Message from the Chair

Hello Early Childhood Network Members:

The Early Childhood Newsletter is going to be published twice a year. I am excited to share with you the articles in this edition. The October issue of Parenting for High Potential was focused on Early Childhood and we have been able to reprint two articles from that issue. We also have articles from Network presenters at the 2012 NAGC convention. Please enjoy this edition of the Newsletter. If you are interested in writing an article or have a specific topic of interest to be included in future editions, please contact Ellen Honeck at Ellen.Honeck@du.edu.

Sincerely,

Ellen Honeck
Chair, EC Network

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Proposal Submission

The 2013 NAGC Convention Proposals are due by February 1, 2012. Consider submitting your best ideas, research, and practical classroom strategies for young gifted children. To submit a proposal go to the new online submission proposal site at: https://www.conferenceabstracts.com/cfp2/login.asp?EventKey=MNXNWIOJ

Did You Know??

The Early Childhood Network has a Convention Attendance Grant. The Early Childhood Network of NAGC recognizes the importance of practitioners who have direct, daily contact with young gifted children. In an effort to support and encourage the participation of practitioners in NAGC and the Early Childhood Network, two (2) attendance grants of $250 each will be awarded for convention registration. More information can be found at http://www.nagc.org/index.aspx?id=1414
Nurturing Young Gifted English Language Learners:

A SURVIVAL GUIDE FOR PARENTS

By Dr. Joan F. Smutny

For many young gifted English Language Learners (ELLs), going to an American school is like a trip to Mars. Everything and everyone looks strange. Many ELLs feel unsure of their abilities when they discover that their proficiency in English can sometimes hinder achievement. They wonder what the other kids think of their speech, their accents, their clothing, and their nationality. Their story is that of the perpetual outsider. They tell of a language that is not only foreign but harsh and unwelcoming—not the language of love, song, and celebration. When they speak it, some feel foreign to themselves. A Brazilian third grader said that his language “will never let me go and I don’t want it to.” He said that was why he had an accent; it was his language telling him where he really belonged. Many ELLs feel to their bones that they will always be outsiders who never quite fit in. Like all outsiders, they focus on what they cannot be or do. They see themselves through a lens of deficiency, a lens that excludes all that they have—their intelligence, gifts and talents, life experience, and developing bilingualism.

In response to their children’s struggles, parents of gifted ELLs often voice a need for them to “be who they really are.” They no longer want to see how paralyzed and unfree their children are—seeking approval from teachers and peers to the point where they try to abandon the parts of themselves they think are unacceptable. Many parents in workshops I offer express the wish that their children have, as one father said, “time to just be—to breathe, think, listen, create.” More and more, they recognize the critical role of creativity in preserving
their children’s individuality, including their culture, language, and talents.

**A Home for the Creative Spirit**

There are many things parents can do to nurture the creative spirit of their children. It begins with themselves—what their words and actions tell their children about the possibilities of living, learning, and loving. Like all children, young gifted ELLs are carefully watching their parents and deriving meaning from their observations. Whatever those observations may be, as soon as parents begin shaping their environment around the creative needs of the family, the home becomes a more vibrant place. Their young children, disheartened by their struggles in school, now have a home where they can thrive as living, breathing learners.

Nepalese student Bharati had a home full of colorful wall hangings in the living room, the stories told by his mother, and the traditional Nepalese dances his father taught him. Here Bharati felt free and alive. His mother wanted him to learn English. By reading with his mother, Bharati learned to love poems written in English. They sometimes performed them together. He eventually became interested in stories from other cultures and musical traditions brought to the United States by people from other lands.

One of the greatest thinkers on creativity, E. Paul Torrance offered parents a list of positive ways to foster and nurture the growth of creativity in their children. It is worth noting that his extensive study and contact with culturally different students informed many of his ideas about creativity.
Here are ways parents can nurture creativity in children:

- Encourage curiosity, exploration, experimentation, fantasy, questioning, testing, and the development of creative talents.
- Provide opportunities for creative expression, creative problem solving, and constructive response to change and stress.
- Prepare children for new experiences and help develop creative ways of coping with them.
- Find ways of changing destructive behavior into constructive, productive behavior rather than relying on punitive methods of control.
- Find creative ways of resolving conflicts between individual family members' needs and the needs of the other family members.
- Make sure that every member of the family receives individual attention and respect and is given opportunities to make significant, creative contributions to the welfare of the family as a whole.
- Use what the school provides imaginatively, and supplement the school's efforts.
- Give the family purpose, commitment, and courage. (Torrance & Goff, 1990)

**Foster an Open, Accepting Atmosphere in the Home**

Acclimating to American culture has made many parents of ELLs open to and accepting of different ways of living. This is a tremendous advantage. It places parents in a strong position to help their children integrate American culture into their own lives and combine elements from both cultures and languages. Openness and acceptance happen naturally as parents focus on their children's unique needs and how their home life can adequately address them.

It can be helpful to consider what a home with an open and accepting atmosphere might look and feel like. A home that displays not only a report the child wrote at school but her sculptures, poetry, and rock collections is one example. A home that provides extra space for a child who loves botany and botanical drawing or that has a quiet, electronic-free zone for quiet reading and thinking is another example. An open and accepting atmosphere also means that the family tries to minimize discouraging or judgmental remarks. It means that everyone can share their interests freely and feel supported and encouraged.

Even if they have very different interests, gifted ELLs benefit from witnessing a parent's deep and abiding love for something. When a father shares his love for music, his children feel the passion and share the process—the room where he practices, the instruments he uses, and the mastery he gains in learning a new song.

Parents need to consider the extent to which their homes make room for their children's creative life. Here are some questions for parents to consider:

- Overall, do they feel that their home reflects the passions and interests of the people who live in it?
- Do they display the works of their children and themselves?
- Are there places where they or their children can work on something they love—away from electronic noise?
- Do they have reading places and reading times?
- Are there areas where the family can store and use instruments like microscopes and binoculars, or where they can perform simple tests or experiments?
- Are there art materials and other odds and ends (e.g., bottle tops, colored wire, and other "found" objects) that children can use to create things?

For parents, a home that accommodates the unique needs of young gifted ELLs is a prepared space where they can address a variety of practical needs, such as supplementing a lesson learned in...
school, nurturing a new interest, or mentoring them through a long-term project. **Participate in Creative Learning Activities With Your Children** Young gifted ELLs are at that age when the spoken and written word are alive to all their senses. Words fall gently on their ears and lead to ideas and sensations never imagined. But the challenge for many ELLs is that their proficiency level in English—even when high—still restricts their literary talents and abilities. "The teachers at the school kept saying that she was more fluent than others in the class," a mother said about her daughter, "but she can’t read in English as easily as in her own language and this frustrates her." Gifted children want to tell stories about their families, create songs, and write poems, but they can’t do any of these without a struggle. Parents can ameliorate situations like this by participating in activities with their gifted child. These activities do not have to be extraordinary or beyond the scope of daily family life. Here are a couple of parents who involved their children in small tasks. No extensive planning or thought was required, but learning English was fun.

A father brought his son with him to the car mechanic who was from Ethiopia, his own country. The boy loves anything mechanical and loved watching the mechanic work under the car. The father told him that his son had list of English words on the kitchen wall and it was so long that they had to start a second list. The mechanic gave him some new ones—ignition, battery, brakes, muffler, and so on. The boy was thrilled and added his new words to the list. Because he was artistic, the boy also created drawings to help him remember what he learned.

For greater learning opportunities, parents will also want to take advantage of local resources—both in the immediate community and in areas close by. Consider these:

- **Studios or after-school programs.** Studios and workshops offer classes in areas that don’t demand a lot of talking or writing. Families can explore dance, art, music, computers, or science. Classes for young students are often open to parent participation. Parents can volunteer as assistants to the teacher or as translators for ELLs who speak their language.

