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ABSTRACT

Appropriately differentiating for gifted students can be a daunting task. There are many issues to consider when individualizing instruction for the gifted and talented student population. I teach gifted students in an elementary resource setting. This Action Research paper identifies a number of the issues I discovered when conducting my action research project—meeting the needs of my gifted students. I also offer recommendations on how I plan to improve my teaching in particular and gifted education at Quail Run Elementary in general.

THE RESEARCH PROBLEM AND ITS SETTING

THE CONTEXT

I am currently a gifted resource teacher at Quail Run Elementary, a Georgia School of Excellence in Warner Robins, Georgia. I teach for the Houston County school system. FOCUS is an acronym which stands for Fostering Originality, Creativity, Unique ideas, and Self-direction. This is my fourth year serving as a teacher in FOCUS, our elementary gifted and talented program. I teach identified gifted students in grades first through fifth, test those children who have been referred in grades kindergarten through fifth, and serve on our school-wide eligibility team which considers eligible students for gifted placement.

This is my tenth year teaching elementary school. I began my teaching career and subsequently taught for six years at Westside Elementary, also in Houston County. I taught regular education students in grades Pre-K through first. Westside was a Title I school. The school was 85% free and

reduced lunch, and although I learned a great deal from my years teaching there, after receiving my gifted endorsement, there was not a full time FOCUS position at that school. I transferred at that time to Quail Run Elementary, whose students are majority Caucasian, with a low percentage of non-English speaking and other minority subpopulations. Quail Run's free and reduced lunch percentage is 23%, and I am one of two full-time gifted teachers on staff.

I serve a total of 107 FOCUS students each week in a resource classroom setting. Different grade levels are served each day, for a total of six hours per week per grade level. The other FOCUS teacher and I team teach. I specialize in Language Arts, and she teaches Logic and Mathematics. The other areas we both emphasize in our program include critical thinking, creative thinking, grade level thematic units, research, current event studies, etc. We also compete in various academic contests throughout the year, such as the FOCUS Oratorical Contest, the FOCUS Academic Bowl, and Continental Math League.

THE LIVED PROBLEM

Because the students I teach are gifted in a wide variety of areas, it can sometimes be difficult to differentiate the curriculum effectively and challenge my students adequately. Students can qualify for the gifted program in a variety of ways, which can lead to a very diverse group of students. These related factors each contribute to my broad research question—how can I effectively meet the needs of my gifted students?

It is my goal each day to provide my students with the type of instruction that fosters their natural curiosity while at the same time improves their self-discipline and awareness. This task can be overwhelming at times. As a result, my dilemma is how to mesh quality teaching techniques and a differentiated curriculum in order to ensure that my gifted students are challenged in my classroom.

THE RESEARCH QUESTION

As a result of the above-mentioned *lived problem*, I developed the following research question: "How can I meet the needs of my gifted students?" The following subproblems relate to my action research question.

THE SUBPROBLEMS

1. **The Diversity of My Students.** My students are identified and placed in the FOCUS program for a variety of reasons. Some have very high IQ scores, while others excel on achievement measures or on assessments of creativity. Some were placed because of teacher recommendations, while others were referred by their parents. Teaching such a wide assortment of strengths, while at the same time motivating all of my students to exceed normal classroom expectations, can be rather challenging.
2. **Communicating with Classroom Teachers.** It is a vital part of my job that I advocate for my gifted students and try to help homeroom teachers understand the unique varieties of giftedness and the needs these talents represent. Through enhanced communication with these teachers I feel that we could do a better job of working for what is best for the students we share.
3. **Communicating with Parents.** Because of the large number of students I teach, it is often difficult for me to maintain close contact with their parents. I believe that maintaining closer contact would help me better understand my students and help these parents to better understand their gifted children.
4. **Teaching and Testing.** Not only do I teach gifted students at Quail Run, but I also test referr gifted children and serve on the school's eligibility team. The testing process is very lengthy and so much time devoted to testing and paperwork can detract from curriculum planning.
5. **Time Constraints.** I serve each gifted child six hours a week. Limited time limits instruction, which is also problematic when I am trying to best serve my gifted children.
6. **Financial Constraints.** While there is always new gifted and talented curriculum being written and produced, purchasing these programs can be expensive. County funding is often shifted toward low-achieving or at-risk students because of the pressure to meet AYP. Because of this, we may not often have access to the newest or best programs due to their expense.

The above-mentioned subproblems are all a part of the larger problem: how to ensure that I meet the needs of my gifted and talented students. As a result, my goal was to seek out a feasible solution to this problem through action research.

REVIEW OF RELATED LITERATURE

Developing instructional practices that meet the needs of gifted learners can be a daunting task. Learning activities must often be restructured for these students in order to be more intellectually demanding. According to Romano (2002), gifted students need time for in-depth exploration, manipulation of ideas, drawing generalizations, and asking provocative questions. Researchers agree that differentiated instruction is one way to meet the needs of students who tend to comprehend ideas easily and learn in greater depth than their same-age peers (Tomlinson & Eidson, 2003; Willis & Mann, 2000; Hooper, 2000).

