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Preparing for the Journey of a Differentiated Classroom



“Computer LEGO Robotics”
Worlds of Wisdom and Wonder, The Center for Gifted

*There are only two lasting bequests we can hope to give our children.
One of these is roots, the other, wings.*

—Hodding Carter

Jimmy brought an armful of books to his first day of first grade. During a free activity period, he sidled over to a couple of children constructing a bridge and asked if they wanted him to read a Frog and Toad book. One of them agreed and sat quietly by his side as Jimmy read and dramatized one of his favorite stories.

In the same class sat Saha, whose family moved to the United States a month before she started school. She knew English but could not understand American accents very well. She shrank into her seat and scribbled the sounds of English words in Arabic script. When flipping through the books on a nearby table, she instinctively opened one from the back.

Russell had so much energy that he zoomed wherever he went. Some people in the school thought he had an attention deficit problem, but his teacher did not agree. His family had moved six times in the past three years seeking work, and Russell needed time to get used to the rhythms of school life. At the moment, all he seemed ready for was running around the edges of the classroom.

Desiree entered first grade with the idea of becoming a potter. She brought her own clay to class every day and asked the teacher when she would learn how to make pots and also statues of her favorite animals. She had no interest in reading or math and spent most of her time making the other children laugh.

During the primary years, children express a wider range of differences than older learners. As a general rule, the younger the age group, the more dramatic the variations within the group and the more likely that differences in tests or in the performance of any task reflect differences in developmental level. Significant changes take place within each year of the primary grades. One month you may find a child struggling with the most basic math concept; the next month, he suddenly masters it. Add to this the influence of culture, special ability, and language, and you have a classroom, such as the one described earlier, where the range of knowledge and understanding in any given subject can span at least several years.

So how do we begin to teach such children? What does a teacher do in a grade where every child is supposed to finish the year reading at a certain level and yet at least a third of the class is bilingual, four children have special problems, and two are already reading? Is it possible to teach essential reading strategies to Russell, who can hardly sit still and barely knows his alphabet; Saha, who painstakingly sounds out words in an Arabic script; Desiree, who would rather do pottery; and Jimmy, who is already reading books at third-grade level?

The first response must be to think through what the children and we as teachers are bringing to the table. As just shown, students in kindergarten through third grade come to class with their own special

abilities, interests, difficulties, languages, cultures, and cognitive and creative development. We teachers also come to school with our own instructional styles, strengths, interests, and experiences. Differentiation is the daily interplay of these individual elements, practices, choices, and adjustments in both teachers and students.

THE METAPHOR OF A “JOURNEY”

As mentioned in the introduction, this book uses the metaphor of a journey to describe the unique process of teaching and learning that differentiation offers to the primary classroom. Learning is, after all, a “doing” phenomenon, unique to each person, and therefore the “journey” of young children in a differentiated environment is one that adapts *to their steps*—*their* readiness for a new adventure, *their* curiosity and interests, *their* imaginative response. This metaphor can be a helpful way to think about the planning and preparation that goes into differentiation. For example, there may be one destination for all the travelers to reach, but each traveler brings different strengths, experiences, and skills from prior journeys to the new experience. The trip leader plans, organizes supplies, adjusts travel routes, anticipates needs, and so forth in the same way that a teacher does in a differentiated classroom.

Let us say that you have decided to organize a journey for 20 young children. Two of them show up without shoes; five have shoes and boots but no sweaters for the cold nights. Three feel nervous about traveling by car and want to know if they can get out now and then to walk around. Two want to get there as quickly as possible. Questions immediately arise in your mind as you plan:

- How prepared are my children, and what do they need to complete this journey?
- What sights and experiences do I want all of them to have no matter which route they take?
- What routes would best serve their needs (a direct route or a longer itinerary that covers more ground)?
- What should be the means of traveling (car, bike, foot, etc.)?
- How will I know if the journey accomplished what I intended?

As a guide to this process, *Differentiating for the Young Child* provides a five-step sequence to assist teachers in responding to student needs while also staying focused on the fundamental learning goals and objectives for the whole class. In brief, these are the steps:

THE LEARNING JOURNEY

Step 1: Know the travelers (children and teachers).

- Are they prepared for the journey? What skills, abilities and equipment do they have?
- What special problems or challenges do they bring to the journey?
- What differences from cultural background, life experience, and home life influence their ability to embark on this journey (i.e., learn)?
- What do you as teachers bring to this journey (knowledge, skills, experience, interests, resources) and what do you need (what accommodations to your style and preferences, what adjustments due to time constraints and other demands)?

Step 2: Determine the destination (learning goal).

- Where do you want the children to be at the end of this journey (i.e., what do you want the students to understand or to be able to do)?
- What territory (content) will they cover in terms of knowledge gained and skills honed?
- What learning standards and curriculum goals will this journey address?

Step 3: Identify proof or evidence that they have reached the destination (i.e., understand what has been taught).

- What behaviors and comments would show you that the students have reached their destination (achieved their goals)?
- What products, performances, constructions, and experiments would express understanding of the concepts, skills, and information taught?

Step 4: Plan the journey.

- How should the journey begin (what catalysts should be introduced)?
- What teaching strategies should be applied?
- What learning activities should be used?
- What resources should be drawn upon?
- How will the environment be designed and managed?

Step 5: Reassess and adjust according to new needs and changes.

- What are the criteria for knowing that the children have reached the destination (understood the concepts and processes involved)?
- What behaviors and verbal and written responses will reveal that learning has taken place?
- What measures (e.g., observation, questioning, rubrics) will give you the information you need to know if the child is on track or if he or she needs further adjustment?

