

Differentiation Strategies: Addressing the Needs of Diverse Learners

Introduction: What Is Differentiation? Why Is It So Important?

In an increasingly diverse and globally interconnected world, it is imperative that classrooms become true communities of learning. According to Carol Ann Tomlinson, a nationally-recognized University of Virginia education professor, differentiated instruction is the key to promoting high levels of achievement for all learners. Tomlinson defines differentiation as a continual process of:

1. Assessing and monitoring students' readiness levels, interests, and learner profiles.
2. Based upon this pre-assessment/diagnosis, differentiate **content** (what is being studied), **process** (how it is being studied and learned), and **product** (what students will generate in terms of both products and performances to confirm that they have achieved desired learning targets).

Tomlinson identifies a wide range of processes and strategies for differentiation. However, her central principles include the need for teachers to:

1. Continually pre-assess/diagnose students' required background knowledge and skills needed for a lesson or unit—and then providing appropriate intervention when learning gaps are evident.
2. Use a range of instructional practices and flexible grouping arrangements to allow for whole-group, small-group, and one-on-one interactions within a lesson.
3. Whenever possible, acknowledge and address students' interests and prior experience as well as the unique aspects of their heritage, culture, and values.
4. Modify learning experiences—whenever feasible—to accommodate students' unique approaches to learning (e.g., preferences for levels of light, noise, cooperative learning and interaction, cognitive styles, personality traits).
5. Use a range of differentiation strategies to address a common set of learning targets while using tiered texts, tiered learning groups, curriculum compacting, and independent study to reinforce students' unique interests and preferences.
6. Scaffold the implementation of the curriculum so that students move from initial acquisition toward constructed meaning, ensuring that students end at a level of either guided or independent transfer.

For Alexandria City Public Schools, differentiation is especially important in light of the rich diversity of its student body. The suggested strategies and practices included in this document are especially relevant for English Language Learners and students with disabilities, but they are universal research-proven pedagogical practices that are also useful for all learners.

General Differentiation Strategies and Practices

1. As you prepare to teach ACPS curriculum units, please make certain that you differentiate learning tasks, instructional strategies, and assessment methods:

- Collaborate with your cooperating teacher or specialist to identify areas in which you can assess students' learning gaps or achievement needs—and determine appropriate interventions to support their learning.
- Plan for differentiation: How will you pre-assess students' varying readiness levels, interests, and learning profiles—and differentiate content, process, and product accordingly?
- In order to individualize or personalize student learning and instruction, make certain that your lesson plans are co-created or shared with cooperating teachers prior to implementing them. In other words, avoid differentiating on-the-spot—by strategically planning for it in advance.
- Make certain that students have reading selections appropriate to their reading levels.
- Use a range of pre-teaching strategies to ensure that students: (a) activate prior learning (i.e., activate cognitive schema); (b) pre-teach unit vocabulary; (c) preview unit content, emphasizing its big ideas and essential questions; (d) help students use mnemonic devices and other advance organizers to frame their learning and thinking; (e) encourage students to self-reflect and self-monitor: *To what extent am I understanding what I am being asked to learn? How can I adjust my learning to improve it?*
- Emphasize the “compelling why” with students: *To what extent do students demonstrate the ability to explain what they are learning and why they are learning it?*
- Encourage students to use Cornell or three-column notes: (a) middle column=running notes; (b) left column=summaries, big ideas, and questions; (c) right column=visual representations and graphic organizers.
- Use a range of “high-expectation” strategies: (a) using proximity, reinforcing students' sense that you respect and like them; (b) asking higher-order questions of all learners; (c) using wait time to allow for student reflection; and (d) using non-verbal affirmations, including eye contact, with all learners.
- Incorporate frequent checks for understanding, making certain that all learners are engaged and committed to learning. For example, for reluctant learners, use subtle prompts and individualized reminder cues to students to encourage them to stay on task and become involved in their own learning.
- Use ongoing progress monitoring strategies, i.e., formal and informal formative assessment tasks that give on-the-spot feedback that is criterion-based.