Differentiated instruction is defined as "a way of thinking about the classroom with the dual goals of honoring each student's learning needs and maximizing each student's learning capacity" (Tomlinson & Eidson, 2003, p. 39). I agree with the belief that instruction should be individualized in order to challenge my students appropriately. I also agree with Bloem (2004), however, who asserts that many times teachers simply do not have enough time or resources to prepare classroom instruction that leads to deep thinking. Therefore, it is necessary that teachers of gifted students manage instructional time well, focus instruction at the highest level of thought and production possible, align meaningful assessments with instruction in order to eliminate unnecessary paperwork, and stretch beyond comfortable limits in order to determine and teach what each child needs (Willis & Mann, 2000).

There are many elements to consider when establishing a differentiated learning environment, including the arrangement and climate of the classroom itself. Hooper (2000) recommends creating a rich, classroom environment where learning can thrive. Researchers suggest accomplishing this through the establishment of learning and interest stations where students can work on various tasks independently and in flexible groups, providing students access to multiple instructional materials and forming a climate where both teacher and student opinions are valued (Willis & Mann, 2000; Torrance & Goff, 1989; Tomlinson, 2003). Similarly, Fogarty (1998) asserts that a differentiated classroom should resemble a children's museum where students are invited to interact with the learning environment through explorations, investigations, and inquiries.

The teacher's role in a differentiated classroom is important, yet in many

ways it differs from the traditional view of a classroom teacher. A teacher who supports differentiated instruction is a *connector* who helps students see what they can do well and a *challenger* who pushes children up the ladder of development, while providing needed assistance through scaffolding (Bloem, 2004). Rather than appearing at the end of the learning process to deliver final judgment in the form of a grade, the differentiated classroom teacher honors multiple forms of intelligence, provides a safe emotional environment for questioning, and allows for student choice in selecting assignments and projects (Bellanca, 1998; Fogarty, 1998; Fischbaugh, 2004.) A teacher in the differentiated classroom recognizes "one size instruction doesn't fit all" (Willis & Mann, 2000).

I strongly agree with Willis and Mann's (2000) assertion that differentiation does not refer to the curriculum itself but rather to the teacher's role in finding manageable ways to meet individual student needs. Differentiation is not simply a recipe for teaching. It is a philosophy based upon the idea that students learn best when presented with natural learning opportunities and when supportive adults push them slightly beyond where they work without assistance (Tomlinson, 2003). It has been my experience that such learning opportunities truly do enable students to take academic risks, as they excel in areas of academic strength and grow in areas of academic weakness.

Researchers agree that, while differentiation is not a curriculum, it should be based upon relevant standards and high quality units of instruction led by caring and courageous teachers (Tomlinson, 2000; Hooper, 2000; Willis and Mann, 2000). Tomlinson (2000) writes, "Any educational approach that does not teach individuals is deeply flawed. Teaching is hard. Teaching well is fiercely so!" (2000).

Willis and Mann (2000) identify three aspects of learning that can be differentiated in the gifted classroom; these include content, process, and products. *Content* refers to the concepts or principles to be taught. Tomlinson (2000) asserts that a specific subject area may remain the same for an entire class; however, the complexity, or means of delivery, may be varied depending upon student needs and interests. *Process* refers to the activities in which students participate, and *products* are the culminating projects students complete in order to demonstrate what they have learned (Willis & Mann, 2000). Such types of student activities and products may be also adjusted by the teacher in order to meet the specific needs of gifted children.

Teachers who believe in differentiated instruction must know their students well. This in-depth knowledge of gifted students is critical in providing students with the opportunity to truly excel, becoming all that they have the potential to become. Students in the differentiated gifted classroom are able to work at the highest level of thought and production possible (Tomlinson, 2000). The lives of these gifted and talented students are therefore impacted in a major, positive way (Kaplan et al, 2002).

Providing gifted students with differentiated instruction gives them a sense of community, both because of the variety of student grouping possibilities and the ownership students feel of the learning material (Tomlinson & Eidson, 2003). Gifted students in differentiated classrooms are assisted in identifying their own strengths and weaknesses, and this self-awareness serves to create an environment where children can truly thrive without fear or intimidation (Hooper, 2000). Lastly, students have choices about their own behavior and the types of learning experiences they will participate in, making learning active and motivation intrinsic. This creates gifted students who are prepared to be lifelong learners (Willis & Mann, 2000). My goal as a teacher has always been to create a hunger in my students for learning and a climate supportive to developing intelligence. Differentiated instruction can foster just such a curiosity in the learning environment. According to Fogarty (1998), an intelligence-friendly classroom helps children be as smart as they can be in every way they can be; such a differentiated instructional approach, therefore, makes perfect sense for both teachers and students.

Action research involves the teacher as researcher, striving to make public the educational theory which is embedded in his/her practice. Olszewski-Kubillus (2003) asserts that educators who seek to effectively serve gifted learners have a critical need to identify those practices which have proven their value for the advanced student. There is a growing movement of teachers who, through an increasing research base, seek to design effective programs for gifted students.

