operation Using symbol to represent unknown numbers 	• 2	 Knowledge of number sense. Connection of numbers and symbols up to 20 Compare numbers up to 20 Ability to represent each number in objects, fingers (and so on) for numbers up to 20 Knowledge of operational symbols for equations for addition and subtraction. Vocabulary adding to (add) taking from (subtract) putting together (combine) compare

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
2	2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	 Solve Represent 	 Addition and subtraction problems within 100 One-and-two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions Using drawings and manipulatives Using symbols for equations Using symbols for unknown numbers 	• 2	 Knowledge of number sense. Connection of numbers and symbols up to 100 Compare numbers up to 100 Ability to represent each number in objects, fingers (and so on) for numbers up to 100 Knowledge of operational symbols for addition and subtraction How to symbolically represent Vocabulary adding to (add) taking from (subtract) putting together (combine) taking apart (separate) comparing
3	3.OA.A.1 Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.	• Interpret	 Products of whole numbers 	• 2	 knowledge of arrays Ability to group objects in a variety of formats Foundational skills with addition Vocabulary whole number product multiplication total

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
4	4.OA.A.1 Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	 Interpret Represent 	 A multiplication equation as comparison Verbal statements of multiplicative comparisons as multiplication equations 	• 2	 Knowledge of arrays Knowledge of groups Foundational skills with addition Vocabulary is of times product
5	5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols	• Evaluate	 Parenthesis, brackets, or braces in numerical expressions Evaluate expressions with these symbols 	• 1 and 2	 Knowledge of order of operation (order does matter) Foundational skills with addition, subtraction, multiplication, division Vocabulary Parenthesis brackets brackets braces expressions evaluate
6	6.EE.A.1 Write and evaluate numerical expressions involving whole- number exponents.	• Write • Evaluate	 Numerical expressions involving whole-number exponents Numerical expressions involving whole-number exponents 	• 1 and 3	 Foundational skills with addition and multiplication Knowledge of order of operation (order does matter) Vocabulary base exponent (index) evaluate expand form (43= 4x4x4)

Grade	Standard	"Unwrapped" Skills (Students need to be able to do)	"Unwrapped" Concepts (Students need to know)	Depth of Knowledge	Pre-Requisite Skills Needed
7	7.EE.A.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	• Apply	 Properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients 	• 3	 Extend knowledge: Properties operations vs. order of operations Vocabulary distribute simplify variable expressions
8	8.EE.A.1: Know and apply the properties of integer exponents to generate equivalent numerical expressions. For example, $3^2 \times 3^{-5} =$ $3^{-3} = 1/3^3 = 1/27$.	• Know • Apply	 Properties of integer exponents to generate equivalent numerical expressions. For example, 3² × 3⁻⁵ = 3⁻³ = 1/3³ = 1/27. 	• 1 and 3	 Apply properties to simplifying radical exponents Vocabulary Negative exponent division of exponents scientific notation zero exponent adding exponents multiplying exponents radical square root cube root
9- 12	HSA.APR.D.6 Rewrite simple rational expressions in different forms; write $a^{(x)}/_{b(x)}$ in the form $q(x) + r^{(x)}/_{b(x)'}$ where $a(x)$, $b(x)$, q(x), and $r(x)$ are polynomials with the degree of r(x) less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system.	 Rewrite Use 	 Simple rational expressions in different forms Inspection, long division, or computer/ algebra system for the more complicated examples 	• 2 and 1	 Using all properties learned in previous coursework to simply, manipulate, create, and interpret radical expressions. Fraction expression simplification

SAMPLE of Unpacking the CCSS- Elementary & Middle School Standards for Math

Standard	Verbs	Nouns	Skills Necessary
Standard 5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Verbs Use Evaluate 	 Nouns Parentheses Brackets Braces Numerical expressions Symbols 	 Order of operations Ability to calculate (4 operations) Define/identify visually bracket, brace, parentheses The difference between expression/equation What does evaluate mean? Determine when parentheses, brackets, or braces should or should not be used in an expression
7. EE.A.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	 Use Generate 	 Properties Operations Expressions 	 Read/comprehend text if used within the context of a story problem Name order of operations for expressions Name order of operations for equations Calculate expressions and equations using 4 operations Identify when there are no special grouping symbols, math problems are solved from left to right Use parentheses, brackets, and braces for set of number solutions, calculations Calculate whole numbers with positive exponents

Mathematics Teaching and Learning Planning Considerations

Directions: Below is an instructional planning tool that will support the resource program teacher in creating specialized designed instruction for their students. This tool is not a lesson plan, but a guide to support the development of one.