2. Throughout your implementation of the unit, use a range of assessment tools and processes, including:

- Pre-assessment/diagnosis at the beginning of key segments or juncture points within the unit (not just at the beginning of the unit);
- Formative assessment (i.e., ongoing, on-the-spot criterion-based feedback to students to help them self-assess, self-regulate, and self-adjust); and
- Summative assessment (i.e., anchor assessments used to judge students' level of proficiency and standards mastery, including transfer tasks identified in Stage Two).

3. Use the following strategies when student assessment data indicate that students require additional support or scaffolding:

When assessment data indicate your student needs support with reading:

- Use anticipation guides to preview key ideas.
- Read text aloud or utilize technology that reads aloud to student (Read, Write, Gold – available in all secondary schools).
- Chunk the text to help students process and summarize information.
- Teach students how to underline key words or important passages.
- Select text at appropriate reading levels.
- Use “Autosummarize” to adapt reading levels of texts (Microsoft Word -> Tools).
- Explicitly teach vocabulary: (1) Model explanations, descriptions, and examples of the word or phrase; (2) Encourage students to restate the explanation of the new term in their own words; (3) Have students create nonlinguistic representations; (4) Integrate academic vocabulary into daily classrooms tasks; (5) Periodically ask students to discuss the terms with one another; and (6) Periodically involve students in games that allow them to play with the terms (e.g., informal competitions).
- Teach self-questioning strategies.
- Model reading strategies frequently.
- Use Think Alouds to model how you want student to interact with the text.
- Introduce vocabulary by using word sorts and visual images.
- Use a variety of graphic organizers to help student interact with text.
- Strategically place sticky notes in reading. When a student sees a sticky note they must reflect on what they've read or ask a question about the text.
- Provide structures practice through partner retell: One partner reads a section and the next partner summarizes the main idea. Partners change roles with the next portion of the reading.
- Use story maps.
- Use visual aids to enhance reading.
- Teach new vocabulary in each day's unit and review terms already mastered.
- Use student experiential knowledge to build background knowledge.

- Use an active word wall. Teachers make a word wall active by creating opportunities for students to interact with the word wall. For example, students could use the words in writing, to play games, etc.

When assessment data indicate your student needs support with writing:

- Use word banks.
- Use active word walls.
- Use graphic organizers to pre-plan writing activities. Have a variety of graphic organizers available so that student can select one that best meets their need.
- Use computer-based webbing tools, like Inspiration, Kispriation and Webspiration - available to all students in ACPS.
- Have several exemplars to share with student.
- Use computer based spell check and grammar check.
- Provide structures for writing.
- Use flow chart for organizing ideas.
- Provide a narrowed choice of topics.
- Allow for collaborative writing.
- Consider using dictation software to for student responses.

When assessment data indicate your student needs support with speaking in English:

- Respect the silent period for WIDA Level 1 students by allowing them to participate in class through other language domains (reading, writing, listening).
- Provide question frames and sentence starters for oral language activities.
- Provide visuals as prompts for conversations.
- Rephrase student answers to provide examples of correct speech.
- Allow students to present things orally in pairs or small groups, instead of in front of the whole class.
- Have students record their speech so they can analyze their errors. Consider using the “record” feature in Microsoft Word.

When assessment data indicate your student needs support with listening:

- Model active listening strategies and processes for students.
- Reinforce the value of active listening behaviors.
- Work with students to summarize and paraphrase dialogue, discourse, and related communication presented by individual speakers, presenters, or groups.

When assessment data indicate your student needs support with math:

- Allow use of a calculator and/or multiplication facts table.
- Have student write in words why they are performing the steps.
- Use graphic organizers to divide up steps in lengthy problems.