Action research is defined as a flexible, spiral process which allows improvement and research to be achieved at the same time (Dick, 2002). Action research, which is qualitative by design, seeks to bring about real change in a practice context, while at the same time allowing researchers to develop a better understanding of the problem. According to Dick (2002), action research seeks to remove the gap between those who decide and those

who do. Those who are affected by the decision join with those who will carry it out.

As is evidenced above, there is a wide variety of information available on ways to meet the needs of gifted learners. Overall, the authors cited in this literature review agree that targeting instruction towards student interests, creating a challenging and supportive learning environment, and differentiating instruction are critical components for successful instruction in the gifted classroom. As one can see, there is still much action research to be done in the area of best practices for gifted education.

RESEARCH METHODS

In designing my action research study, I decided to use interviews, questionnaires, and classroom observations in seeking to answer my research question—what is the best way to challenge my gifted students? I interviewed three administrators at my school, Quail Run Elementary. These interviewees were my principal, the assistant principal of instruction, and the school counselor. I interviewed my principal (*Administrator A*) because he is central to decision-making at my school. Scheduling, funding, and instructional decisions are all ultimately made by him. I felt that he would provide pivotal insight to my research study. My assistant principal (*Administrator B*) was an important person to interview about curriculum and curriculum standards. She is also instrumental in making instructional decisions at our school. She recently completed her doctoral degree, so she had much information and encouragement to offer about conducting action research. Lastly, I selected our school counselor (*Administrator C*) to be a part of my research. She serves on our Quail Run gifted eligibility team, which works to make determinations about gifted testing and referrals. Her history of work with gifted students made her a valuable resource to me.

Secondly, I designed and distributed questionnaires to several groups. Questionnaires were given to random samples of Quail Run classroom teachers, other Houston County elementary gifted teachers, and parents from Quail Run who currently have students enrolled in the FOCUS gifted program. Because I teach my students in a resource setting, they spend a great deal of instructional time with their homeroom teachers. I felt that having input from these teachers would be vital in discovering the best practices for teach-

ing my gifted students. Likewise, other FOCUS teachers from Houston County had a great deal of insight to offer about strategies they have used which have been both successful and unsuccessful. Lastly, I selected a random sampling of parents to distribute questionnaires to. These parents had children in grades kindergarten through fifth, and some have more than one child enrolled in the gifted program. Parents often know their children in a unique way, and I felt that they would have interesting ideas and opinions on how their children would learn best in the gifted environment. Copies of the surveys used may be found in Appendices A-C, and will be discussed in subsequent sections of this report.

Lastly, I conducted classroom observations beginning on February 26, 2006 and lasting until March 24, 2006. I observed students ranging from first to fifth grade. These observations will be discussed in detail later in this report as well. Observations included students working with technology, creative problem solving, interest centers, contracting, and independent studies. Anecdotal notes were taken based on student comments, my observations, and collected student work samples.

The following is both a discussion and an analysis of the results of my research on how to best meet the needs of gifted students.

INTERVIEWS

An account of the questions asked in my administrator interviews, a description of their responses, and an analysis of their comments are contained in the following section of my research report.

1. How are FOCUS classes beneficial for students at Quail Run Elementary School?
   - *Administrator A*—"They provide enrichment for a large portion of our population. This is a growing group. There are skills and strategies taught in FOCUS that are not taught in regular education programs."
   - *Administrator B*—"They are very beneficial for those students who are intellectually advanced. The program allows for a day of challenge and higher level thinking. It also allows for a day of challenge with their high-achieving peers."
   - *Administrator C*—"Students are given a chance to enrich their education. This is important for these gifted students."

Analysis—The administration at my school believes that providing specialized instruction for gifted students is, and should be, a priority. All assert that such enrichment opportunities benefit gifted learners. They agree with the arguments made by Tomlinson (1999) that gifted students need advanced and differentiated instruction, and a priority should be placed on providing them with such an education.

2. Can you foresee any harm from such educational experiences? Why or why not?
   - *Administrator A*—"I do not see any harm. These students enjoy the experience and are getting the instruction that they need."
   - *Administrator B*—"No, not at this time. I hear nothing but positive feedback from parents and students."
   - *Administrator C*—"I do not feel that these classes are harmful for students who are truly gifted."

   Analysis—My administrators did not identify any harmful effects from participating in weekly FOCUS classes. Administrator C did specify that gifted pull-out models help the truly gifted, perhaps implying that there are students in our Houston County gifted program who are not truly gifted. Although this is a topic of interest, this is not the central focus of my current research study.

3. What do you feel is the most important characteristic of gifted students?
   - *Administrator A*—"FOCUS students seem to possess wonderful critical thinking skills. These thinking skills are vitally important."
   - *Administrator B*—"I think that creativity is the biggest asset to gifted students. They are able to think and create on a higher and unique level."
   - *Administrator C*—"Being able to excel in the regular classroom is an important aspect of giftedness."