- **Community centers.** The advantage of community centers is the variety of offerings. If children want to take a class in an area where they already have experience or skill, parents can negotiate with the teacher to see if they can try a higher level. Again, parents can participate by volunteering or by sharing resources and materials.

- **Animal shelters/nature rehabs.** Many children are born loving animals and nature. By volunteering with their children (e.g., walking dogs, visiting with cats at a shelter, removing invasive plants at a nature center), parents help them learn how to care for animal and plant species. They can also learn about the biology of different animals and the ecological system of local forests and water systems.

Any of these experiences can become a catalyst for further learning and sharing between parents and children. In fact, the whole point of providing these experiences is to stimulate greater growth that children can then bring back to their home and school. **Find Creative Ways to Supplement Your Child’s Curriculum** This was critical to the survival of one gifted ELL I know. For a couple of years in primary school, she was trapped in large classrooms with nothing to do but learn more English. Her teacher—overworked and pressured to help all students achieve minimum competency—had limited time and resources to assist a highly intelligent (and successful) bilingual child. So the parents, with the teacher’s knowledge and support, designed challenging, creative projects related to the topics she was studying in school. For 2 years, they took topics from the curriculum, found their own resources (e.g., on the Internet, at museums, in libraries) and did their own research.
Their daughter created a design with short lines of text showing how volcanoes evolve and erupt. She made lists of backyard animals and plants and learned how to use a guidebook. She discovered a talent in body movement and mimed and danced to interpret poems and short stories.

This young ELL girl had access to libraries, museums, and the Internet. Not all children have these resources, but usually there is a public library nearby, which has books, magazines, and DVDs, as well as access to the Internet. Having a close relationship with the local library is so vital for young gifted ELLs. Whatever their own level of proficiency in English, parents need to make literacy a part of their home. There are also reading opportunities in their environments as well including store names, billboards, or traffic signs. Specific reading times at home are encouraged with different types of texts, including short stories, cartoons, poems, raps, and memoirs.

Nurturing the reading life at home makes trips to the library more meaningful and lively. If the family is attending a reading event, children become aware of reading as a social experience—something to be shared and even performed. By listening to the reader, gifted ELLs learn that words come alive on the page when they are also spoken, interpreted, and embodied. With even limited time available, parents can institute daily or weekly practices that enable their children to develop their creative potential.

- Have children record family stories heard from a family member. Possible activities include sketching each part of the story, writing short text on each sketch, choosing a special word describing the person or story, writing the word in both English and language of origin, and creating a short poem.
- Help them start a collage on their country of origin as a medium for exploring language and meaning. The children could write words freely over the collage that express their personal feelings and thoughts about their home country; they can write a letter to their country and the people they miss.
- Have children start collections from the outdoor world: rocks, pine cones, birds’ nests, pressed leaves or flowers, and shells.

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Four top reasons to explore the past at the Crow Canyon Archaeological Center

1. Powerful and memorable experiential education activities
2. Learning centers that are replicas of ancestral Pueblo settlements
3. Professional archaeologists and educators as instructors
4. Expansive, scenic learning environment in SW Colorado

Cortez, CO • 800.422.8975, ext. 146, or 970.564.4346 • www.crowcanyon.org

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From these, a variety of projects can emerge, including stories about these phenomena, sculptures, diagrams, poems, dramatizations, nature journals, and so forth. • Get notebooks for children to use as journals. At regular times each week, have them do some writing or drawing about things they did and what happened to them. Encourage a creative approach. The children can write upside down or on colored tissue paper stuck to the pages. They can draw creatures around the edges of a page. The journals are theirs alone.

A Final Note
Fostering the creative spirit may begin with supporting children’s artistic interests or instilling an atmosphere of openness to originality and imagination in the home. But, taken to its depths, creativity offers a great deal more. It’s important to remember that young gifted children—ELL or not—begin life already filled with a sense of the large and expansive world at their feet, full of promise. Our role as parents is not so much to expand this world but to ensure that the one they have continues to grow naturally through the years of formal schooling. The practice these children gain drawing on their inner resources is immensely strengthening and nurtures a sense of independence and ownership of their own learning. Creative work—and the honoring of the creative force by parents and families—bring a sense of dignity and personal power that endure for a life time. To understand, as a parent, that imprisoning circumstances of school or society cannot strip you or your children of this “personal power” to be and do is one of the great and often hidden gifts of the creative spirit.

Resources
• Torrance, E. P., & Goff, K. (1990). Fostering academic creativity in gifted students. (ERIC ED Digest #E484)

Author's Note
Joan F. Smutny, Ph.D., is founder and director for The Center for the Gifted. She teaches creative writing to young students at her programs, as well as gifted education courses to graduate students at the university level. She is editor of the Illinois Association for Gifted Children Journal, contributing editor of Understanding Our Gifted, and a regular contributor to Gifted Education Communicator, Parenting for High Potential, and Gifted Education Press Quarterly.

Tiered Learning Stations:
12 Ideas Especially for Advanced Young Learners
by Dr. Bertie Kingore

Learning stations are classroom work sites organized with standards-based materials and learning experiences that enable all students to engage in continuous learning objectives and flexible group interactions away from their usual table or desk.

Productive learning stations emphasize academic standards and learning objectives rather than simple folder games. To be developmentally appropriate for high-ability learners, learning stations must include more complex, tiered activities that activate problem-solving opportunities and guarantee access to beyond-grade-level resources. Tiered learning stations safeguard uninterrupted academic growth for advanced students while all children interact to practice or extend learning targets. As with all centers for primary children, a key emphasis is to integrate discovery, kinesthetic experiences, and many curriculum priorities, such as the development of vocabulary, writing, reading, and math skills. Simultaneously, these learning experiences invite children to practice the social skills that adults value for young learners.

In a differentiated environment, the tiered experiences at stations must emphasize learning objectives that are both integral to the curriculum and rigorous enough to elicit content depth and beyond grade-level responses. Learning suffers when stations are simply convenient places to send students to keep them busy or involve them in peer tutoring. Learning stations that fail to focus on essential academic content and children’s advanced capabilities have little effect on achievement and squander valuable learning time.

Explore the following twelve ideas to incorporate as you produce learning stations that further children’s learning but do not burden teachers with unrealistic preparation requirements. The ideas include simple procedures to increase relevancy as well as several suggestions for high-
interest, low-preparation tiered learning stations that have particular applications for young learners.

1. **Learning Standards.** At students’ eye-level in each station, post a laminated list of the core concepts and skills for that content area. Use a wipe-off pen to check the skills incorporated in the content of the current learning experiences. As the learning tasks evolve, change the checked standards. This list communicates to children which skills and concepts they are expected to understand and apply. It also clearly signals visiting adults that specific learning objectives are in progress during learning station sessions.

2. **Places for Stations.** Find room for tiered stations in crowded classrooms by using standing stations. A windowsill or shelf allows space for selected problems and simple materials that students use for high-level thinking investigations while standing in the area.

3. **Directions.** Use direction cards and orally recorded directions in tiered stations to provide a framework and directions for the varied learning experiences as well as to support students who would benefit from repeated reading of directions. Direction cards and recorded directions enhance children’s management and independence without direct teacher intervention.

4. **Familiar Graphics.** Provide new and different applications of the graphic organizers and learning tasks students already know how to complete. Using the known in a new way continues learning applications with a minimum of adult direction and speeds center preparation time.

5. **Nonfiction.** Young gifted children prefer nonfiction so they can feed their passions for their learning interests. In keeping with the emphasis of the Common Core, provide an ample variety of nonfiction materials and ensure a means for children to search for their own resources at a station. This process enables advanced students to extend their learning and satisfy their voracious appetites for specific information.