- Provide manipulatives and/or utilize virtual manipulatives (<http://nlvm.usu.edu/>).
- Provide step-by-step instructions.
- Utilize “Rally Coach.” Rally Coach is a Kagan strategy where pairs of students work on procedural skills. One student is responsible for writing portion of the task, while the other is responsible for telling the student what to write. Students trade turns being the “writer” and “speaker.”
- Teach the [“Copy, cover compare”](#) strategy.
- Utilize the “Four Step problem solving approach” - Understand the problem, devise a plan, carry out the plan, look back.
- Use acronyms as mnemonic devices. Provide examples on the worksheets.

When assessment data indicate your student needs support with attention:

- Use preferential setting.
- Use proximity.
- Build in opportunities for frequent movement.
- Help the student set and monitor personal goals (i.e., How many sentences do you think you can write in the next 3 minutes?).
- Use a private signal to cue behavior.
- Prepare learner for change in activities.

When assessment data indicate your student needs support with understanding new concepts:

- Pre-teach new concepts: use small group instruction to pre-teach the most important concept of the day
- Identify the priority learning and emphasize that through the lesson.
- Provide meaningful practice, review and repetition.
- Incorporate sensory elements – visual, auditory and kinesthetic-tactile, musical, etc.
- Provide cues for students that signal when the most important concept is being discussed.
- Allow time for students to discuss new ideas and summarize their learning in groups or with a partner (Think, Pair, Share).

When assessment data indicate your student needs support with retaining and retrieving information:

- Use multi-modalities (visual, auditory, tactile) to teach the same concept.
- Pre-teaching and teach vocabulary in context.
- Use frequent repetition of key points.
- Highlight information.
- Use color coding to show concepts and relationship.
- Teach mnemonics as a memory tool (e.g., link strategies, rhyming pegwords, spatial systems, analogies, metaphors).

- Teach students to use and create visual imagery to represent ideas and concepts.
- Use lists.
- Teach students how to create remembering strategies that are personal to them.

When assessment data indicates your student needs support with representing new learning in assessment:

- Use a variety of authentic assessments.
- Teach test taking strategies.
- Teach the format of the upcoming tests.
- Allow a variety of ways to respond: orally, pictorially, tape recorded etc.
- Assess learning over time.
- Use rubrics and share learning expectations with student.
- Give students extra time who need it for processing language.

When assessment data indicates your student needs support with organization:

- Teach time management skills (i.e., making these skills an explicit part of unit academic vocabulary; modeling key skills for learners; encouraging students to self-assess in response to rubrics or checklists articulating key time management skills essential for a particular unit; providing ongoing coaching and feedback on students' use of identified skills; making these skills transparent and clear within a "no-secrets" classroom).
- Have a strong structure for the class.
- Clue student when time to organize materials i.e., "Place your homework in the first pocket of your folder."
- Utilize assignment sheets and online homework posting.
- Teach student an organization system.
- Consider how your classroom organization system supports the student. If it is too complex consider allowing a more flexible system for the student.

Universal Differentiaion Strategies That Are Also Useful for English Language Learners

- **Building Background Knowledge:**
 - Concepts should be directly linked to students' background experience.
 - This experience can be personal, cultural or academic. Links should be explicitly made between past learning and new concepts. Key vocabulary is emphasized.
 - New vocabulary is presented in context. The number of vocabulary items is limited.
- **Comprehensible Input:**
 - Use speech that is appropriate for students' language proficiency.
 - Make the explanation of the task clear using step-by-step manner with visuals.