   Analysis—I received three very different responses to this question. While Administrator A felt that critical thinking was the most important aspect of being gifted, Administrator B pointed to the importance of creativity. This might manifest itself as a gift for creative problem solving, music, art, etc. Administrator C, however, felt that gifted students must be able to succeed in the regular classroom setting. My concern about this perspec-

tive is that, often times, gifted students might also be affected by other problems such as learning disabilities or Asperger's syndrome. Such factors might affect classroom performance for these children. Little (2002) says that often children with Asperger's continue to speak continuously about a favorite topic, oblivious to the fact that the listener is not interested or wants to say something in response. Bornot (2001) emphasizes that students who are gifted and have learning disabilities are often not identified and are underserved in today's elementary schools. Such contributing factors may limit school success, but should not detract from a child's true giftedness.

4. Which characteristic do you feel is probably least appreciated in the regular classroom?
   - *Administrator A*—"Classroom teachers may not appreciate the fact that gifted students need enrichment. The creativity of these students is often overlooked in the traditional classroom setting."
   - *Administrator B*—"Higher level thinking can be underappreciated. These students sometimes challenge a teacher's thinking and lessons. It can also be hard for these teachers to not feel threatened by these deep thinking students."
   - *Administrator C*—"Teachers often do not appreciate the unique knowledge gifted students possess and do not allow these students to add to classroom learning."

   Analysis—Each of my three administrators expressed an awareness that sometimes gifted students are not fully understood or appreciated by their homeroom teachers. They agreed with Tomlinson and Eidson's (2003) assertion that teachers do not always maximize gifted children's learning capacities. Because of time constraints and limited classroom resources, gifted students often end up helping lower-achieving students, rather than extending their own knowledge. Also, some teachers view knowledgeable students as a threat to their expertise in the classroom. This is particularly unfortunate, because the teacher who fails to learn, fails to grow professionally.

5. Which characteristic do you feel is the best indicator of future academic success?

- *Administrator A*—"The higher order thinking skills that gifted students have is the best predictor of success in both college and in life."
- *Administrator B*—"I think that creativity and higher level thinking are the two assets that set FOCUS students aside and make them successful."
- *Administrator C*—"Students who work hard and don't let their abilities 'go to their heads' are the ones I feel will succeed in the future."

Analysis—These responses were very similar to those from question three. Administrators A and B pointed to the importance higher order thinking skills and creative problem solving. Administrator C, on the other hand, felt that gifted students who were also humble would be the ones to succeed in adulthood. While Administrators A and B regarded self-confidence and a love for learning as positive attributes, Administrator C saw these as potential detriments to the FOCUS student. I agree that humility is important, but I want my students to be self-confident and to fully appreciate the gifts they have been given. I feel that the right balance is critical in producing a successful student.

6. Should instruction be the same in the gifted resource room as it is in the regular classroom? Why or why not?
   - *Administrator A*—"Instruction in the regular classroom is typically lecture and handouts. Goals for the gifted program should be higher and there should be more opportunities for 'out of the box' learning."
   - *Administrator B*—"Instructional goals should be the same and always related to the GPS—Georgia Performance Standards. These standards, though, should be covered to a higher level and approached in a different manner so that gifted students use much higher levels of thinking."
   - *Administrator C*—"Instruction in FOCUS should be more intense than the regular classroom in order to better hold the interests of truly gifted students."

   Analysis—All three of my administrators emphasized the point that instruction in the gifted classroom needed to be deeper and more challenging than that which is provided in the regular classroom setting. They stressed the importance of using higher level thinking skills and a challenging curriculum. Researchers agree with this assertion that rich classroom environments and enriching activities are critical for the gifted learner (Fogarty, 1998; Tomlinson, 2003).

7. How can the FOCUS program be improved to better meet the needs of our gifted student population?
   - *Administrator A*—"I wish that FOCUS teachers did not have to meet every Friday. Then they could concentrate more on working with our own QRES students."
   - *Administrator B*—"I would like to see changes in scheduling, especially for kindergarten, first grade, and second grade students. Since these young students still need help in reading, other academic approaches may be best for them. That way we could pinpoint lingering areas of academic difficulties."
   - *Administrator C*—"I feel a program that allowed students to be pulled out for a short time every day, rather than once a week, would allow for better instruction."

   Analysis—Two separate areas of concern emerged when evaluating concerns about our Houston County FOCUS program. Currently, FOCUS teachers are frequently pulled from their schools for meetings on Friday. My school administrators felt that such meetings impede the work I am able to do at my own school in terms of both gifted testing and teaching. Secondly, Administrators B and C suggested that, especially younger FOCUS students, be served in gifted classrooms for shorter segments of time so that they do not miss basic instruction in reading and mathematics. Acquiring a solid baseline in these skill areas seemed very important to them.

8. Is individualized instruction as important in gifted education as it is in the regular classroom? Why or why not?
   - *Administrator A*—"Yes, maybe even more. Even though students are in FOCUS, they still may not be on the same level. Individualized instruction is always important."
   - *Administrator B*—"It is essential! Every child needs to have his/her educational needs met in the classroom. Differentiated instruction is a must."
   - *Administrator C*—"Yes, especially for young students. Even gifted children sometimes need extra help or special attention."