6. **Choice.** Choice increases children’s ownership and their motivation to exert the effort required to excel. Supplying a variety of tiered learning tasks promotes choice as children select among the provided authentic, open-ended learning tasks. Children’s engagement and joy in peer interactions increase with they are empowered to select among learning options.

7. **Academic Vocabulary.** As frequently as possible, model specific, higher-level vocabulary related to the learning tasks in each station. For example, as children use tangrams or create original word problems in Mathematical Explorations, use directionality words and terms, such as symbol, equation, and equivalent. In the Animals Read and Listen Place, encourage children to incorporate terminology such as author, illustrator, sequence, and protagonist as they work together. Children learn well the terminology adults consistently use in authentic contexts.

8. **Self-Assessment.** To promote continuous learning and excellence, require high-ability children to self-assess learning behaviors, effort, and their learning results. Ensure that even the youngest students maintain records of progress and reflect on personal changes as learners rather than gauge their results through comparisons with grade-level peers.

9. **Animals Read and Listen Place Station.** Place a collection of stuffed animals atop a bookshelf filled with quality fiction and nonfiction books. Children select an animal to read a story to or an animal to hold as they listen to a recorded story and read along in the book. Picture books about animals are a natural component at this station, but also supply class-
made books, wordless books, class favorites, and an abundance of nonfiction books about topics that reflect children’s interests. Research supports that they develop a higher vocabulary when reading materials about their specific interests. Include recording devices so interested children can record a book as a read-along for others.

**10. Construction Zone Station.** This hands-on station includes a variety of manipulatives such as blocks, Legos™, straws, and Play Dough™ for building and problem solving. Enhance the learning potential by having children write how-to sequences or draw plans for construction projects before they begin or after completion of the tasks. Post the plans that children develop for others to follow to complete a construction when working at that station. Children can also draw the outline of a single-layer block construction, label it with the number of blocks used, and challenge others to use the same number of blocks to re-create the structure from the drawing.

**11. Nifty Numbers or Mathematical Explorations Station.** This hands-on station provides a variety of manipulatives to engage children in tasks involving number sense and related math concepts. Post a short list of approved websites providing free access to math connections and games at a range of challenge for individuals to explore. Graphs, clocks, dice, graph paper, magnetic numerals, Sudoku puzzles, counters, and math picture books engage students in mathematical challenges. Children particularly enjoy the following learning tasks.

- Use cut paper or crayons to create pictorial and written math word problems and equations that practice and extend math skills and vocabulary.
- Develop math paper chains with each link being a different equation for the targeted number.
- Write their math autobiography, incorporating as many numbers as possible that are relevant to their life.

**12. Thinking About Us Station.** This station promotes a celebration of individuals and the entire class. Children draw and post self-portraits or drawings of classmates involved in classroom scenes. Provide a digital camera and invite children to photograph and post pictures with captions and explanations about themselves, friends, and family. Include a rich array of books with stories that celebrate being a child. To display at the station and share with others, children complete interest surveys, lists of their favorite things, informative graphs that compare their preferences, family trees, drawings that illustrate what is important to them, and alliterative alphabet books about themselves or their class. They also write stories and riddles about individual or class experiences for others to read or decipher.

**References**


Beyond File Folder Games: Nurturing Young Learners Through the Use of Independent Learning Centers
By Sarah Reeps & Jill Rodeffer

In this age of standards-based learning where remediation programs abound, early intervention is essential to developing the potential of our young, high ability learners. Amongst the gifted education community, it is commonly understood that our highest ability learners are often the least likely to make one year of academic progress in a given school year. As educators and parents, what can we do to help nurture these learners? Although there are many excellent enrichment resources available, perhaps our ultimate goal should be to guide students on the path to becoming independent—to teach them how to take ownership of their learning.

“The object of education is to prepare the young to educate themselves throughout their lives.”
Robert M. Hutchins

With so much emphasis placed on meeting benchmark standards and state objectives, students who have previously mastered these concepts are frequently left with little to learn. One way this gap can be bridged is by developing independence in students through the use of interest-based and contract-driven learning centers. These learning centers differ from what is often used during traditional center time in that they are not isolated activities and practice of basic skills. Each are ongoing studies centered around highly motivating topics and guide students through a process of taking ownership of their learning. Through their work on these centers, students will experience challenging tasks and develop a sense of self-motivation and perseverance. Students will learn that making mistakes is part of the learning process and will be challenged to set high goals to meet high expectations.

While it is tempting to dive right into ready-made learning centers and enrichment activities, it is important to realize that there are certain learning characteristics that independent learners should possess before being expected to successfully tackle these new and meaningful challenges on their own. As all learners are different, some students will innately have these skills, while others will need specific, direct instruction before proceeding.

What are some of the learning characteristics and skills that independent learners need? They need to communicate orally or in

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**Classifying the Characteristics**

- Can communicate orally or in writing
- Can follow directions
- Can stay on task
- Able to focus on a task
- Self-motivated
- Able to make choices
- Have perseverance
- Risk taker
- Self-directed
- Can produce self-selected products to show learning
- Reflect & self-assess
- Can evaluate resources
writing. They need to be self-motivated. They need to show perseverance and be risk takers. They need to be able to reflect and self-assess. These skills can be grouped into beginning, intermediate, and advanced characteristics that fit nicely into a hierarchy for teachers to use to drive instruction in their classrooms. This hierarchy gives teachers a structure to help organize what they already have in their classrooms into a meaningful, logical sequence for students.

Level One — Guided Foundations: In this introductory level, students will have direct instruction and opportunities to practice the skills of communicating what they know (orally or in written format), following written and/or graphic directions, staying on task for 15-20 minutes, and working with limited support. A center story provides direct instruction by introducing students to characters who display the learning habits of effort and reflection. Level One activities are short tasks that are often done during one session with the assistance of a teacher, teacher assistant, or parent volunteer. After completing a Level One activity, the student is asked to reflect back on his or her work.

Level Two — Gaining Independence: Once students have shown mastery of the skills in Level One, they may begin Level Two tasks which focus on self-motivation, making learning choices, time management, focusing on a task, and knowing what to do when help is needed and the teacher is busy. A student working on Level Two tasks should consistently demonstrate Level One behaviors and should be working towards mastery of Level Two behaviors. The characters introduced in the Level Two center story focus on motivation and making learning choices. Level Two activities can be a collection of Level One-type activities that span multiple learning sessions and require the student to make learning choices and to reflect on his or her work. Being able to do this type of work over the course of several work sessions prepares students for the contract-driven work in Level Three and Level Four. There is less teacher support in this level as the student should be moving towards independence.

Level Three — Introduction to Contracts: Students working at this level should be working on understanding personal learning strengths and weaknesses, taking learning and academic risks, persevering when work becomes challenging and uncomfortable, and being self-directed. The learning habit of perseverance is the focus of the Level Three center story. Level Three activities involve the use of a simple contract that a student follows over the course of multiple work sessions. Contracts usually involve reading at least one fiction or non-fiction source, showing comprehension of that reading, and then completing a variety of tasks related to the reading. There are opportunities for student choice and for student reflection and self-assessment at this level.

Level Four — Contract Based Independent Study and Level Five — Self-Selected Independent Study: Level Four contract-based activities are readily available from many publishers of educational materials for high ability students. Teachers
can also model their own contracts off of these ready-made materials to meet the needs and interests of their students. What is important to understand is that while these published materials are very beneficial to high ability learners, these students must possess the characteristics and skills in Levels One, Two, and Three in order to have success at working independently. When students are missing these earlier skills, they often experience frustration or require a great deal of teacher support to complete this type of work at an independent level. True self-selected independent study at Level Five involves in-depth questioning, evaluation of resources, and the production of self-selected products to show learning and is usually not appropriate for younger students.