Like any journey, differentiation requires preparation. How much preparation depends on the experience and talents teachers bring to the process, the learning needs of their students, and the level of support in their schools. For this reason, the journey is unique for each teacher who undertakes it. In order for differentiation to become beneficial for learners and teachers—one that feeds the imagination and provides the elements of discovery and surprise that make journeys worthwhile—realistic decisions have to be made about when and where it will work best and what human and material resources are needed to support it. Here are two examples of how teachers varied instruction to match the needs, learning styles, and interests of their students.

Example: Use of Learning Stations

Because of the different kids mainstreamed into my room, I usually have quite a range of skill and ability—anything between two years below grade level to at least two above. Differentiating helps me deliver the curriculum so that I can be sure everyone is getting the important stuff and getting it in a way that works for them. One of the strategies I use regularly in math is separate learning stations where the kids take new information and apply it at different levels of complexity and with different kinds of materials. At the beginning of the year, I familiarize the kids with the three stations. The first one has a lot of manipulatives, drawing paper, rulers, pencils, etc. This is where students prove the math facts and rules they've learned and show their partner why their solution to a problem works. I give them suggestions for how they might demonstrate their answers. Another station is for practicing computation where they need more help. Materials at this station could be worksheets, computer programs, and other supports that help the students become more confident. In the third station, children do math-related projects, which tend to be long term, and they have the option of working alone or in small groups. I work out their projects with them, depending on their individual interests and learning needs.

—Third-grade teacher

Example: Use of Creativity

A pattern I developed with my kids was to begin with direct instruction and then branch off into creative applications. For

kindergarteners, this works really well. The class had been learning a number of different words from a series of stories we'd read together. On index cards, I wrote a number of words from these stories (one on each card) and mixed them up in a basket. The children took five words each and also selected a picture from a large stack of prints I keep in a box. The print gave them a setting. I asked them to think up a story using the five words and the picture they had chosen. After some time, I had volunteers tell me their story while I wrote it down on the board. Other, more advanced kids wrote theirs; still others accompanied their story with sketches of their own. This experience gave everyone a chance to invent a story using words I wanted them to use and understanding more about what goes into a story. Creativity is a great differentiating source because of its flexibility. Everyone at every level can participate, and they can go as far as their ability and ideas allow.

—Kindergarten teacher

Teachers in seminars on differentiated instruction sometimes feel so pressured to apply the new strategies they've learned that they don't give themselves the time to carefully think through which ones will benefit them or how to integrate them in a manageable way. In beginning this process, the first question to consider is this: What elements of differentiation do you already have in place? What are you doing to adjust and adapt to the needs in your classroom *right now*? Some teachers become so intent on learning the new program that they lose sight of their own tried and true stock of teaching practices, discoveries, and innovations in the classroom. Yet these assets form the foundation for differentiating in the primary grades. If we pursue this metaphor of a journey a little further, what we do, logically, when embarking on a trip is to first look at what we have in the way of supplies and what we already know about the new terrain. In essence, we do an inventory.

The remainder of this chapter guides you through a similar process of taking stock. It is a time for you to gather your own resources (your knowledge and expertise, your material supplies, your hobbies and talents, your networks of support), and then assess your level of preparedness and make some initial decisions about how to proceed.

The following list is a way to begin this process. Think through the items as they apply to you with the aim of discovering where you are in relation to differentiation.

Taking Stock: An Inventory for Differentiation in the Primary Classroom

The Primary Classroom and Differentiation

Aspects of the primary classroom that support differentiation

Examples:

- Child-centered instruction
- Sensitivity to learning styles

Teaching strategies in primary education that adapt well to differentiation

Examples:

- Hands-on learning
- Small-group instruction
- Arts applications

Student Learning Needs

Student level of mastery

Examples:

- Students below or above grade level
- Students at different levels in different subjects

Learning challenges and needs in evidence

Examples:

- Reading difficulties in some students
- Gifted students unchallenged

Cultures, languages, interests, life experiences and circumstances

Examples:

- Bilingual students
- Several highly creative or artistic students

The Teacher's Knowledge and Experience

Teaching methods used most

Examples:

- Whole-class instruction followed by small-group activity
- Questioning techniques to support inductive thinking, followed by independent seat work

(Continued)

(Continued)

Current ways of responding to different academic and skill levels

Examples:

Reading groups and reading “buddies”

Math groups that progress at different levels of mastery

Creative processes in literacy and social studies

Knowledge and experience in differentiated instruction

Examples:

Inservices that focused on strategies

Workshops in developing learning centers

Some success in helping children who need reinforcement

Essential Concepts, Knowledge, and Skills

Required curriculum content and learning goals adaptable to differentiation

Examples:

Big ideas and concepts in a topic that allow for more flexible responses

Broadly stated curriculum standards that are not prescriptive

Arts activities adaptable to different learning needs of young children

Examples:

Theatrical games to explore history

Visual arts as catalysts for writing or math assignments

A Learning Environment for Young Students

The classroom itself and how it responds to the different learning needs of students

Examples:

Atmosphere warm and open; music to begin and end school day

Space colorful and many displays for engaging children

Nature center, reading corner, math games, and projects area

Resources to Explore

Resources applicable to different learning styles, intelligences, levels of mastery

Examples:

Books and magazines

Nature displays with real nests, grasses, etc.