   Analysis—Differentiation of curriculum and individualized instruction are ideas that all three of my administrators emphasized. They each agreed

with the assertion that gifted students require the same type of individualization as their peers. They assert, like Berger (2006) that gifted students need appropriately differentiated curriculum to address their individual characteristics, needs, abilities, and interests.

9. Please describe any complications you experience in scheduling for gifted classes.
   - *Administrator A*—"FOCUS students do not go to Specials (Art, Music, and Physical Education). This makes scheduling homerooms very difficult. I wish we did not have to make so many modifications for this policy. Even if students went to Specials, they would still get enough gifted hours, as mandated by the state."
   - *Administrator B*—"FOCUS students should not have to miss Specials. I don't think these students should have to miss the creativity that takes place in PE, art, and music."
   - *Administrator C*—"I do not participate in school scheduling."

   Analysis—Although Administrator C does not participate in class scheduling, both Administrators A and B emphasizes the dilemma they are faced with because FOCUS students do not attend art, music, or physical education on their FOCUS day. Both are currently doing more research on changing this existing county mandate, and both feel that gifted students, perhaps more than any other learners, need opportunities to enjoy both artistic and musical experiences. Neither were sure why this policy is in place, but would like to check on the likelihood of it being changed in the future.

10. Does providing for gifted students influence the way resources are allocated in your school?
    - *Administrator A*—"Not really. We have funds used specifically for FOCUS for our school."
    - *Administrator B*—"No, FTE counts are used for FOCUS expenditures."
    - *Administrator C*—"I do not know how funds are allocated."

    Analysis—Funds for gifted education do not come from any school funds. Gifted classes do not affect resource allocation at Quail Run.

11. In your evaluation of the program, do you have any specific areas of concern?
    - *Administrator A*—"There are some students in the program who I feel do not belong. This is an issue of testing, though, not teaching."
    - *Administrator B*—"My areas of concern would be scheduling and our FOCUS kids missing Specials. I also feel that there is too much time between grade level testing and parental notification. I feel that if parents were notified sooner of testing results, we would have less phone calls and parental concerns. Also, it is often difficult to explain to parents why 'bright' students are not always identified as gifted."
    - *Administrator C*—"My main concern is students who are in the gifted program because of their creativity, yet they still struggle academically. I feel that the criterion for gifted placement needs to be higher."

    Analysis—Concerns about the gifted program for all three of my administrators relate to testing, not teaching. All were concerned that students are sometimes placed in the program because of success on a standardized test. These students are not always gifted, in their opinion. All expressed a knowledge that students are placed in the program according to state guidelines; however, they were concerned at how many parents confuse students who are high-achievers with those who are gifted. Perhaps this is a topic we could address at one of our quarterly parent meetings.

I was very encouraged by both the amount and quality of information that I received from my interviews with the Quail Run administration. All three of my interviewees were complimentary of the FOCUS program in general. Much of what they had to say was an affirmation of what I already believe—gifted students need differentiation and individualization just as much as other students do. Good teaching practices are universal in nature, and fostering a love for learning in one's students should be a goal all educators share. As Davenport and Anderson (2002) emphasize, critical elements such as collaboration, empowerment, core beliefs, values, and leadership are all vital components bringing this vision to reality.

QUESTIONNAIRES

Questionnaires were distributed to parents of gifted students, classroom teachers at Quail Run Elementary, and other elementary gifted teachers in Houston County. Samples of these questionnaires are included in Appendices A-C, however a description of responses and my analysis of the feedback follows in the subsequent section of this action research report.

1. **PARENT SURVEYS (Appendix A)**
   Parents were selected randomly for inclusion in my research; however, I did ensure that I included parents of students from all grade levels that I work with, kindergarten through fifth. I asked 28 parents to complete questionnaires based upon their own opinions and experiences with the gifted program and effective gifted curriculum. 26 parents returned their questionnaires. Although there were variances in the answers I received, there were many commonalities as well. I will focus on these in the following discussion.
   - **Characteristics Noted in Their Gifted Children** Of the 26 surveys I received, 24 parents noted that their gifted students made good grades. 21 described their children as having a good memory. 20 parents used words such as curious and creative to describe their gifted learners. 19 respondents indicated that their children had vivid imaginations and learn quickly. 18 said that their children were very observant. Only 14 parents indicated that their gifted children were more alert than his/her same age peers, while only six reported that their children had advanced vocabularies. Clearly adjectives such as curious, creative, quick, imaginative, observant, and bright are words that most of my parents would use to describe their gifted children.
   - **Strategies that Work for Gifted Children** In identifying strategies that work effectively with their gifted students, my 26 parent respondents pointed to the following techniques as most beneficial: a) learning through field trips (22), b) allowing for student choice about ways to complete assignments (19), c) incorporating technology into the gifted curriculum (18), d) allowing for independent studies (17), and e) providing interest centers (16). Only six parents felt that their children should have input in curriculum planning and instructional strategies.

Strategies parents wrote in as other ways to differentiate for their children included ample time for creative thinking activities, more time for peer collaboration, and more "out of the box" projects.