Lesson Title: Order of Operations	Course: Algebra	Date:	
Core Content and Process Standards: Number and Operation			
8.EE.1. Know and apply the properties of integer exponents to generate equivalent numerical expressions Aligned Resources			
8.EE.2. Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that v2 is irrational. Aligned Resources			
8.EE.3. Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. Aligned Resources			
Resources to View Prior to Teaching:			
http://www.mathgoodies.com/Lessons/vol7/order_operations.html			
http://www.math-play.com/Order-of-Operations-Millionaire/order-of-operations-millionaire.html			
Content Chunks : <i>How will you divide and teach the content to engage students' brains?</i> (Launch, Explore, Summarize, Apply, Assess)			
Lesson Objective(s): What will you be teaching? (List content and language objectives).			
Example: In this lesson, students will use the calculator to derive the order of operations. Then they problem solve to arrive at the same solution by placing parenthesis in four different numeric problems.			
Big Ideas for Enduring Understanding	Essential Questions (EQ)		
 Identify which concepts you want your students to learn and master, e.g., There are rules that dictate the order in which to solve numeric expressions and equations. Symbols communicate which rules we use. 	An essential question frames problem to be solved. It shou experiences and interests to world. EQ should connect wh real world, where they can put to work. Essential questions of uncovering a topic.	Ild connect students' lived disciplinary problems in the nat they learn back to the ut their new understandings	
	• Why do we need an orde	er of operations?	
	• Why is our "order of ope	rations" in the order it is?	
Anticipatory Set			

Teach vocabulary for text you are using. Give some background information to help students begin to make connections and build knowledge. You can do a KWL chart on board as a large group of have students individually make a chart. What do I know about the topic? What do I want to know? What did I learn?

Skill Focus	Vocabulary Focus		
Identify the skills students will need to master the content standards:	Identify the vocabulary that will be used during the specific text.		
Example: Using the Order of Operations	Example: Order of Operations, Exponent, Square Root, Cube Root, Scientific Notation, various forms of multiplication and division, recognition with variables and numbers		
Universal Design for Learning Considerations Provide multiple means of representation, expression, and engagement.			
Free on-line graphing calculators at Desmos.com	Free on-line graphing calculators at Desmos.com		
Elmo for projections			
Square paper for the foldable			
Playing cards			
• 30-sided dice			
Identify On-line Supports to Supplement Instruction:			
http://regentsprep.org/Regents/math/ALGEBRA/AOP2/orderPrac.htm			
http://aplusmath.com/cgi-bin/Worksheets/Online_Orde	er_Of_Operations		
Assessment (Traditional/Authentic) How will you know students have learned the content?			
Example:			
Allow small groups of students to work on the Order of Operations Group Problem Solving			
Use the Order of Operations worksheet as a review			
White board or board relay situation			
Ways to Gain/Maintain Attention (Primacy) How will you gain and maintain students' attention? Consider need, readiness, learning style, novelty, meaning, or emotion. Example: make a peanut butter and jelly sandwich, use graphing calculator, create a foldable, game, have music			

Example: make a peanut butter and jelly sandwich, use graphing calculator, create a foldable, game, have music playing during problem solving, cooperative groups, or compete on the board or boards to find solutions.

Cognitive Deficit To Consider in Teaching and Learning

Identify your students' area of need and determine the impact the deficit (s) has on the mastery of the skill; determine the instructional approach that will be used to support each students acquiring of that skill (s), and identify the instructional strategies that work best to maintain or reinforce the newly emerging skill or concept.

Example #1: Math Reasoning

• Difficulties with actively investigating and exploring math concepts within a word problem or math task

Example #2: Working Memory (Long-Term)

- Difficulties recalling and retelling basic math facts
- Have difficulty remembering facts and procedures, such as new vocabulary words, verb conjugations or mathematical procedures.

Example #3: Math Reasoning

- Difficulties with actively investigating and exploring math concepts within a word problem or math task
- Difficulties with applying previously learned information to new and different situations
- Difficulties with operations involving numbers and referents for number

Example #4: Processing Speed

- Exhibit slow retrieval of information.
- Fail to follow instructions despite repeated instructions.
- Difficulties scanning, discriminate between, and sequentially order visual information.
- Difficulties scanning, discriminate between, and sequentially order visual information.