The goal of this project was to establish routines and provide direct instruction for specific work habits students need to possess in order to work in an independent, successful and meaningful manner. It is important to note that the levels do not represent grade levels. A group of kindergarten students could work on Level One tasks with a teacher or assistant using materials that enhance and enrich the student’s academic needs just as easily as the Level Three tasks can be geared towards guiding first grade readers into the realm of reading and researching from non-fiction texts.

“Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.”

Chinese Proverb

Teachers are some of the most resourceful people on earth. They have enormous collections of books, folders in filing cabinets, and links saved on their computers just waiting to be used. This hierarchy of learning characteristics can help a teacher figure out where these activities and materials “fit” for their high ability learners. Giving students an opportunity to develop their independent learning skills doesn’t have to be a daunting task. By starting with small steps and collaborating with colleagues for support and sharing activities, teachers can help their high ability students reach their potential in both the regular and the gifted classroom.

**Author’s Note:** Sarah Reeps and Jill Rodeffer are K-3 gifted education teachers in Loudoun County, Virginia. They were excited to share their work on this topic at the 2012 NAGC National Convention. To receive their presentation slideshow and notes, please email them at sarah.reeps@lcps.org or jill.rodeffer@lcps.org

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**What’s the Big Idea? Essential Questions Explained**

By Amy Jacobs

A true idea doesn’t end thought, it activates it. It has the power to raise questions and generate learning.

-Grant Wiggins

As an Early Childhood Educator, you may have noticed that accountability and testing has been creeping insidiously into our early childhood curriculum: it is trickling down even further and faster than we might have thought. As academic skills become an increasingly predominant part of early childhood education, you may be thinking, what about play? How can I continue to provide a vibrant, developmentally appropriate curriculum, which engages my students in active, hands-on learning yet still teaches the required academic skills. How can I encourage my students do what they do best—learn through play?
Instead of fighting the accountability trend, consider rethinking your approach to curriculum and planning—utilize an exciting tool to help your instruction become rich and all encompassing. I am talking about essential questions.

What are essential questions and how can I use them in my early childhood classroom?
Before you read further, stop and self-evaluate: Do you know what an essential question is? Have you ever utilized curriculum that has essential questions attached to it? Have you ever written Essential Questions yourself? How comfortable are you with identifying and using essential questions?

Before you can truly work on identifying and creating your own essential questions, you need to consider, what Grant Wiggins calls, Big Ideas. What is a Big Idea? I tell my students that a Big Idea is like an umbrella—it is an overarching concept or idea that can help frame your area of study. A big idea is that string that ties all areas of your curriculum together, providing breadth of meaning, connection and organization. It is a format for examining the skills, facts and experiences you want your students to experience while learning your core concepts. In short, a big idea helps you prioritize your area of study, by pinpointing the ways in which your concepts are interconnected.

Perhaps the most exciting things about the big idea approach to curriculum is that it truly brings you into the heart of what you are teaching—providing an avenue for connecting ideas from various disciplines and areas. Think about it as the ultimate interdisciplinary planning approach.

A big idea can be transferred to other ideas, issues and inquiries over time. Understanding big ideas is the first step in designing and utilizing essential questions.

Why Big Ideas and Essential Questions?
Why should you start to think about your lessons and units through the lens of Big Ideas and Essential Questions?
Consider the current focus on differentiation: consider the fact that quality unit and lesson planning for differentiation begins with the end in mind. Therefore, in order to be able to differentiate effectively, you need to know what your expected outcome is: What do you expect your students to know and understand about your concepts? What do you expect them to be able to do with what they’ve learned?

With those questions in mind, it is easy to see how big ideas come into play.
- Curriculum that’s worth differentiating focuses on big ideas/concepts and can be framed with essential questions.
- Learning goals that are focused on concepts and Big Ideas have greater potential to “be differentiated” than do goals that are topically-driven.

This sounds good enough, but I’m still not sure how it all works...
Try it out. Imagine that your kindergarten science curriculum includes the study of oceans. Is Oceans a big idea? If you were to take a minute and jot down every thing that you might teach in a unit on oceans, you would probably come up with a list that included items such as: ocean animals, life cycles, waves and currents, geography of the ocean, and so forth. When I asked my undergraduates if oceans was a big idea, they all quickly agreed that, yes it was. In fact, one student suggested that the ocean was THE biggest thing there was. So now it’s your turn. Do you think that oceans is a big idea?

Does the idea of oceans focus your study on just one area? Does it provide a framework for making connections? Can you use the idea of oceans to organize facts, skills and experiences? Does the idea of oceans transfer to other concepts and topics? Does it require uncoverage—meaning do you need to dig to find out what its value is? In the grand scheme of things, is a unit about oceans really about fish and mammals, or is it about the characteristics of living things? How much mileage would you get out of the idea of fish and mammals? Now consider how far you could stretch your
children’s knowledge and understanding if you talked about the characteristics of living things instead of merely fish and mammals.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Big idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish and mammals</td>
<td>Characteristics of living things</td>
</tr>
<tr>
<td>The food chain</td>
<td>Interdependence</td>
</tr>
<tr>
<td>The water cycle</td>
<td>Cycles</td>
</tr>
<tr>
<td>Pollution</td>
<td>Cycles or Interdependence</td>
</tr>
</tbody>
</table>

As you look at this basic table, remember that your topics are the fact-based subjects you teach and that the big ideas are the categories that those facts fit into.

**How do Essential Questions fit into the mix?**

An essential question can be defined as a question that does not have a yes or no answer. Rather, essential questions are questions that are debatable and arguable—they have value as a learning tool. In fact, an essential question is one that is interesting, authentic to its discipline, and worth arguing about. A litmus test you can use as you create essential questions, is, “is this a question that real scientists or experts in this field are interested in researching?” Ask yourself, or ask your students if this is a question that raises more questions that it answers? Is there only one path to take while studying this question, or are the multiple pathways to guide your inquiry? Additionally, an essential question often raises moral, ethical or philosophical concerns. It is recurring in adult life—in other words, this question is one which your students will encounter many times over the course of their life.

Below are some practical tests for essential questions

- Am “I” intrigued by this question, as an adult? Is it something I’d like to discuss? Is it worth arguing or debating?
- Does this question “beg” or raise additional questions?
- Is this something a real (scientist, historian, writer, mathematician) thinks about and studies?
- Does this have a single “right” or unambiguous “yes/no” answer? (Hopefully not!)

With that in mind, consider our previous topic, oceans.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Big Idea</th>
<th>Essential Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish and mammals</td>
<td>Characteristics of living things</td>
<td>What characteristics do fish and mammals share which allow them to survive in ocean habitats?</td>
</tr>
<tr>
<td>The food chain</td>
<td>Interdependence</td>
<td>How are the creatures living in the ocean interconnected?</td>
</tr>
<tr>
<td>The water cycle</td>
<td>Cycles</td>
<td>How can researching the water cycle help us predict changes in the ocean?</td>
</tr>
<tr>
<td>Pollution</td>
<td>Cycles or Interdependence</td>
<td>Why are life cycles of ocean plants and animals important for life on Earth to continue?</td>
</tr>
</tbody>
</table>
Getting down to writing
When it is time for you to write your own essential questions, where do you start? You should pull out your core curriculum or your state standards and look at the concepts you are required to cover for the year. Then brainstorm a list of topics and ideas that fall under each area of your curriculum. Look for commonalities and see how you can group your topics. Is there an overarching theme of change? Perhaps many of your topics fall under the category of cooperation. Did you notice that many of your areas have the theme of exploration?

After you’ve grouped your curricular topics into smaller groups, write your big idea: Oceans, a study in interdependence. Then from that umbrella of your big idea, begin to write essential questions that focus your instruction.