- **Should Instruction Differ in the Gifted Classroom?** All 26 of my respondents indicated that yes, instruction in the gifted classroom should be different from that provided in the regular classroom! Most parents recommended the following important instructional differences: a) more advanced study (24), b) more student independence (23), c) more variety in the methods of instruction (23), d) more accelerated study (23), and e) smaller class sizes (20). Only 13 parents felt that their students needed individualized instruction. Again, parents pointed to the significance of collaborating with their gifted peers, having opportunities to learn in a more relaxed learning environment, and providing gifted students with teachers who are excited about teaching them.
- **Other Interesting Observations from Parent Questionnaires** Most parents indicated that FOCUS is a day their students look forward to. These children enjoy spending time with other gifted learners and using skills that are often untapped in the regular education classroom. Parents report that their gifted children relish opportunities to have independence and creative control in the classroom. Projects and experiments are also very important.

2. **CLASSROOM TEACHER SURVEYS (Appendix B)**

Quail Run classroom teachers were selected randomly for inclusion in my research. I included teachers from all grade levels. I asked 12 teachers to complete questionnaires based upon their own opinions and experiences with gifted curriculum and gifted learners, and 11 of these teachers returned their questionnaires. The following are key points of those questionnaire responses.

- **Characteristics Noted in Gifted Students** Of the 12 surveys I received, 11 teachers identified their gifted students as quick learners with a great deal of creativity. Nine described their children as having advanced vocabularies and vivid imaginations. Eight respondents indicated that their gifted students were very alert, made good grades, were curious, and had good memories. Six teachers said that their children

were very observant, and five indicated that their gifted students were more attentive than their same age peers. Terms such as creative, quick, verbal, and imaginative would be adjectives teachers might use to identify the most common characteristics of their gifted students.

- **Strategies that Work for Gifted Children** In identifying strategies that work effectively with their FOCUS students, the 11 classroom teachers I surveyed pointed to the following techniques as ones they had actually used in their classrooms: a) implementing independent studies (8), b) contracting to allow students choices about ways to complete assignments (7), c) incorporating the use of more technology (6), d) implementing the use of interest centers (5), e) allowing student input into curriculum planning (4), and enhancing the curriculum through the use of field trips (2). None of the respondents have tried either compacting the curriculum or cubing. Classroom teachers also said that they had tried to implement more creative teaching strategies and had given their FOCUS students more homework to challenge them more.
- **Should Instruction Differ in the Gifted Classroom?** All 11 of my respondents indicated that yes, instruction in the gifted classroom should be different from that provided in the regular classroom! Most classroom teachers recommended the following important instructional differences: a) more instruction through nontraditional means (9), b) more accelerated study (8), c) more advanced study (7), d) more student independence (4), e) smaller class sizes (4), and f) more individualized instruction (3).
- **Other Interesting Observations from Classroom Teacher Questionnaires** Classroom teachers felt like their gifted students bored easily in the gifted classroom, and consequently, these teachers reported difficulty staying organized and having sufficient work for students to do upon their completion of classroom assignments. Classroom teachers report that their gifted students gravitated towards analytical thinking, problem solving, reading, and exploring independently. They recognized that mixed ability groups do not always benefit their gifted learners, nor do they always help low-achievers either. Such groupings often make struggling students dependent on others to do their work for them, and gifted students experience added pressure because of an increased work load. These groupings can be advantageous when done correctly

and only in appropriate contexts. Again, this points to the need for teachers to know their students and their individual learning needs.

3. GIFTED TEACHER SURVEYS (Appendix C)

Houston County FOCUS teachers were also selected randomly for inclusion in my research. I included teachers from all areas of Houston County including Byron, Perry, and Warner Robins. I asked nine teachers to complete questionnaires based upon their own opinions and experiences with gifted curriculum and gifted learners, and all of these gifted teachers returned their research questionnaires. The following are key points of those questionnaire responses.

- **Characteristics Noted in Gifted Students** Of the nine surveys I received, nine described their students as having good memories, being curious, and demonstrating creativity. Eight respondents indicated that their gifted students had vivid imaginations, learn quickly, and have good memories. Seven teachers said that their children were very observant and indicated that their gifted students were more alert than his/her same age peers. Seven teachers also reported that their gifted learners had advanced vocabularies and made good grades. Terms such as creative, quick, imaginative, and curious would be adjectives teachers might use to identify the most common characteristics of gifted students. Other noted characteristics included a good sense of humor and the ability of these students to make learning connections across the curriculum.
- **Strategies that Work for Gifted Children** In identifying strategies that worked effectively with their FOCUS students, the nine gifted teachers I surveyed pointed to the following techniques as ones they had actually used in their classrooms: a) providing learning opportunities through field trips (9), b) incorporating the use of more technology (8), c) contracting to allow students choices about ways to complete assignments (8), d) encouraging independent studies (8), e) allowing for curriculum compacting (8), f) providing interest centers (7) and g) implementing the use of interest centers (7). Only six gifted teachers reported the use of cubing and five allowed for student input in the process of curriculum planning. FOCUS teachers also commented on other ways to differentiate for their students including allowing students to share their expert-

ise with the class about a topic under study, incorporating shared inquiry literature response sessions, and teaching content through the use of historic simulations.