Computer programs

Arts materials

Priorities and Preparation

Greatest needs in the classroom

Examples:

Gifted

Bilingual

High variation in reading readiness

Greatest demands right now

Examples:

Learning benchmarks, particularly in literacy

Preparing kids for testing in the district

Problems to tackle through differentiation

Examples:

Help struggling kids in reading

Find new ways to get students more engaged in science

Find more challenging assignments for gifted kids

New strategies to try

Examples:

Compacting for bright kids

Tiered instruction in math class

The following sections examine these items more closely in order to address the questions and practical concerns many teachers have about differentiation.

THE PRIMARY CLASSROOM AND DIFFERENTIATION

Most primary teachers are differentiating already, though they may not be fully aware of it. In a first-grade classroom, for example, we would likely find students working at different levels of ability, moving around in a space with flexible seating arrangements. Colorful displays and materials that appeal to the hands-on, sensory responses of young children are often richly in evidence. From their earliest years, young children learn by exploring their environment; they finger, touch, taste, and shape whatever they can get their hands on (Morrison, 1997). This doesn't change significantly in the primary school grades. Most primary classrooms combine

direct instruction with a variety of creative activities that inspire young students to expand upon newly learned concepts, inventing the world from their own imagination (Belgrad, 1998).

In the primary grades, education is already child-centered, although teachers still face the same pressure as those in higher grades to conform to the curriculum standards and learning benchmarks adopted by their state. But the philosophical underpinnings of primary education embrace ideas that are also fundamental to differentiating. Let's consider, for example, the constructive behavior of young children that has become the foundation of teaching in preschool, kindergarten, and, to a large degree, the primary grades (Cohen & Jipson, 1998). Drawing on the work of Piaget (1977, 1980), a "constructivist" or "developmental" model is centered around how children *construct* their understanding of the world through continuous contact with and adaptation to their environment. As in a differentiated classroom, teachers play a key role in anticipating student learning needs and in guiding the process of thinking, applying, and inventing. They become active *mediators* in the learning process (Feuerstein, 1980; Vygotsky, 1962), designing learning experiences based upon the children's cognitive, social, and physical development as well as their creative and imaginative life.

This kind of educational program for young children emphasizes play, exploration, risk-taking, and creative problem solving. Teachers here care as much about content as do those in the middle and upper grades, but their success with younger children depends on their being able to respond to considerable differences in growth, development, and experience. In many primary classrooms, children advance at their own rate and teachers create simple structures for monitoring progress and assessing strengths and weaknesses. They actively extend, engage, question, affirm, and challenge children as they "construct" knowledge (Cummings & Piirto, 1998, p. 383).

So, in some ways, primary teachers have an advantage in that many of them already have features of a differentiated classroom in place: ways to discover the learners' special abilities and characteristics, a variety of work areas in the classroom, a diversity of resources, and an active class of eager students who are used to doing different things. If this is your case, you already have a strong foundation to create a supportive environment for differentiating. On the other hand, if your school and past experience have emphasized direct instruction in the primary grades, introducing new changes may take more time. In this case, you can integrate the strategies of differentiation more gradually, beginning with those areas where your students have the greatest need.

STUDENT LEARNING NEEDS

Differentiated instruction evolves from the children before you. Every student who walks through the door of the classroom brings special gifts to the learning table. He may have unkempt hair and stare down at his shoes, or he may speak another language and hop around the room like a grasshopper. But each one has some hidden strength that enables him to learn. In preparing to differentiate, you have a significant advantage if you know who your learners are—what abilities, interests, and experiences have shaped them.

Because of the wide range of levels and backgrounds in many primary schools, teachers tend to pick up on things right away. After a few weeks, they can make general observations (“about two thirds of my students are at grade level”) and even more specific ones within certain subject areas (“several students are really struggling in reading” or “quite a few of my kids get a lot out of role-playing in math”). These insights inform the process of differentiating. Level of mastery, learning styles, interests, and cultural, ethnic, and linguistic backgrounds—all affect how children engage in the learning process and what teachers can do to meet their educational needs.

Here are some examples from a kindergarten class:

Alma is a bilingual child who grew up in the United States. She speaks Spanish to her parents and English to other relatives. She knows many stories told by her grandmother. Some are family stories; others are tales that come from the village where her parents grew up.

Brendan spent a great deal of his childhood hanging around his father’s garage because his mother had to work. Sometimes, his father let him carry some of his tools, and when he wasn’t playing outside, he would sit on a tall stool and watch his father fix the cars that came in. His father pointed out a lot of things while he worked, and Brendan came to know a lot about car engines.

Each of these children has special strengths gained from the lives they have lived so far. Alma has a wealth of stories—a wonderful source for literacy. Brendan understands engines and through this has a developed ability to construct things and improvise with a variety of objects. Becoming aware of specific skills, experiences, and abilities that young children carry within them opens the door to new paths for learning. Educator-anthropologist Luis Moll believed that discovering the hidden strengths (the knowledge, skills, and abilities) of bilingual communities

should guide the education of their children—an approach he called “funds of knowledge” (Moll, 1992). In an ethnographic study of the Mexican American communities that fed into some of the barrio schools in Tucson, Arizona (North Central Regional Educational Laboratory, 1994), he discovered a wealth of expertise on such subjects as agriculture, economics, mining, and science. Those with rural backgrounds shared what they knew about cultivating plants and animals and ranch management; others knew mechanics, carpentry, masonry, and electrical wiring. Many in the communities had entrepreneurial skills and knew specific information about archeology, biology, and mathematics.