- Use a variety of techniques to make content concepts clear.
- Teachers need to focus attention selectively on the most important information.
- Introduce new learning in context. Help students learn strategies such as predicting, summarizing.
- **Vocabulary and Language Development:**
 - Teachers introduce new concepts by discussing vocabulary words key to that concept.
 - Exploring specific academic terms starts a sequence of lessons on larger concepts and builds the student's background knowledge.
- **Guided Interaction (Cooperative Learning):**
 - Teachers structure lessons so students work together to understand what they read—by listening, speaking, reading, and writing collaboratively about the academic concepts in the text.
 - Grouping which supports language and content objectives.
 - Cooperative groups, buddies, pairs, large and small groups.
 - Ample wait time for responses and opportunities for clarification in native language, if possible.
- **Metacognition and Authentic Assessment:**
 - Teachers model and explicitly teach thinking skills crucial to learning new concepts.
 - Metacognition is a critical skill for learning a second language and a skill used by highly proficient readers of any language.
 - With authentic assessments, teachers use a variety of activities to check students' understanding, acknowledging that students learning a second language need a variety of ways that are not wholly reliant on advanced language skills to demonstrate their understanding of concepts.
- **Explicit Instruction:**
 - Teachers directly teach concepts, academic language, writing structures and reading comprehension strategies needed to complete classroom tasks.
- **Meaning-Based Context and Universal Themes:**
 - Teachers take something meaningful from the students' everyday lives and using it as a springboard to interest them in academic concepts.
- **Modeling, Graphic Organizers, and Visuals:**
 - Teacher use of a variety of visual aids, including pictures, diagrams, and charts, helps all students—and especially ELL students—easily recognize essential information and its relationship to supporting ideas.
 - Visuals make both the language and the content more accessible to students.

- **Use ACCESS for ELLs results to inform instruction:**
(<http://www.wida.us/assessment/access/index.aspx>)
- **Everyday Practices for Effective ELL Instruction:**
 - Use all four language domains in lessons (reading, writing, speaking, and listening).
 - Use stations and cooperative learning (jigsaw, team pair solo, round robin, etc.).
 - Allow students to process information in their native language.
 - Follow the teaching and learning cycle of building background, modeling, joint construction, and individual construction.
 - Teach English expressions and colloquialisms.
 - Teach prefixes and suffixes peculiar to the English language.
 - Present information from known to new information.
 - Write shorter and less complex sentences.
 - Teach the words that signal sequence.
 - Rewrite story questions or text excerpts in simpler English by using shorter sentences and pictures.
 - Tape short stories for independent listening assignments.
 - De-emphasize speed and emphasize accuracy of reading.
 - Explicitly teach words that signal the organizational patterns of texts—for example: Classification, Cause, Effect, Sequence, Comparison, Contrast.
 - Color code directions into actions, written responses and observations.
 - Provide a rubric to students for each assignment and have them grade themselves.
 - Pair ELL students with a native English speaking peer.
 - Ask questions orally and support comprehension by having them visually displayed
 - Modify written materials, simplify texts by choosing less complex vocabulary and simpler sentence structures.
 - Point out words that have special meanings in a specific subject area and other meanings in different contexts.
 - Give students extra time and allow them to use bilingual dictionaries on projects or assessments.

Helping Learners Achieve Guided and Independent Transfer:
Promoting High Levels of Accelerated Learning and Enrichment

1. Provide opportunities to engage in independent study, exploring and investigating key aspects of the unit's big ideas, essential questions, and knowledge/skills in which they have a deep interest.
2. Encourage students in generating and producing novel ways of thinking about important concepts and big ideas by asking them to design their own problems related to unit transfer goals and declarative and procedural knowledge.

3. Engage students in project-based learning that requires them to discover authentic, real-world applications of significant concepts and process from the unit to their own lives and the world beyond the classroom.
4. Encourage students to see cross-disciplinary connections and patterns related to the big ideas and processes from the unit: e.g., *How is the mathematics from this unit applicable to my work in such content areas as science and social studies?*

Ideas for Scaffolding, Tiering, Compacting, and Addressing the Needs of Diverse Learners