- **Should Instruction Differ in the Gifted Classroom?** All nine of my respondents indicated that yes, instruction in the gifted classroom should be different from that provided in the regular classroom! Most gifted teachers recommended the following important instructional differences: a) more advanced study (7), b) more student independence (7), c) more variety in the methods of instruction (7), d) more accelerated study (7), e) smaller class sizes (7), and f) individualized instruction (7). Gifted teachers also pointed to the significance of gifted mentorships and more opportunities to learn away from the classroom setting.
- **Other Interesting Observations from FOCUS Teacher Questionnaires** Most teachers indicated that FOCUS provides students with an opportunity to use creative problem solving and logical thinking skills. They felt that learning for the gifted student should be active and involve hands-on activities. Curriculum should be broader in scope and more project-based. FOCUS teachers did recognize the need for some gifted students to improve upon their social skills and on improving their self-motivation. Most felt that mixed-ability grouping in the classroom was fine, as long as gifted students were not always forced to do all the work and were provided with opportunities, such as in FOCUS, to collaborate with their gifted peers.

In analyzing the answers from all respondents to my questionnaires, I discovered the following commonalities. Parents, classroom teachers, and gifted teachers recognize that gifted learners have unique learning needs. All feel that the FOCUS program should offer special opportunities to gifted learners, in order to enrich the instruction students receive in the regular classroom. There does appear to be a disconnect, however, in what classroom teachers feel they should do for gifted students. Some reported that more homework or more classroom assignments were adequate differentiation strategies. The idea that more work meets the needs of gifted students does cause me some concern as a gifted teacher. I recognize the importance of better communication with the classroom teachers at my school, so that they

understand that there are multiple ways to differentiate. One day in the gifted resource setting does not adequately challenge gifted students, so parents, classroom teachers, and gifted teachers must work with school administrators to implement instructional strategies which will effectively meet the needs of gifted students. In this way gifted curriculum and instruction for gifted learners must be flexible enough to address the broad array of needs represented by that population (Tomlinson et al, 2002).

CLASSROOM OBSERVATIONS

I observed my students over the course of four weeks. Observations took place during different segments of the FOCUS school day, including math, language arts, economics, and independent studies. I observed students in all grade levels in my attempt to find out what types of learning activities truly meet and challenge my gifted students. A summary and analysis of these observations is included below.

1. **Language Arts**
   - **Summary of My Observations** I observed my first and second grade students while implementing a new literacy strategy, entitled Mrs. Bryant's Book Club. Students not only helped me select the novel for book study, but also had choices about what projects to complete and how to complete them. Through contracting, my first and second graders selected the assignments that interested them and contracted for the grades they wished to achieve. Students created wonderful dinosaur diet projects, completed independent research, and engaged in creative writing to accompany our novel study of *Dinosaurs before Dark* by Mary Pope Osborne. Students also participated in Internet webquests to create a dinosaur zoo and view the fossil record. I noted an increase in student engagement and an improvement in the quality of work produced. Feedback from students at the end of our study indicated their enjoyment of independence and choice, as well as their interest in project-based assessment. I noticed improvements in vocabulary and comprehension and feel that I will use Book Clubs in gifted literacy instruction in the future.
   - **Analysis of My Observations** According to authors, "The format of Literature Circles and Book Clubs parallels what real readers do when

they get together to talk about books with friends on their own" (Cunningham et al, 2002, p. 296). Reading is generally a subject my gifted students thoroughly enjoy, and I felt students truly benefited from their interactions in Book Club meetings. My students were engaged throughout out novel study, and when combined with contracting, I felt that such literature activities were very successful. My students enjoyed sharing ideas with their peers, analyzing the text, demonstrating their expertise in the subject of paleontology, and using the Internet as a classroom research tool. Students kept Learning Logs throughout our course of study, and these also provided valuable insight into the learning that was taking place and student opinions of the lessons.

2. **Economics**
   - **Summary of My Observations** I observed my third graders during their participation in an economics unit, entitled Mini-Society. In this study of economics, my students established their own society, *Sun Palm City,* and created their own currency, *Rainbow Betas.* I observed my students forming businesses, creating products, and evaluating their opportunity costs. Students communicated with each other about decision making and held daily town meetings to solve problems and evaluate how to run their society more efficiently. Students also created advertisements using the school lap tops and the program Power Point. This economics unit culminated with a *Market Day* at which gifted students from throughout Houston County met to trade goods and services. Student interest was high throughout the course of my observations and my role was that of observer and facilitator, rather than instructor.
   - **Analysis of My Observations** I feel that this economics unit provided students with critical real-world skills, as well as lifelong applications for learning. My students were able to use their creativity and entrepreneurial skills to create innovative products. Instead of completing simple math worksheets, my gifted students engaged in financial planning, cost analysis, saving, spending, and budgeting. My students were very engaged throughout this unit, and through conversations with them and reading their Mini-Society Journals, it was clear to see how much they had learned. I also received a great deal of positive feedback from parents and administrators, reinforcing how positively the students felt

about the learning that was taking place. Researchers agree that "Teachers can draw on a variety of authentic product formats in order to help students understand the nature of products required of practicing professionals and what goes into the creation of those products" (Tomlinson et al, 2002, p. 232).