Starting points for writing essential questions
Below find a simplified list of question starters. Naturally, some of them lend themselves to more challenging questions than others. Some can be written either way—it just depends on how you word things.

- What is ______ like or similar to. Why?
- How does ________ work?
- How do we know ________?
- Why is ______ like that?
- Where do ________ come from?
- Why does a ________ do ________?
- How is ________ the same as ________?
- How is ________ different from ________?
- How do you ________?
- What do you know about ________?
- What is ________ about?
- How can an understanding of ________ guide us in learning about ________?

All things considered, this is just the tip of the iceberg. As intentional teachers, imagine how much more engaging for you students this type of instruction is. The opportunity to design authentic learning experiences grows with the type of questioning you engage your students in. As we continue to champion play as the ideal way for young learners to construct their own knowledge, giving them a big concept to examine is much more satisfying than having them memorize a list of terms and facts. Posing a question and asking them to learn all they can to help you answer this question will engage them in authentic learning and turn them into real scientists!

To learn more about essential questions and big ideas, examine the Understanding By Design Framework developed by Grant Wiggins and Jay McTighe

Author’s Note: Amy Jacobs is a faculty member at the College of Lake County in Grayslake, Illinois where she teaches in the Education Department. She has been teaching early childhood gifted students since 1998 through both the The Center for Gifted and the Center for Talent Development at Northwestern University.
Thinking STEM? Start Early
By Debbie Dailey

In A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas, the National Research Council (NRC, 2012) outlined a new vision for K-12 science education which included a strong emphasis on science in the elementary grades. The NRC recommended that science practices, concepts, and ideas follow a learning progression across Grades K-12. For example, K-2 students should investigate macroscopic phenomena that can be directly experienced but, as the student progresses in grade level, they should be introduced to invisible entities and eventually atomic and subatomic particles. The NRC recommended that early practices be related to direct experiences and that later practices employ more abstract ideas and models. This gradual transition allows students to mature in their ability to develop scientific reasoning, such as using evidence to make and support claims. Furthermore, the progression of knowledge across grade levels allows students to learn more complex material by the time they reach high school (NRC, 2012).

The emphasis placed on elementary grades by the NRC (2012) and subsequently the Next Generation Science Standards is noteworthy. Ignoring science in the elementary grades will affect students’ conceptual and deep understanding of science core ideas, thereby placing additional responsibility on high school teachers to prepare students for college (NRC, 2012). Unfortunately, science in the elementary grades is rarely seen as a priority and many times occurs only as an afterthought. To improve elementary science instruction, teachers need continued professional development support focused on how to teach science, particularly inquiry-based science and a strong inquiry-based curriculum relevant to students’ real-life experiences. In addition, school administrators need to provide teachers with adequate time in the day to teach science and sufficient resources to conduct science activities and experiments.

When establishing an inquiry-based science classroom, students and teachers need to practice thinking like a scientist. Scientific inquiry involves the processes that real-world scientists undergo to investigate a problem or answer a question (NRC, 1996). Developing inquiry practices often requires scaffolding until both students and teachers are comfortable with the process. An example of scaffolding inquiry-based learning is through Herron’s Level of Inquiry (Herron, 1971). Herron’s levels of inquiry include the stages of: confirmation, structured, guided, and open. The levels are differentiated by the amount of information provided to the students when conducting an investigation. Confirmation inquiry (teacher-directed) is used in the beginning or with students who struggle to understand the investigative process; whereas, open inquiry is used with experienced or highly-able students.

Selecting an appropriate curriculum is necessary when improving elementary science programs. STEM Starters, a program focused on improving elementary science teaching and learning (Cotabish, Dailey, Hughes, & Robinson, 2011), utilized The College of William and Mary’s award winning science curriculum. The curriculum utilizes problem-based learning (PBL) in real-world, student-relevant settings. PBL’s are characterized by student-centered learning and active participation. In a typical PBL scenario, students are presented with a messy problem with no clear-cut solution. Students work in groups to solve the problem through investigation and inquiry. An example from the What’s the Matter curriculum guide involves students investigating the disappearance of the principal’s water. The principal left an open container of water in her office, and it vanished after a couple of days. The principal asked the students for help in solving this mystery. Of course, this problem leads students to inquiring about the water cycle and thereby fosters a deep understanding using real-world experiences.
In addition to using the William and Mary science curriculum, STEM Starter students studied biographies of famous scientists and inventors using Blueprints for Biography® STEM Starters Series. STEM Starter Blueprints are a series of teacher curriculum guides with high-level discussion questions, creative and critical thinking activities, a persuasive writing component, rich primary resources, and science experiments or observations. STEM Starter Blueprints have been developed for the following: (a) George Washington Carver, (b) Galilei Galileo, (c) Thomas Edison, (d) Marie Curie, (e) Alexander Graham Bell, (f) Michael Faraday, (g) Louis Pasteur, and (h) Albert Einstein. The curriculum units utilized in STEM Starters are displayed in Table 1.

Table 1.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>William and Mary Problem-Based Learning Units</th>
<th>Blueprints for Biography®</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Weather Reporter</td>
<td>George Washington Carver or Louis Pasteur</td>
</tr>
<tr>
<td></td>
<td>Budding Botanist</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What’s the Matter</td>
<td>Galilei Galileo or</td>
</tr>
<tr>
<td></td>
<td>Dig It</td>
<td>Albert Einstein</td>
</tr>
<tr>
<td>4</td>
<td>Electricity City</td>
<td>Thomas Edison or</td>
</tr>
<tr>
<td></td>
<td>Invitation to Invent</td>
<td>Michael Faraday</td>
</tr>
<tr>
<td>5</td>
<td>Acid, Acid Everywhere</td>
<td>Marie Curie or</td>
</tr>
<tr>
<td></td>
<td>Nuclear Energy</td>
<td>Alexander Graham Bell</td>
</tr>
</tbody>
</table>

Establishing an elementary science program can be done with commitment and dedication from both administrators and teachers. Providing teachers with quality support and adequate resources encourages their development as science teachers. Providing young students with engaging science curriculum and opportunities for investigations allows them to develop an enthusiasm for science and sharpens their science reasoning skills necessary for upper-level courses.

References


Author’s Note: Debbie Dailey is the Assistant Director of the Mahony Center for Gifted Education at the University of Arkansas at Little Rock. Debbie has a B.S.E. and M.S.E. in biology with an emphasis in chemistry. She is presently finishing her doctorate in educational administration. Debbie served as the Peer Coach and Curriculum Coordinator.
Controllable but Ignored: Environmental Factors in Early Childhood that Impede School Success
By Steve V. Coxon, Ph.D.

As an educational researcher, I have focused on the talent development of children in middle childhood and early adolescence in science, technology, engineering, and math fields. As a parent of two young children, my ear has been increasingly bent to the occasional study reported in the media focused on early childhood. Some of these have strongly suggested harm to children from things seemingly innocuous. I have gone digging into the literature to locate some of these studies, and I have focused on two lines of research: television and food.

There is strong evidence that television viewing is related to many factors that impede future school success including limiting language development, creative play, and attention. There is also very strong evidence that very common pesticides used on food impede the development of intelligence. While we have control over these factors and can reduce or eliminate the problems, excessive television watching and the consumption of pesticide-laden foods is as common as cigarette smoking and lead paint use in the recent past. I presented my review of this literature at the National Association for Gifted Children conference in Denver this fall and offer it again here in hopes of increasing awareness of these issues as well as to spur action in regards to these solvable challenges.