Most schools knew little of these “funds” of experience and knowledge and therefore could not create meaningful bridges between the children and the curriculum. Bilingual children, Luis Moll argued, need to be able to use the strengths that have come to them within their first-language community to overcome the limitations they experience in their second-language community. This principle applies to all students, as all bring hidden “funds” through which teachers can make meaningful connections to the curriculum.

Preparing for a more differentiated classroom experience, therefore, involves finding out the best way to get the most useful information about your students. Young children come to you with little formal schooling and a wide variety of home situations, cultural environments, and community learning experiences. Working with parents and community members (see Chapter 2) will enrich your approach to differentiating as you will have a much clearer sense of where your students have come from and what resources, processes, and catalysts for learning will develop their latent abilities. Here are two examples from primary teachers:

I make the most of the moments when parents come to pick up the kids. I will jot down a few things I noticed in class and get the parents talking. Over time, I find out a lot and they will now volunteer information that helps me understand why their child reacts a certain way to an activity in class.

—Second-grade teacher

Over the first month or two, I sit down with a parent from each family and we talk about their child. They bring something the child has done and I explain my philosophy and how I like to work with the students. This helps me because I can then call on them later when I need support for a project or I can suggest ways they can help their kids at home.

—Kindergarten teacher

Since differentiating adjusts the *content* of a lesson or unit (what they are to learn), the *process* (how they are to learn it), and the *products* (what results they are to produce), the needs of the students determine the kinds of changes made.

ADAPTATIONS TO STUDENT NEEDS		
<i>Content</i>	<i>Process</i>	<i>Products</i>
<ul style="list-style-type: none"> • Does the level and pace of the content match their abilities and interests? • Do they fall behind in any area? • Do they finish assignments quickly and well? 	<ul style="list-style-type: none"> • Do they learn more by doing (i.e., through experiments, building, constructing, designing) and less by listening to information? • Do they prefer problems that involve inductive reasoning? • Do they incline toward the creative? 	<ul style="list-style-type: none"> • Do they have a hard time relating to the materials that accompany an assignment? • Can they use visual art to organize their thoughts and guide their writing (e.g., through a storybook approach)? • Are student-made maps a good way to show the children's learning in this class?

THE TEACHER'S KNOWLEDGE AND EXPERIENCE

Teachers bring to the work of differentiation their own unique combination of talents, interests, and approaches to guiding young children, as well as a mine of valuable insights they've gained from their years in the classroom. The individuality and life experiences of teachers have to be honored and valued at each step of this process. Sometimes, under the pressure to fall in line with a districtwide program or a preconceived idea of what differentiation should be, educators lose sight of this fact and they end up deciding that it's out of touch with the realities of today's classrooms.

Several concerns teachers frequently mention about differentiation are as follows:

Time. “Who has the time?” is a frequent question asked. Most teachers see the value of differentiation and understand how it would benefit their students, but the preparation involved seems formidable. Part of this comes from the impression that differentiated instruction should be going on all the time.

Required curriculum standards and learning benchmarks. “We don’t get to decide what we teach” is another common sentiment. Sometimes inservices are conducted as though primary teachers develop their own curricula and can freely teach students with little concern for district requirements. Many express a need to know how to differentiate within the limitations of their school day and state curricula.

Manageability. “How do we orchestrate all these different activities simultaneously?” Teachers can’t be expected to apply different strategies for different children all day long. It simply isn’t feasible, and often, it isn’t even necessary. An essential part of differentiation is figuring out when it’s really needed, and in most cases, the children themselves will reveal this by the problems they’re having and by the eagerness they express in wanting to do more.

Teachers need to include more of themselves in this journey. They are the ones who will inspire, motivate, and energize the process; they are the ones who enable the learners—at different stages of growth and achievement—to step onto the path of a new learning adventure; they are the ones who will provide alternate routes for the different “travelers.” Without the freedom to make the strategies of differentiation their own, they cannot fully engage in the process. This involves *beginning with what they have* and building from there to meet the most pressing needs of students.

As mentioned in the beginning of this chapter, you should think about the strategies you currently use to address different learning needs in your classrooms and how well you feel they are working. Taking the time to think about the unique talents, training, experiences, skills, and knowledge *you* bring to differentiation, as well as the challenges, concerns, and gaps in knowledge, can be a helpful aid in decision making.

So much of differentiating involves decisions. How should I begin? Where do my students need it most? Which strategies have worked well

and which have not? Which strategies require more preparation time than I can reasonably give and which ones am I prepared to use right now to help my students? How effective can I be, given the experience, resources, and support I have? How can I capitalize on my strengths and experiences?

Sometimes it helps to make a list of the areas where you're in a strong position to differentiate and those where you aren't. Here's an example:

What I can bring to differentiation.

Examples:

- My knowledge and experience over the past year
- Strategies I'm already using as a primary educator
- Special talents (art and ecology) that can enrich how I differentiate

What I need help on.

Examples:

- Tiered instruction is difficult for me to manage.
- I have a hard time structuring small-group experiences so that the kids aren't so dependent on me.
- I'm not sure how to create a cluster group with another second-grade teacher.

ESSENTIAL CONCEPTS, KNOWLEDGE, AND SKILLS

Staying with the “journey” metaphor, we can regard the content as the territory that the students travel through as they make their way toward their destination (learning goal). Along the way, they learned about the mountains they passed, studied and measured the dimensions of the rivers they had to cross, and catalogued the different species of flora and fauna. Differentiation enables children to draw on *their* learning preferences, life experiences, and special strengths to progress through the curriculum. So, while some advanced students would take a more difficult path through the mountains, others would stick to the lowlands. Still others may take a side trip to the cattail marshes to collect samples.