Example #5: Math Fluency

- Speed of performing simple calculations for 3 minutes.
- · Difficulties with understanding
- Number meaning, relationships, magnitude
- · Difficulties with operations involving numbers and referents for number

Instructional Approaches: What to do? Model different methods for computing.

When teaching, record a number of different approaches to solving a problem–asked from the class or by introducing their own—it exposes students to strategies that they may not have considered. When children think that there is one right way to compute, they focus on learning and applying it, rather than thinking about what makes sense for the numbers at hand.

Instructional Approaches: What to do? Ask students regularly to calculate mentally.

Mental math encourages students to build on their knowledge about numbers and numerical relationships. When they cannot rely on memorized procedures or holding large quantities in their heads, students are forced to think **m**ore flexibly and efficiently, and to consider alternate problem solving strategies. —*Continued next page*

Instructional Approaches: Question students about how they reason numerically

Asking students about their reasoning—both when they make mistakes AND when they arrive at the correct answer—communicates to them that you value their ideas, that math is about reasoning, and, most importantly, that math should make sense to them. Exploring reasoning is also extremely important for the teacher as a formative assessment tool. It helps her understand each student's strengths and weaknesses, content knowledge, reasoning strategies and misconceptions.

Instructional Approaches: What to do?

Students will be taught to write — rather than just remember — math facts and equations. Math word problems are frequently identified as an area of difficulty for individuals with weak working memory skills. However, the simple act of writing down the key components of a word problem circumvents the need to keep too much information in mind. Using some type of graphical representation for math word problems such as numbering steps, arrows that connect information in a meaningful way, or a drawing that summarizes the problem

Instructional Approaches: Pause, Paraphrase, Summarize, and Allow Time

Stop at least two times per lesson and request a quick summary from students – "what have we learned so far?" – followed by quick notes on the board. Research overwhelmingly indicates that at least 40% of total learning time needs to be spent reviewing new material.

Instructional Strategy: Make estimation an integral part of computing.

Most of the math that we do every day—deciding when to leave for school, how much paint to buy, what type of tip to leave in a restaurant, which line to get in at the grocery store

Instructional Strategy: Grab the playing cards.

Using popular family games such as Uno, Crazy Eights, Memory, and Concentration that require memory and the use of numbers, sets, and mathematical concepts. To get the most benefit from this, point out the memory strategies that lead to success in the game. Playing these games can help students learn to maintain information in mind from earlier in-game experiences, and apply that information when making a decision in the present. Simple games such as Go Fish require players to remember what cards someone asked for earlier in the game so that players know what cards are more likely to be in their opponents' hands. More complex card games such as Bridge and Pinochle require working-memory skills, counting, and estimation strategies to be successful. Switch games to keep your student's interest, playing increasingly more complex games as she masters easier ones.

Instructional Strategy: Make estimation an integral part of computing.

Most of the math that we do every day—deciding when to leave for school, how much paint to buy, what type of tip to leave in a restaurant, which line to get in at the grocery store relies not only on mental math but estimations. Be mindful that traditional textbook rounding exercises don't provide the necessary context for students to understand estimating or build number sense. To do that, estimation must be embedded in problem situations.

Instructional Strategy: Using Number Talk Strategy—

A Number Talk is a short (5-15 minutes), ongoing daily routine of student/teacher conversations that provides students with meaningful ongoing practice with computation problems that are solved mentally.

IEP CCSS related Goal/Objective Sentence Starters

By _____ when given a _____ at ____ level TSW independently name order of operations for expressions _____ within three out of four times.

By _____ when given a _____ at ____ level TSW independently use parentheses, brackets, and braces for set of number solutions, calculations within three out of five attempts with guided notes.