Television
Nationally, we offer television to our children as if it were their full-time jobs to watch. Televisions are found in the bedrooms of 1 in 4 two-year olds (Rideout, Vandewater, & Wartella, 2003) despite the American Academy of Pediatrics’ (AAP; 2001) statement recommending that children under age 2 years have no screen time. The same AAP statement further recommends that children over age 2 years have no more than one to two hours of educational screen time per day. This suggestion is widely ignored. A survey of over 1000 parents found that children ages 2-5 years watch screens an average of 32 hours per week of which 97% was television (McDonough, 2009). School alleviates the amount to a small degree: Children ages 6-12 years watch an average of 28 hours per week (McDonough), though it is seemingly less likely to be educational. The television is on during meals in 64% of households and is on nearly all waking hours in more than a third of households (Rideout, Foehr, & Roberts, 2010). At age 70, the average American will have spent nearly a decade of life watching television (AAP, 2001).

So, what difference does all of this television make? It inhibits language development, limits creative development, reduces attention, and is detrimental to health and well-being.
Tomopoulos et al. (2010) followed families with infants and found that those that watched more than an hour of television per day at six months of age had significantly lower scores on measures of language development at age fourteen months. In another study of language development, young children in houses where the television is on most of the time were found to be less likely to read daily than their peers in houses where the television time is limited (59% vs. 68%) and less likely to be able to read at all (34% vs. 64% among ages 4-6 years) (Rideout, Vandewater, & Wartella, 2003).

A study of more than 1700 children ages 0-12 years found that television time is negatively related to time spent in creative play (Vandewater, Bickham, & Lee, 2006). This finding was especially strong among children under 5 years. Anderson et al. (2001) found that television watching was related to lower divergent thinking levels and diminished creative play. Kim and Coxon (in press) noted that the national decline in creativity scores parallels increased television among children in the 1980s and 90s.

Lillard et al. (2011) reported on a study of four-year-olds assigned to watch SpongeBob SquarePants, watch educational television, or simply draw. Afterward, children in the SpongeBob SquarePants group scored lower on a measure of attention than the other two groups.

Furthermore, the AAP (2001) conducted a literature review and found that television was related to obesity, poor body image, substance abuse, and violent behavior. Each of these factors has potentially strong, negative consequences for future school success.

It may not all be bad; content may be a factor. Anderson and his collaborators (2001) found that watching Mister Rogers’ Neighborhood in preschool predicted higher ideational fluency in adolescence and that Sesame Street viewing was a predictor of academic achievement. This fits well with the AAP (2001) suggestion that children may watch a limited amount of educational television. Television viewing is a controllable factor in children’s environments that, given the short summary of research offered here, should no longer be ignored.

**Pesticides in Food**

Several recent studies from across the country have demonstrated significant and meaningful deficits among children with high pesticide exposure compared to those with the least. In one study of hundreds of children followed from before birth through age 7 by researchers at the University of California at Berkeley, children in the top quintile of pesticide exposure had IQ scores 7 points lower than those in the lowest exposure quintile (Eskenazi, 2011). Scaled over the entire country, this represents a tremendous loss of potential. Even at the individual level and with average levels of pesticide exposure, children with high potential may be more prone to exclusion from gifted programs. In a recent study from Columbia University, researchers looked at some common pesticides in the cord blood of newborns in inner city New York. With each 5 picogram increase in pesticide in their cord blood, IQ scores decreased by 1.4% and working memory decreased by 2.8% (Rauh et al., 2011). This a very small level of pesticide exposure. As organic fruits and vegetables have 90% less pesticides than those grown with pesticides, many researchers recommend choosing organically grown foods (Landrigan as cited in Goodman, 2011).

**Conclusion**

Mounting evidence suggests that children’s exposure to television and pesticides should be limited or eliminated. Both are controllable factors.
Parents should eliminate television exposure for children under 2 and, if any exposure is to be offered to older children, the focus should be educational programming. Children with less television exposure tend to speak and read earlier, engage in more creative play, have greater attention spans, and have better health and well-being.

Eliminating pesticide-laden food is also recommended for children’s intelligence. This presents the additional challenge of increasing grocery expenses. While middle and upper income families may choose to reevaluate their budgeting priorities in light of the research presented here (and eliminating television bills could offset some of this expense), lower income families are unlikely to be able to afford organic groceries. It is important that eliminating such pesticides from our food system altogether becomes part of the national discussion on our children and our nation’s future. Certainly all children are worth facing the challenge.

References


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**Teaching with Type: Applying Personality Type in the Classroom**

By Charlene Brock

“My child won’t speak up in class and her teacher is constantly pressuring her to do so.”

“I give complete instructions to my students and some students still come up to me and ask me to repeat the directions.”

“I have one student who constantly questions and critiques me in front of the class. I feel like I am under his scrutiny.”

“No child is so smart, but it isn’t recognized because he can’t get his work done and turned in on time.”

These common concerns of parents and educators can be understood and dealt with from the perspective of personality type theory. Type theory, as identified by the *Myers-Briggs Type Indicator*® (MBTI®), has been used in counseling and professional settings for over 50 years. An early dream of Isabel Myers, the instrument’s author, was its application in the educational setting. With the growth in the use of the instrument and the development of the *Murphy-Meisgeier Type Indicator for Children*® (MMTIC®), an instrument developed by Dr. Elizabeth Murphy and Dr. Charles Meisgeier for children in the 2nd-12th grades, type theory is being applied more widely in the field of education. Furthermore, a national research project recently conducted by the Center for Applications of Psychological Type (CAPT) has demonstrated that training teachers in type theory can lead to an increase in student academic performance.

There are four dichotomous scales that are identified by the MBTI and the MMTIC: Extraversion and Introversion, Sensing and Intuition, Thinking and Feeling, and Judging and Perceiving. Individuals determine their “best-fit type” by comparing their understanding of each of the preferences with their instrument results. There are 16 possible types and no type is better than any other. They all bring their own unique strengths, weaknesses, and responses to stress. Despite one’s type being innate and lifelong, individuals have access to all of the preferences and use them as needed in any given situation. The goal is to develop one’s natural preferences so that one is proficient at using them and then to develop the often more difficult opposites in order to bring about a balance. Type provides information that leads to personal growth and development in life, work, and learning.

Take a look at each of these preference pairs separately and the impact that they can have in the educational setting. First, there is Extraversion and Introversion. This pair is defined as determining the source of one’s energy. Extraverts get their energy from outside of themselves, by interacting with others and being in active environments. Introverts get their energy from within, from spending time in solitary reflection and quiet environments. Does your child want to go out with friends even if he is tired and, if so, does he come home from gatherings with even more energy than he had before as an Extravert would? Or, does your child decide to stay home, not because she does not like the kids who
invited her out, but because she simply cannot muster the energy to “get back out there” as an Introvert would? Extraverts tend to be expressive and verbal, while Introverts tend to be more reflective and prefer to think before they speak. In the educational environment, when teachers have been asked to describe their perfect classroom, Extraverted teachers tended to cite very busy, interactive classrooms with lots of room devoted to student group work and interaction. Introverted teachers tended to prefer rooms which provided students with individual space and quiet nooks. Think about how your child might respond to each of these environments. Also, consider the pressures that an Introverted child might feel in a classroom that requires a great deal of public speaking and participation. Knowing one’s type can give words to describe and understand situations faced daily and provide tools for developing the skills necessary to succeed in those environments.

The second preference scale is Sensing and Intuition. Sensing type students tend to be detail oriented, practical, and methodical in their learning. Intuitive type students tend to perceive overarching themes and patterns, think outside the box, and look for new possibilities and ways of approaching tasks. This preference scale reflects the filter through which individuals take in information. In the school environment, Sensing types may prefer detailed, step-by-step instructions and may ask for clarification even after thorough directions have been given. Intuitive types may believe they understand the basics, try to begin an assignment before hearing all of the instructions, and then ask for clarification if they get stuck. Furthermore, individualized approaches may benefit these types when they need organizational tools for outlining ideas for papers. Sensing types may prefer the more traditional, linear format of organization whereas the Intuitive types may prefer more free form concept maps for organizing topics and ideas.