An important step in differentiation is to identify the essential concepts, knowledge, and skills of the subject under study. The reason for this is clear. There needs to be a cohesiveness to the journey so that, even though one group of students is reading a novel and another a short story,

both are headed in the same direction. Let us take, for example, this essential reading strategy: to identify what's most important in a text. This goal is broad enough to allow flexibility in the learning "routes" you plan for your students. You could do the following:

Steer children toward books at different levels of difficulty.

Provide different *kinds* of books (nonfiction, science fiction, fantasy, biography).

Allow different ways to express the main idea of a book (art, theater, essay, diagram).

Even when the required curriculum leaves little room for invention, you have to make choices. Give some careful thought to the larger implications of curriculum goals and standards and the fundamental concepts, knowledge, and thinking skills students need to navigate the terrain before them. What enduring gift of understanding do you want to leave your students with by the end of a week, month, and year? What topics and units will enable your students to explore essential concepts and knowledge?

The following are four useful criteria for selecting the most essential content (Wiggins & McTighe, 1998):

1. To what extent does the idea, topic, or process represent a "big idea" having enduring value beyond the classroom? In other words, what fundamental concept undergirds this lesson? For example, a unit on the relationship between people and the oceans would focus, in different ways, on the interconnectedness of ocean ecology—the big idea.

2. To what extent does the idea, topic, or process reside at the heart of the discipline? To learn science, young children need to do science, not just read or think about it. In a language arts class, students write stories, poems, and essays; interpret literature through movement and theater games; and discuss ideas in favorite books. Learning correct rules of grammar, usage, and spelling are inherent in this process but not goals in themselves.

3. To what extent does the idea, topic, or process require uncoverage? Think about those areas of a subject that students often find difficult. What central concepts in math require more time and reinforcement? Do the reading activities you've designed help them grasp what's most important in a story, a poem, or a book on butterflies?

4. To what extent does the idea, topic, or process offer potential for engaging students? A key concept or idea may hold no interest for

students, however essential it is to a subject. You need to choose interesting topics that connect to a big idea and provide access to meaningful exploration and discovery. For example, you can teach about double-digit numbers through story and simulations.

As you review what you're planning to teach, ask yourself two levels of questions—"essential" and "unit" (Heacox, 2002). Essential questions involve overarching themes, concepts, and principles. An example might be this: "How are folktales different from all other tales or stories?" Unit questions evolve from this broad question and target specific information, concepts, and skills. Examples could include the following: "Where do folktales come from? Why are they called folktales? What is an example of a folktale in this country?" Often, these questions tie in with curriculum standards. Keep the number of questions relatively low (no more than five) and write them in simple, child-friendly language. These questions not only guide you but also create a conceptual structure for the students to follow.

How you use essential questions and unit questions is up to you. For some teachers, the questioning process clarifies in their own minds how they want to structure a class. And with respect to differentiation, it encourages them to focus first on the fundamentals—the understanding, the thinking process—that they want their students to experience and make their own. Then, they can more easily create different ways for them to get there.

I think of essential content as the forest, the unit, a species of tree in this forest. If we were to go to a national forest, we would naturally want to know what forest we were in. So I see this part of differentiating as a way of saying to the kids, "This is the forest we're going to be exploring. And over here is a tree and we're going to learn about this tree species . . . Or, here is a river and these are the things we're going to learn about the river." Sharing this with kids motivates them more because if they can see the big picture, they're likely to also see the value of exploring a smaller section of this forest. Before we get into a new unit, I often ask the kids what they'd like to learn, and it's amazing what they come up with. Last week, the students asked so many interesting questions about poetry

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Focus on Essentials

Level I: Essential Themes, Concepts, Principles

A single, broad question

Level II: Information, Concepts, Skills Tied to Learning Standards

Five clear, student-centered questions

(which we are studying now) that I had a pretty clear sense about what “big ideas” I wanted to focus on and how we would explore the different poetic traditions and literary conventions.

—Third-grade teacher

My school is always hammering away about state curriculum standards. But there’s a way you can look at these as a guide. I write down the ones I feel most apply to my grade and my students and then work back up to a “big idea.” For example, in math we have this standard: “Demonstrate knowledge and use of numbers and their representations in a broad range of theoretical and practical settings.” I ask myself, “Well, what do kids need to know about numbers?” Then I consider things like quantity and size and comparisons of quantity and size. From there, I might have as a key question, “How can you make a quantity larger or smaller?” This of course leads to addition and subtraction, fractions, and other mathematical concepts.

—First-grade teacher

In the second example, a teacher took a curriculum standard and looked for the bigger picture implied by that standard. Young children love to make things larger or smaller and already have an awareness of this fundamental math concept. Building on that, the teacher is in a strong position to make adjustments for students who need to explore the concepts of quantity and size with different resource materials or for those who are eager to tackle more difficult problems. In the first example, the teacher uses the children’s interests and questions to guide her to the big ideas in a poetry unit. Following direct instruction, she will be able to modify activities according to the different literacy levels in the class. As the third chapter shows, staying focused on fundamental learning goals as well as the students’ individual needs prepares you to make quicker decisions about how differentiation can best serve your classroom at specific points in time.