SCIENCE: INSTRUCTIONAL DESIGN AND IMPLEMENTATION

A Note from the ELA Subcommittee:

In the process of creating a science lesson, we selected a focus on ecosystems and energy due to its overarching concepts that feed into a variety of other topics in the realm of biology. These concepts "set the stage" for learning more in depth about living things. Ecosystems and energy are inherently relatively concrete concepts, as they are relatable to any local area that the students are in (urban, suburban, rural). Examples can be found everywhere. This has direct impact on all students and is therefore relatable information which lends itself to introducing further concepts such as photosynthesis and cellular respiration. Standards were broken down from a larger concept to the skills and concepts which they would need in order to show understanding and are presented in the Learning Targets or "I Can" Statements. Essential questions can be regarded as precursor knowledge needed to acquire the Learning

Targets. Sample lesson activities were gathered to address students' natural enthusiasm in the use of technology that would support concepts and engage students in learning. Knowledge in science is intrinsic to understanding the world around us. Imparting these concepts is vital to supporting our fellow teachers and our students in becoming lifelong learners. The following activities were designed to get students excited and interested about science. As we developed our unit of study, we kept in mind that today's learners are stimulated visually, orally and a bit kinesthetically. They (the learners) must use all of their senses to be engaged in the learning process and we as teachers must model and provide many opportunities during our valuable classroom time to engage them. As members of the resource program committee, we, as special education teachers who love science, developed a unit that will support your students' access to the science curriculum expectations, while supporting the individual needs of students with disabilities.



MEET THE SCIENCE RESOURCE COMMITTEE



Diana Demers



Diana Demers is a teacher consultant for the science department at Garden City High School where she works with students with a variety of disabilities. Diana works collaboratively with the science department to differentiate curriculum

and facilitate specially designed instruction. She is currently working on reconstructing a supplemental materials website for the high school sciences. She is also working with a team to develop a post-secondary website. Diana holds a B.A. and M.Ed. in Special Education in Autism Spectrum Disorder and Cognitive Impairment.



Rebecca Adams



Rebecca Adams has over 15 years of educational experience. She began pursuing her Bachelor's Degree in Education at Ferris State University on a Wade McCree Scholarship; she later transferred to Wayne

State University. Rebecca graduated with a BS in Elementary Education focusing on social studies (K-5 self-contained and RX 6-8) in 2000. She also received her Masters Degree in Special Education (CI) from Wayne State University in 2009. Rebecca began her journey working as a caregiver in an early childhood program and later became a latchkey director for an afterschool program, before her first position as a teacher. Rebecca held the position of grade level leader, PBIS coach, a curriculum coordinator, and a mentor for middle school aged girls. Rebecca was hired as a Student Learning Consultant at University Prep High School and was later promoted to one of four individuals as a building administrator for grades 9-10. She continued pursing her career in administration in her role as a Middle School Assistant Principal for Detroit Service Learning Academy. In 2013, she was hired as the Principal of Arbor Prep High School in Ypsilanti Township. Currently, she works as a team member of Global Psychological Services as Special Education Coordinator. Her role is overseeing IEP compliance, supporting the collaborations of general education teachers and resource teachers, and meeting with administrators.



Bill Robinson



Bill Robinson graduated from Eastern Michigan University with a bachelor's degree in Emotional Impairments and again with a masters in Curriculum and Development. Bill has worked at the Allen Park School District since 2001 as a middle school teacher. At one point in time, Bill has taught Language Arts, Science, and Alternative Education.

Currently, Bill is a high school special education teacher. Bill enjoys every component of the instruction of Science. He enjoys supporting his students with disabilities by connecting them with the subject in fun and exciting ways, which includes adding technology to the development of his daily lessons.

Science Teaching and Learning Planning Considerations

Directions: Below is an instructional planning tool that will support the resource program teacher in creating specialized designed instruction for their students. This tool is not a lesson plan, but a guide to support the development of one.

		-		
Lesson Title: <i>Ecosystems</i>	Course: Earth Science	Date: September, 2016		
Core Content and Process Standards				
B3.2C: Draw the flow of energy through an ecosystem. Predict changes in the food web when one or more organisms are removed				
Grade: 9-12 CCSS. ELA-Literacy.RST.9-10.4: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9-10 text and topics				
GLCE L.EC.04.11: Identify organisms as part of a food chair	GLCE L.EC.04.11: Identify organisms as part of a food chain or web. Grade: 4			
CCSS.ELA-Literacy.RI.4.3: Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what				
Resources to View Prior to Teaching:				
Introduction/ Explanation/ Modeling:	Introduction/ Explanation/ Modeling:			
introduction wtih "Crash Course Kids" video: https://www.youtube.com/watch?v=MuKs9o1s8h8				
Video provides basic information. Teacher will need to link new vocabulary not covered in video to examples in video. Review key concepts with students, including examples from within the local area of food chains and webs.				
Guided Practice: Interactive modeling via http://www.iknowthat.com/ScienceIllustrations/foodchains/science_ desk.swf.				
Lesson Objective(s): What will you be teaching? (List content and language objectives).				
I can identify different organisms in a food chain using accu	ırate terms for their location in	the web or chain.		
I can explain and create a food chain or web.				
Big Ideas for Enduring Understanding	Essential Questions (EQ)			
 Identify which concepts you want your students to learn and master, e.g., Students will be able to state and explain how humans fit within the ecosystem and food web. 	world. EQ should connect w	uld connect students' lived disciplinary problems in the		
 Students will be able to explain how the loss of an organism within an ecosystem can affect other 	to work. Essential questions uncovering a topic.	÷		
organisms.	How are ecosystems org	Janized?		
	How does energy flow t	hrough an ecosystem?		
	How are ecosystems imp from the environment n	pacted when an organism 10 longer exists?		