The third preference scale is Thinking and Feeling and this identifies one’s decision-making style. A person who prefers Thinking tends to look at the world with logic and objectivity. You might observe this in a child who is looking to analyze the world around him, frequently asking “why”, and thriving under competition. A person who prefers Feeling makes decisions based upon her internal value system of right and wrong, is empathetic, and constantly considers the effect her decisions will have on the people around her. Feeling types do not typically enjoy individual competition, but strive to create cooperation and harmony between people. In the school environment, these two types enjoy different kinds of activities. Thinking types enjoy discourse, debate, and competition. Feeling types enjoy cooperative group work and assignments that are person- or value-based. Teaching Thinkers and Feelers to identify the flaws and the positive attributes of ideas and perspectives will benefit them both. This is the only scale that is gender-driven with 57% of males preferring Thinking and 75% of females preferring Feeling (Myers, 2003). Helping children understand the validity and contributions of their type, especially if they are out of gender preference norms, can be especially helpful.

The fourth preference scale is Judging (not to be considered “judgmental”) and Perceiving. These preferences represent how an individual interacts with the world. Judging types are most comfortable when they can bring order to the world. They are decisive and want to move ideas and projects forward, often taking leadership roles. They tend to be organized in their external environments and to design and implement plans and schedules. They take their work seriously. Perceiving types, in contrast, want to experience the world rather than control it, and they like to make their work fun. They may have issues with planning for deadlines as they can get so caught up in the process of creating and learning that they lose track of time. They are adept at dealing with the unexpected, with an inner confidence that they can handle whatever comes their way. In the school setting, Judging and Perceiving preferences may be most apparent when it comes to completing and turning in homework. Judging types tend to be skilled at starting projects early and finishing with plenty of time, whereas Perceiving types thrive under the last minute pressure of deadlines. Backwards planning can be an effective tool for Perceiving types, so that they begin projects early enough to finish on time.
Interestingly, type preference trends are reflected in the gifted and talented (GT) community. It is imperative to note, however, that individuals of all types can be smart and achieve well in school. Based on work by Sak (2004), who summarized multiple research studies to identify patterns of preferences within the GT community, the majority of GT learners identify preferences for Extraversion (51%), Intuition (72%), Thinking (54%), and Perceiving (60%). This is in contrast to the general population, which shows preferences (as identified in the MBTI Manual, 2003) as Introversion (51%), Sensing (73%), Feeling (60%), and Judging (54%). These preferences are exact opposites! Furthermore, consider that the majority of early childhood teachers are Extraverted Sensing Feeling Judging types. More educators in middle and high school tend to have preferences for Intuition and Thinking as conceptual thinking and critical analysis becomes a priority in teaching (Schaubhut & Thompson, 2008). Keeping these trends in mind, it is important that gifted programming meets the unique needs of its learners, which may be in direct contrast to the needs of the mainstream learner. However, it is also important to remember that all types of students deserve to be challenged academically whether they fit the norm of the mainstream or the GT student. Type knowledge allows students to identify their own learning preferences, to advocate for themselves with teachers, and to learn helpful tips and tools in order to succeed academically. Parents can support their children in these efforts when they, too, understand their children’s preferences. In addition, by recognizing natural differences in learning and motivation as relates to type, teachers are empowered to provide stimulating and engaging curricula for their students. Personality type theory provides a valuable resource for understanding and meeting these needs.

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References


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Early Access: Fostering Academic Success
Through the Acceleration of High Gifted Young Children

By Lindsey Reinert, M.Ed.Psy & Penelope Heinigk, Ph.D.

What is Early Access?
Effective as of July, 2008, Colorado House Bill 08-1021 allows state funding for formally identified highly gifted 4 and 5 year olds to enter kindergarten or first grade a year early. Highly gifted is defined in this bill as a child who is academically gifted, socially and emotionally mature, and in the top 2% in their cognitive abilities. The intent of HB 1021 is to meet the unique needs of the “highly advanced gifted child.” It does not permit early access to all gifted 4 or 5 year olds. Quality preschool programs will meet the needs of most gifted children. Acceleration is an option that may also be considered in future years.

How do young highly gifted children benefit from Early Access in Colorado’s Jefferson County (Jeffco) School District?
Boredom, underachievement, perfectionism, and succumbing to the effects of peer pressure are predictable when needs for academic advancement and compatible peers are unmet. Early Access students are cluster grouped with like peers and allowed access to curriculum, instruction and assessment aligned with the child’s level of challenge as well as opportunities to foster friendships and social emotional growth closer to the child’s developmental level. Teachers who have Early Access students in their classrooms are supported by district GT Resource Teachers and given opportunities for professional development.

What is the Early Access admission process in the Jeffco School District?
There is an extensive application process for Early Access which takes into consideration varied indicators that build a body of evidence. In addition to the cognitive requirements, academic abilities, school readiness, motivation and a positive support system are all components that are evaluated in order to assure that Early Access is a good fit for that child. The Gifted and Talented Department collaborates with Child Find, Early Childhood and Special Education during this process through the following steps:
• Initial Application
• Collection of portfolios, developmental history, and perception forms
• Cognitive testing using the DAS assessment
• Achievement testing using the TEMA and TERA to determine math and reading levels
• Preschool observations
• Committee review of submitted materials for all students scoring in the 98th percentile or higher on cognitive tests
• School visits for families of accepted applicants
• Placement meetings with parents, principals and teachers

What pathways are available for Early Access students?
At the end of the first year of Early Access, a meeting is held with the family, teacher and principal in order to determine the most appropriate pathway for the next year. This may include continuing on in a regular classroom of the next grade

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level, transitioning into a GT Center classroom of the same or the next grade level, or changing school sites. Again, we strive to find the best fit for each student for the upcoming school year.

**How many students are accepted into Early Access each year?**

We are in our fifth year of identifying highly gifted 4 and 5 year olds for the Early Access process and have worked hard to serve a variety of Early Access children, meeting their specific needs in creative and responsive ways.

Here is a summary of our application and acceptance data:

- **Cohort 1 (2009-2010)**
  - 25 Applied
  - 10 Accepted
  - 7 Kindergarten, 3 First Grade

- **Cohort 2 (2010-2011)**
  - 35 Applied
  - 15 Accepted
  - 13 took placement
  - 8 Kindergarten, 5 First Grade

- **Cohort 3 (2011-2012)**
  - 51 Applied
  - 18 Accepted
  - 14 took placement
  - 11 Kindergarten, 3 First Grade

- **Cohort 4 (2012-2013)**
  - 62 Applied
  - 13 Accepted, all accepted
  - 9 Kindergarten, 4 First Grade

Further information on the Jeffco Early Access process can be found at:


Supporting documents can be found at:

[https://sites.google.com/a/jeffcoschools.us/jeffco-early-access/](https://sites.google.com/a/jeffcoschools.us/jeffco-early-access/)

**Author’s Note:**

*Formerly a Language Arts teacher in a GT Center Middle School, Penelope Heinigk is currently a GT Resource Teacher for the Jeffco School District where she supports over 20 schools with their GT needs including identification, programming, extension & enrichment, teacher development, parent support and problem solving. She graduated with her doctorate from the University of Oregon in 2001 and holds teaching endorsements in Language Arts, German and Gifted & Talented.*

*Formerly a self-contained 3rd-5th grade gifted and talented teacher in Adams 50 School District, Lindsey Reinert is currently a GT Resource Teacher for the Jefferson County Public School District where she supports over 20 schools with their GT needs including identification, programming, extension & enrichment, teacher development, parent support and problem solving. She graduated with her master’s degree of Educational Psychology with the focus on gifted education from the University of Connecticut in 2008 and holds a Colorado teaching licenses for pre-k through 8th grade education and an endorsement in Gifted & Talented.*
Five-Star Schools: Defining Quality in Early Childhood Programs

By Dr. Nancy B. Hertzog

Hakeem, Emily, Jose, and Latisha are all entering preschool in the fall. Their mothers are looking for the highest quality early childhood program they can find. Is there a guide for them to find a five-star program? Are all certified or accredited programs of equal quality? How do these parents and guardians know what defines quality in early childhood education, and will high-quality programs be affordable to all of them?