The quality of engagement is also essential, as all teachers know. In the arts chapter (Chapter 4) as well as in the subject chapters (Chapters 5–8), the power to engage students’ interest and imagination is as important as the content itself. Because young children often come to school at different levels of development, their teachers are quite adept at creating new vehicles for engaging them *where they are*. Keeping track of the ways your students become inspired and engaged—whether through the arts, nature, tinkering with gadgets, or using recording devices—expands your options for modifying instruction in almost any subject.

A LEARNING ENVIRONMENT FOR YOUNG STUDENTS

Most primary teachers recognize the power of a child-centered learning environment to bring a subject to life for young students. They understand that the classroom is not just a place for learning but a *medium* for it. In the days of straight rows and worksheets, even children who did well often applied themselves to subjects that held no life for them. They bent over their desks practicing skills, learning facts, and taking notes in schools where teacher-directed instruction ruled the day. While many primary classrooms still include whole-group instruction, particularly when teachers are introducing new material for the first time, they no longer confine themselves to it. Engaging the child in the learning process has become more important. In large part due to the early influence of Maria Montessori (1964, 1966) and the emphasis she placed on “following the child” and the “prepared environment,” as well as the work of Piaget (1977) and others, classrooms have fundamentally changed.

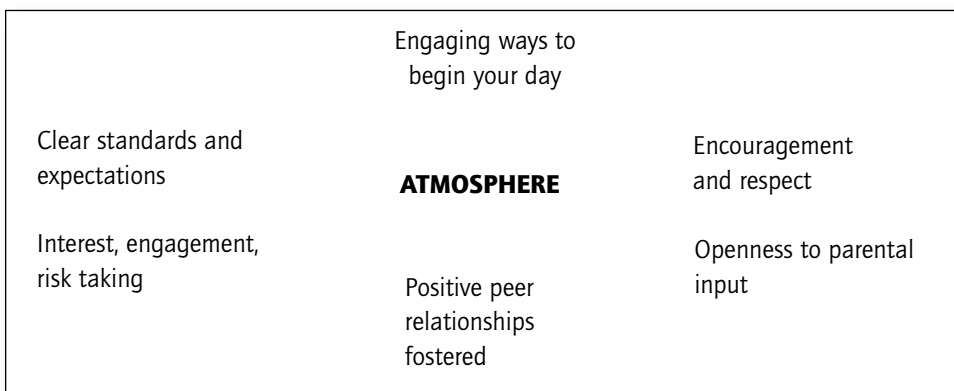
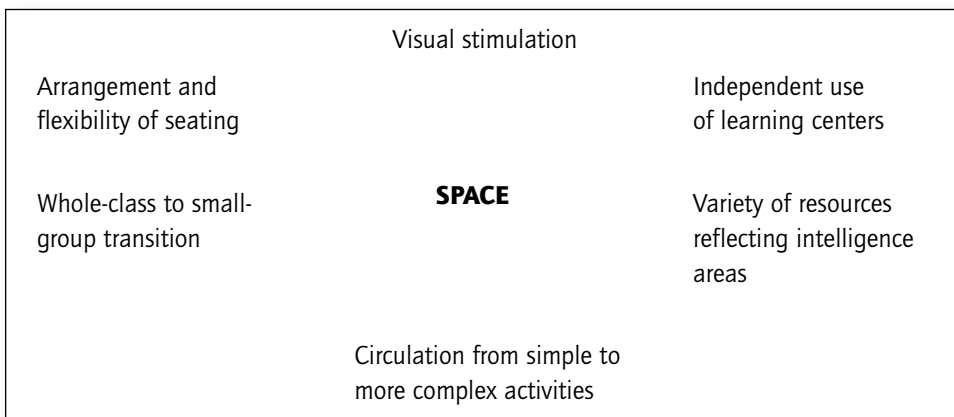
As part of this historic shift toward a more child-centered classroom, differentiating also emphasizes the environment as a catalyst for learning. This sort of classroom is dynamic, continually adapting to new needs and circumstances as they arise. In such a situation, you cannot always anticipate exactly what preparations will work best for your class. And this brings us to an important point that will simplify your life: You don’t have to do all the work! Your richest resources are the children and their families, as this teacher discovered:

There wasn’t much of anything in my school other than textbooks, paper, a few commercially made (and rather ugly) charts, and some scrappy art supplies. More overwhelming than this, though, was the sterile feel of the classroom. I ended up bringing things in from garage sales and my own home—a rug for one area I was creating for quiet reading and some stuffed animals from my own collection. I brought in colored things—anything—that would diminish the overall drabness of the room. One day I met one of the bilingual teacher aides and she said, “You don’t have to do it all, you know. The kids and their families will help you!” I’m so glad I listened to her. I no longer supply everything I need. After putting key elements in place, I always have my students bring in things that they think will work well in particular activities. I am continually amazed at their resourcefulness and how they can figure out ways to use materials in so many different ways. Also, as far as color goes, this is no longer an issue. Now that the mothers know I love color, they have contributed wall hangings (made by hand) and posters from their native Mexico.

—First-grade teacher

This first-grade teacher learned one of the most important lessons in preparing her classroom. She could delegate some of the responsibility to her students. Children *love* to contribute to the environment where they learn; by doing so, they make the space their own and the classroom becomes a safe haven for them to grow. You have probably experienced this yourself. In a class about the environmental changes of autumn, a teacher might have students bring in different kinds and colors of leaves that have fallen from their neighborhood trees, rather than supply the leaves herself.

In the naturally open, creative environment of most early childhood and primary classrooms, the tools for responding to different learning needs are already in place. The following charts illustrate this and can help you think about how you can best prepare your classroom space and the materials you have. Ultimately, who your students are, what they need, and the lessons you are preparing are the best guides.