Anticipatory Set

Blank templates for notes can be created ahead of time including word banks for students to fill in. Manipulatives can be created ahead of time to create the guided practice food chains using gross motor skills (attach images to magnet, create web on board) for those who lack the fine motor skills to operate an iPad or computer. Games available on the iPad have varying levels of difficulty depending on the game. Teacher can choose a group of similarly leveled games to assign to students to assure success.

Skill Focus	Vocabulary Focus
Identify the skills students will need to master the content standards:	Identify the vocabulary that will be used during the specific text.
Example: Draw, Predict, Determine information in a science informative text.	Example: organism, food web, food chain, consumer, producer, prey, predator

Universal Design for Learning Considerations *Provide multiple means of representation, expression, and engagement.*

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Guided Practice: Tablet interactive and worksheet

http://www.explorelearning.com/index.cfm?method=cResource.dspDetail&ResourceID=647

Identify On-line Supports to Supplement Instruction:

Guided Practice: Interactive modeling **http://www.iknowthat.com/Sciencelllustrations/foodchains/science_desk.swf.** Review illustration and key vocabulary. Click on "make food chains" to go through food chains in different habitats as a whole group (discussion).

Extension Activity to address new science standards: 5-PS3-1 *Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.* This information could also be added to the formative assessment poster/ comic strip/ etc. as an explanatory piece of the assessment. Students write a short piece on where the energy for each animal originated (which all leads back to the sun).

Assessment (Traditional/Authentic)

How will you know students have learned the content?

Example: Have students create a visual representation that connects food webs and food chains and shows how they are interrelated. Options for this project can be posters, comic strips, etc.

Ways to Gain/Maintain Attention (Primacy)

How will you gain and maintain students' attention? Consider need, readiness, learning style, novelty, meaning, or emotion.

Example: Using the strategy, gallery walk, the whole class views each other's projects (possibly have students note main ideas or interrelate with other topics covered in lesson....What makes up a food chain? How are food chains and food webs related? What kind of organisms are included in a food web? Where can I see a food web or food chain in real life?, etc.).

Continued next page...

Cognitive Deficit to Consider in Teaching and Learning

Identify your students' area of need and determine the impact the deficit (s) has on the mastery of the skill; determine the instructional approach that will be used to support each students acquiring of that skill (s), and identify the instructional strategies that work best to maintain or reinforce the newly emerging skill or concept.

Example #1: Reading Comprehension in Integrate and Interpret

Having difficulties with comparing and contrasting information or actions by characters; examine connections across parts of text; consider alternatives to what is presented in the text; use mental images

Instructional Approach: Guide students through focused, high-quality discussion on the meaning of text.

Teachers should develop higher-order questions that encourage students to think deeply about what the text means rather than simply recalling details. Questions should reflect what teachers want students to draw from the text, including implicit as well as explicit information. They generally should not be simplistic ("What is the boy's name?") or ask just for an opinion ("Did you like the story?"). Typical higher-order questions include:

Why did _____?

What do you think _____?

If you were the author or text _____?

What does _____ remind you of and why?

What makes you say that?

What happened in the text that makes you think that?

Can you explain what you meant when you said _____?

Do you agree with what ______ said? Why or why not?

Instructional Strategy: Active Participation

Have students read what is underlined, highlighted, or written in the margins. To consolidate this information in long-term memory, they can make outlines or use graphic organizers.

IEP CCSS related Goal/Objective Sentence Starters

By ______ when given a ______ at _____ level TSW independently recall five primary details in written form within three out of four times.

By _____ when given a _____ at _____ level TSW label and categorize objects, people, and places within three out of five attempts with guided notes.

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