1. For students who would benefit from acceleration, independent study, or opportunities for going deeper into unit content, emphasize enrichment strategies related to the unit, including such possible learning tasks and strategies as the following:
 - Effective differentiation for Honors students and for those who would benefit from acceleration involves processes of curriculum compacting and tiering related to the transfer goals and big ideas for this unit. Specifically, effective diagnostic assessment can determine if students have already mastered key unit knowledge and skills, allowing them to engage in more accelerated content (compacting) or enriched explorations of topics of specific interest to them related to unit content (tiering).
 - Have students investigate the historical origins of key concepts and skills within the unit, including the importance of these ideas within mathematics and in other areas.
 - Encourage students to engage in projective investigations: i.e., Based upon what we've learned here—including its historical significance—how will students be learning this in the future? To what extent will students still be studying the content identified for the unit?
 - Engage students in deeply exploring the “Why?” of the content they are studying: Why is this important? How can I apply it to my life and my world?
 - When feasible, have every student work on an independent investigation or project related to how they can use unit big ideas and processes in real-world, authentic ways.
 - Anchor multiple units around culminating performance tasks using key elements of G.R.A.S.P.S. project design: i.e., authentic goals, roles, audiences, products and performances, and evaluation standards.

- Encourage students to find creative ways to teach unit-specific content to other students (e.g., visual representations, textbook materials, power points).
- Use electronic social networking to encourage students to reflect on and share their growing understanding of key unit concepts and skills (e.g., Blogs, chat groups, tweets).
- Create mentorship opportunities for students in which they interact with professional mathematicians and scientists who can reinforce the value of learning unit-, course-, and grade-level specific content.
- Integrate unit-specific content and skills into formal and informal competitions involving school clubs and organizations (*e.g., Odyssey of the Mind*).

Social Studies Grade 8

Unit 2: Rights and Duties of Citizenship

(Sample Transfer Task)

You work for a community organization that helps recent immigrants become United States citizens. Develop a handbook or brochure that guides people through the process of becoming citizens. Include a list of “Frequently Asked Questions” about citizenship and provide answers that will help people understand how to become a citizen, the rights of citizens, and the responsibilities and duties of citizens.

Your handbook should be clear and easy to understand for people who are new to the United States. It should include information about the steps of becoming a citizen and the rights, responsibilities, and duties of U.S. citizens.

Scaffolding a Transfer Task for English Language Learners

Questions to guide the planning process:

1. How can you move students in their understanding of the essential questions from the concrete to the abstract?
2. How can you get students to jointly construct a model?
3. How can you get students to use all four domains of language?
4. How can you extend students’ understanding through reading and writing?
5. What grammar and language structures are needed for this task?
6. How can you support students to use oral language?

Step 1: Start concretely:

Teacher models task with an example that students can connect with. For example, begin by asking students, what are the responsibilities and duties of being a member of your family? Then, ask them, what rights do you enjoy by being a member of your family?

Introduce essential questions and connect to a family example:

- How does an individual become a citizen and what is expected of her/him?
- What are the rights, duties and responsibilities of citizens and how are they related?

Step 2: Guide students through joint construction:

Guide students to work in groups and collaboratively create an example of what they will be expected to do in the transfer task. For example, they could relate the essential questions to being a member of a club or a sport team. Students could be grouped by interest.

Step 3: Help students create tangible models:

In this activity, students will need to explore how does a student become a member of the club or sport team and what is expected of her/him? Also, students will explore what rights, duties and responsibilities of being part of the club or sport team and how do these three areas are related?

Students create a list of frequently ask questions about the club or sport team that they selected.

Using a jigsaw, students present the model they create to each other. This exercise provides them an opportunity to use oral language.

Step 4: Moving students toward abstract understanding:

Return to the essential questions. Connect essential questions to readings about citizenship. Apply reading strategies that get students to interact with the text such as reciprocal teaching, Question Answer Relationship (QAR), or Cornell Note-taking.

Step 5: Individual group construction:

Have students work in groups of 4 to complete transfer task. Have them create list of rights and responsibilities of being a U.S. citizen. Have the group select the top 4 rights or responsibilities. Each group will present and explain why they selected the 4 rights or responsibilities and each member of the group will explain a right or responsibility of their group.

Extension Ideas:

If student is an immigrant or comes from an immigrant family, have them interview family members. If a student is not an immigrant, they could interview an immigrant from the community. Teacher could invite a guest speaker from the community who recently became a U.S. citizen.