Learning centers with materials for different learning styles		
Colorful and diverse materials that are modified frequently	CLASSROOM	Small-group work areas
Space for teacher supplies and resources	Display and storage areas for long-term projects	Area for extended activities to promote higher level thinking and creative problem solving

RESOURCES TO EXPLORE

If you're a primary teacher, you already know that rich, engaging resources are everything in a classroom for young children. To accommodate students' unique learning needs and styles, you probably have resource centers of your own. Some of them may have a variety of materials (e.g., books, art materials, displays, maps, games, construction materials) for exploring specific concepts in a unit. Others may be areas of the room where particular kinds of activities happen. An example of this might be a semi-enclosed, quiet area with rugs and pillows where children can read, write, or sketch their ideas away from the bustle of the classroom. Or you might discover that you have a number of performers in your class who need a space, equipped with costumes, props, and construction paper, so that they can work on dramatic presentations, a mime piece, or a creative dance piece.

There is no need to have any more centers than the ones you really need. They will evolve naturally from your understanding of the children before you and from your work together. In this regard, Howard Gardner's (1993) research on "multiple intelligences" can shed light on those students in your class who may require different kinds of resources to progress in your classroom (see Smutny, Walker, & Meckstroth, 1997, pp. 33–37). Children from other cultures often need alternative ways to process new learning and express the strengths of their heritage. The following list offers some ideas on how you can create learning centers focused on specific "intelligences."

Linguistic Center—Linguistically oriented students learn best through the written word. They exhibit mastery in language (sometimes in a dialect)

and often have a verbal wit and an ease expressing themselves verbally or on paper. A linguistic center should be located where it is quieter and have comfortable floor pillows, chairs, and tables.

Resources: Books; magazines; encyclopedias; dictionaries; paper for writing and drawing stories; books on tape; magnetic letters with board; spelling materials and games; alphabet games; sentence blocks with articles, nouns, verbs, adjectives, and adverbs; computer software for word processing and story writing; taped stories from oral traditions around the world; taped poetry.

Musical Center—Musically able students learn through rhythm and melody—by singing, humming, rapping, or tapping a pencil, foot, or finger. They often express a deep love for music, have an ability to compose catchy tunes of their own, and easily recognize a wide range of melodies.

Resources: Piano, keyboard and headset, other musical instruments, drums, rhythm instruments, cassette player and taped music, blank tapes for children's music, instrument picture cards.

Logical-Mathematical Center—Children with special abilities in the area of logic and mathematics are drawn to numbers and to discovering the logic and pattern of numbers. They often enjoy exploring other ways of calculating to understand how patterns work. They love logic and applying reason to solve complex mathematical problems.

Resources:

Math materials—felt board with felt objects and numerals; peg boards with colored pegs; pattern cards; puzzles; dice; number cards for sequencing and matching; math facts cards; number games and projects; tangrams; attribute blocks; Venn diagrams, graphic organizers, and matrices; codes to decipher; computer software for math activities.

Science materials—simple machines (e.g., pulley, gears), magnifying glass, microscope, telescope, mirrors, prisms, thermometers, models of planets, paper and pencil to record and draw data, computer software for computer-based science activities.

Visual-Spatial Center—Some gifted children gravitate toward the visual. They feel most at home in activities that involve seeing, representing, and manipulating lines, objects, and spaces. You might find them working out an idea in a diagram or sketching a word problem so they can “see” it and

solve it. They are often the first students to notice any subtle changes in the classroom (a new poster, the addition of a few more desks, etc.) and prefer to sketch, diagram, or map out their thinking process.

Resources: Paints, paintbrushes, and easels; finger paints; clay; cookie cutters to make prints; markers; crayons; colored pencils; paper in various sizes and colors; scissors; scraps of ribbon, fabric, and yarn; glue, paste, and tape; old catalogs and magazines; pictures; photographs; mazes; picture puzzles; posters; camera and film; illustrated books, maps, charts, and diagrams; computer software (CD-ROMs) showing famous works of art or museum tours.

Bodily-Kinesthetic Center—Gifted children who learn best in a bodily-kinesthetic mode express this through hands-on activities and by doing. They enjoy touching, building, and moving and often express an exceptional gross or fine motor control—in sports, dance, or mime. They may be the class clown or the theatrical children who can't resist acting out the stories they tell or imitating (to perfection) the different people in their stories. They play roles that imitate real life and often solve problems and deal with abstractions using their imagination.

Resources: Trucks and cars, equipment and materials for crafts, large blocks, cardboard bricks, dress-up clothes, a variety of hats and props, masks, kitchen equipment, dishes, pots and pans, workbench and tools, puppets, stuffed animals, manipulatives to sequence, puzzles.

Interpersonal Center—Children inclined toward the interpersonal domain relate well to others and are leaders, organizers, and mediators. This doesn't mean they are necessarily outgoing. They may be the unassuming students who quietly diffuse arguments or anticipate problems in group projects. This center could be an area for group activities or even total group work. Activities might include brainstorming, cooperative tasks, collaborative problem solving, mentoring and apprenticeship, and group games. It could also include biographies of great leaders from around the world.

Intrapersonal Center—Students with intrapersonal intelligence tend to be introverts. They are often independent and have keen insight into their own thoughts, feelings, and personal growth. They know what they need and where their strengths lie, and they are equipped to deal with their emotions and personal goals. These students tend to be quiet and prefer working alone. A center could simply be a couple of desks where students engage in independent assignments, journals, self-paced projects, problem

solving, time alone, reflection, or computer software for word processing, or it could have a few relaxing chairs where children can listen to audiotapes or think quietly.