The federal government has defined quality through its funding of Early Learning Challenge Grants, a component of the Race to the Top federal funding program. This article will describe how the state of Washington is planning to use its award to comprehensively reform early childhood education. These initiatives have implications for the field of early childhood gifted education and may be useful to parents when they begin to choose an early childhood setting for their child.

Quality early childhood education is important, not only for the children themselves, but also for our society. Studies have shown that:

- every dollar invested in high quality early learning programs returned between $3 and $17 in benefits. These benefits include:
  - Lower costs for special education; child welfare; public health; social welfare from teen pregnancy; and juvenile and adult crime
  - Reduced need to repeat grades in school, lowering school costs
  - Increased tax revenue from successful students’ increased earnings as adults. (Washington State Department of Early Learning, 2010 p. 4)

Early Learning Challenge Grants

Policy makers know that quality early learning experiences have a long-lasting impact on the well being of our society, and they are funding Early Learning Challenge Grants to push the research agenda on defining quality for all early childhood programs, not just those provided with federal funds.

Nine states (California, Delaware, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Rhode Island, and Washington) were recently awarded Early Learning Challenge Grants by the federal government. In a letter to the governors announcing the winners, Arne Duncan, Secretary of Education, and Kathleen Sebelius, Secretary of Health and Human Services wrote:

These states have created high quality comprehensive plans to improve early learning and development programs around five key areas of reform: establishing successful state systems; defining high-quality, accountable programs; promoting early learning and development outcomes for children; supporting a great early childhood education workforce; and measuring outcomes and progress. (U.S. Department of Education, n.d., para. 3)

Noticeable in the grant competition itself, reform in early childhood education includes comprehensive components of high quality—not just challenging curriculum, the physical space, or the learning environment. High-quality early childhood programs have measurable outcomes for children, qualified professionals with avenues for professional development and advancement, and state systems...
that integrate services for early learning experiences and facilitate transition from child care to school-age educational placements. In the state of Washington, this comprehensive program is entitled Early Achievers—a fitting name to establish that all young children are competent and ready to achieve.

**Washington State Early Achievers Program**

According to the Early Achievers operating guidelines, the program is voluntary to early childhood providers and is designed to do the following:

- Support child care providers to provide high-quality care by providing resources including training, coaching and incentives
- Help parents and caregivers find high-quality child care and early learning programs that fit their needs with the help of an easy-to-understand rating system
- Ensure that children have high-quality early learning experiences that help them develop the skills they need to be successful in school and life. (Washington State Department of Early Learning, 2012, p. 6)

For participating child care providers, the state of Washington provides perks and benefits to the centers’ staff, including free professional development, coaching with a model developed by researchers at the University of Washington (G. Joseph, personal communication, July 10, 2012), and quality improvement awards.

The National Association for the Education of Young Children (NAEYC) has had an accreditation program since 1985. Programs that have met accreditation criteria have met specific standards of quality developed by NAEYC, updated in 2006, that address the stakeholders in young children’s learning: children, teachers, families, and administrators (NAEYC, n.d.). Accredited programs provide assurances to parents that the environments are safe, child-teacher ratios are adequate, facilities have appropriate supplies and are clean, and instruction is planned and implemented according to developmentally appropriate practices. However, it can be costly for programs to pursue accreditation. In the state of Washington, without cost all programs may pursue the Quality Rating Improvement System (QRIS) through the Early Achievers Program. However, states that do not have federal funding may develop their own systems for rating early childhood programs.

The QRIS was developed to help consumers as well as the children served. According to the Alliance for Early Childhood Fi-
What defines quality in early childhood education

A Quality Rating and Improvement System (QRIS) is an organized way to assess, improve, and communicate the quality of early care and education programs that families consider for their children (para. 2). Most importantly, the QRIS is an improvement system, not only a rating system. Administrators using the system see tangible ways to improve their programs.

In the state of Washington, the Early Achievers Program provides points to program providers that voluntarily take their centers through levels one–five, with the top level earning 91–100 points. Points are awarded according to quality in the areas defined by the State Department Framework: (a) family engagement and partnerships; (b) everyday interactions with children; (c) choosing and implementing a strong curriculum; (d) using regular assessment of children’s skills, strengths, and needs; (e) individualized teaching for every child; and (f) providing professional development and training.

Two instruments are used to assess quality and to assign points based on their ratings: The Early Childhood Environment Rating Scales (ECERS-R) and the Classroom Assessment Scoring System (CLASS). Information about the ECERS-R can be found through the Frank Porter Graham Child Development Institute (see http://ers.fpg.unc.edu/node/82). The CLASS (see http://www.class.teachstone.org) primarily focuses on interactions and is broken into three main areas: emotional support, classroom organization, and instructional support. The developers of the CLASS reported, “Research findings from over 3,000 classrooms demonstrate that children in classrooms with higher CLASS ratings realize greater gains in social skill, language, early literacy, and math development” (Pianta, LaParo, & Hamre, 2009, p. 10).

Both instruments are too complex to discuss fully here. However, their components include indicators of the physical, emotional, and cognitive environment as well as the quality of the child-teacher interaction, including the amount and quality of student feedback, the degree of individualization, and the amount and appropriateness of personalized instruction. All aspects of early education are observed, described, and rated according to what we recognize as best practice for young children’s learning experiences. In the state of Washington, the ratings of the two instruments contribute 55 of the 100 total possible points for the overall center star rating.

Implications of Early Childhood Quality Reform Initiatives

How do these quality indicators and the state of Washington’s implementation of a quality rating system impact the field of gifted education or inform parents across the United States? Access to

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quality early education improves access to other educational opportunities that previously were limited to children from diverse backgrounds and impoverished homes. Many early childhood programs that were designed to serve children with deficits in academic skills, not strengths, must now focus on addressing the unique competencies of every learner. Teachers in quality early childhood programs address students’ strengths and pay particular attention to the diversity of children’s skills and performance levels. Quality means addressing diversity.

Parents of children who are reading beyond their age level or solving mathematical problems faster than their older siblings, or parents worried that the instruction will not match their children’s interests should feel comfort in knowing that early childhood providers who are engaged in pursuing quality ratings are not only interested in meeting the needs of their children, but have the training to do so.

Although this article described how the state of Washington is defining quality in early childhood programs, quality should exist in every state, and not only in private and expensive schools. Parents now have a model for demanding quality as a consumer. They know that their children’s early childhood instruction should be personalized and related to their interests—and that their children should be challenged to grow in their cognitive, social, emotional, and psychomotor domains. Rich learning environments that earn a five-star rating include parents as partners, have professional development opportunities for teachers, monitor growth and progress, and communicate learning goals to families and students. High-quality environments adhere to principles described by the renowned expert Lilian Katz (2007), most notably that the younger the child, the more he or she learns from direct, firsthand, and interactive experiences. Although the purpose of these reform initiatives is to help young children “get ready” for school, high-quality programs make learning meaningful for children. Katz (2003) described horizontal relevance as meaningful experiences for students’ current everyday lives, not for some future grade or age level or vertical relevance. Five-star programs have teacher-child interactions that support and promote students’ autonomy, questioning, and interest development. Five-star programs nurture young children’s talents. So, the parents of Hakeem, Emily, Josć, and Latisha can now ask their early childhood care administrator, “What is your program’s rating?”

References


Author’s Note

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