Naturalist Center—There are children who have a close affinity with the natural world. They have a deep sense of connection with both flora and fauna and demonstrate an extensive (in some cases, an encyclopedic) knowledge of certain species. Their responses to nature often embrace a poetic as well as scientific sensibility. They enjoy classifying and identifying species and exploring natural phenomena such as climate, ecological change, and environmental conservation.

Resources: Rocks; seeds; pots and soil for planting; garden area (e.g., potting soil in suit boxes lined with plastic); live animals; variety of leaves, fossils, and seeds; pictures of plants and trees for classifying and comparing; pictures of mammals, reptiles, birds, fish, and insects; plastic creatures; dinosaur models; paper and pencils for drawing and recording data; database software; bird feeders (hopefully, one outside); nests.

Structured experiences at a few centers such as these will give you a chance to observe where your students' strengths lie. Having a rich collection of materials that are suited to different learning styles also enables you to honor what is unique about the children and to create a bridge to new ideas and information in the curriculum. Knowing *where* you want all your students to be in terms of essential learning, you can use the environment and resources to design *how* they will get there.

PRIORITIES AND PREPARATION

Before embarking on this journey, it is wise for you to consider carefully your own priorities and concerns about your students. The guiding principle in differentiating is always to *follow the children*—to allow their needs, abilities, and interests to shape the learning path. But differentiation is a journey for you as well. No teacher can be expected to create multiple assignments in response to different student needs throughout the day and keep track of everyone's progress and achievement. In many situations, changes to your current teaching program are not even required. Where change is needed, try to think of small adjustments you can introduce gradually in a number of skill areas and subjects. Or if you want to attempt a strategy that calls for more planning and supervision, do it in a unit you know well. In other words, if you are new to differentiation, try

to avoid making it harder by attempting large-scale changes in new units or by trying to do too much all at once, thus doubling the demand on your time and resources.

One of the messages we've consistently heard from teachers who are using these strategies is the importance of being gradual in implementing new ideas in your classroom and of finding your own way to make differentiation really work. This means that you have to make choices based on what you feel will most benefit your students, and if you are like most teachers, these choices will depend on two overriding concerns:

1. How ready are my students for the lesson I have in mind?
2. What are the most pressing needs that I must attend to *in this lesson at this point in time?*

Consider first where the most pressing student needs are and in what specific skill, knowledge, or thinking areas they reside.

Examples:

- Kindergarteners with little literacy at home who struggle learning their letters
- Gifted math students who finish everything in 10 minutes
- A student who never completes anything

Keeping these two questions firmly in thought will bring focus to your planning as you decide what "learning paths" you want to build into your daily teaching.

Learning area	Student need(s) to address	Features to look for in a teaching strategy
Reading comprehension	<ul style="list-style-type: none"> • Readers with little literacy in their background • Gifted readers far above grade level 	<ul style="list-style-type: none"> • Varies level of texts • Focuses on student interests • Integrates learning styles • Uses the arts

As just mentioned, when trying a new strategy that requires more planning, do it in a subject or lesson that you've taught many times.

Strategies I can implement right now: Match learning centers to student learning styles; vary challenge level in reading practice.

Strategies I can expand upon: Vary thinking process involved in math work through more or less challenging applications; tie enrichment activities in social studies to the goals of my unit.

Strategy I'd like to learn about or plan for: Independent study.

What I need to try it: More information on learning contracts; how to organize it so I can supervise and keep track of the process.

BEYOND PLANNING

After we have prepared and planned, we need to look for those unplanned moments and surprises when something new appears—a child has a question that sparks interest in the class; another child finds a creative solution to a math problem. Our plans have made it possible for more children to reach the learning goal of a particular lesson, but the openness of differentiation also allows other things to happen. One of the most important of these is for children to create relationships with their subjects. From their earliest years of life, young children learn by being in a relationship—with their environment, the picture books they've scribbled in, the stuffed animals they've pressed into service for their games, or the box of leftover construction materials they've used and reused to invent new transportation vehicles.

One of the great challenges teachers face today, particularly with the No Child Left Behind Act, is the pressure to “deliver” a prescribed amount of information and skills in a way that can be verified by testing. This means that children have little time to create the relationships that lead to a lifelong passion for learning. Instead, they encounter new worlds of knowledge in the mode of a hurried introduction: “Learn this and move on to the next thing.” While differentiation cannot solve this problem, it can alleviate it by providing more points of entry into a lesson or unit. And because students' interests and learning styles matter, they have more opportunity to bring more of themselves to a journey. You as a teacher can ensure that your children are reaching the goals they need to while at the same time providing the means for many of them to go beyond the planned destination to make discoveries that you had not planned. It is this zone of what can be experienced on a journey that makes teaching exciting and that gives teachers who feel so constrained by the curriculum,

state standards, and required testing an opportunity to recapture the classroom as a place of inspiration and discovery.

LOOKING AHEAD

The next chapter is about assessment. This includes how you can find out the most useful information about your students as learners, how to monitor their progress while they are learning, and how to determine whether you need to make other adjustments at the end of a unit or lesson. Without knowing your students, you cannot really plan the most suitable activities for them. And without being able to determine if the changes you've made are benefiting them, you are teaching blind—never a good position in a profession where accountability is a constant issue.