3. **Independent Studies**
   - **Summary of My Observations** I observed my fourth graders who were involved with independent study projects about the 50 states. For the first half of the year in FOCUS we spotlight Georgia's history and the geography of its coastal islands. Activities within this unit included field trips to Cumberland Island, cubing activities, scaffolded instruction, and research. At the culmination of our Georgia unit, students began independent studies about a state of their choice. Students investigated the state's history, geography, economy, natural resources, symbols, etc. This research was done through the Internet, reference books, and informational texts. My students also used the school lap tops to design brochures and Power Point presentations for their state. Other activities included writing persuasive letters to convince tourists to visit their states, designing postage stamps to represent their states, writing reports about their findings, and calculating the driving distance and gas needed to drive to a given state. Our final activity was to host a "State Fair," at which my gifted students set up stations, using triboard displays and the lap tops, and served as ambassadors for their states. My gifted students shared their expertise with school second and third graders, as well as parents who were invited to attend.
   - **Analysis of My Observations** I discovered that my fourth graders learned so much from their independent research, in fact maybe more, because they were researching topics they were interested in. I was very impressed by the brochures and Power Point presentations they made, and they too indicated their enjoyment of the use of technology. My students were able to act as experts and share their knowledge with others, which really caused them to deepen their own knowledge base. The feedback I received from them and from their parents was very positive. This will definitely be an independent study project I repeat in the future.

4. **Math Instruction**
   - **Summary of My Observations** Fifth grade observations took place during math instruction. I used a math activity, designed specifically for use with gifted children—tangram puzzles. I began by introducing tangrams to my students. Tangram puzzles were created by the ancient Chinese, and these seven geometric shapes were used to formulate a variety of geometric puzzles. Shapes come in specific sizes and make great tools for teaching equivalent fractions and geometric concepts of area, perimeter, etc. Student partners were given a set of tangrams, a puzzle card, and a solution card. Students worked collaboratively to complete their puzzles. The first week students grew easily frustrated and struggled with puzzle completion. By the second week, students were more comfortable with both the concepts and the materials. They used the solution cards to give them guidance, and began to build upon their understanding of previously learned concepts. By week three the students were confidently solving the puzzles and even "racing" with their peers to find solutions. Several children elected to work alone, which others continued to work in pairs. As an enrichment activity the last week my students used a variety of materials—felt, foam, paper, etc.—to design their own tangram puzzles. Students created tangram houses, animals, and even people. These student-generated puzzles will be placed in a classroom learning center for further exploration by students.
   - **Analysis of My Observations** Although these puzzles were very challenging, I feel that they were appropriate for use with my gifted students. It is seldom that students in the upper grades get to use hands-on materials, which also points to the benefits of such unique learning opportunities. As Sullivan and Lilburn (2002) assert, "In the upper grades children need experiences that allow them to look more closely at the properties of shape and design and thus refine their thinking and descriptions" (p. 73). I feel that allowing my gifted children to create their own puzzles allowed them to use their imagination and creativity. I also plan to use literature, such as Lee Ernst's *Tangram Magician* and Slocum and Boterman's *The Book of Ingenious and Diabolical Puzzles* to continue our learning and math discovery in the future.

As I observed my students over the last four weeks, it became increasingly clear that if challenged appropriately and engaged in their learning, gifted students would be able to maximize their learning potential. By incorporating the use of technology, real-world applications, challenging puzzles, contracting, technology, and independent studies, students were encouraged to develop independent thinking skills, while at the same time they were able to learn the content areas under study. Tomlinson (1999) asserts, at its most basic level, differentiating instruction means shaking up what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn.

CONCLUSION

My research was completed in order to answer the question, "How can I meet the needs of my gifted students?" The answer that I found was threefold in nature. First, appropriate differentiation must take place both in the gifted classroom and in the regular classroom. Through analysis of my classroom observations and questionnaires completed by other FOCUS teachers, I feel that we are succeeding at differentiation in the gifted resource setting. Tomlinson (1999) identities five characteristics of the differentiated classroom: 1) differentiated instruction is proactive, 2) it is more qualitative than quantitative, 3) it is aimed at offering multiple approaches to content, process, and product, 4) differentiated instruction is student-centered, and 5) it is a blend of whole-class, small group, and individualized instruction. I feel that each of these descriptors could be used to describe instruction in my classroom. I am concerned that classroom teachers are not as aware of all that differentiation means. Many classroom teachers reported giving their students "more" homework and classwork, because they finished their work too quickly and it was hard to keep them engaged. As the FOCUS teacher, I plan to do a better job of communicating ideas to them and offering practical, classroom suggestions that they will be able to use. "More of the same" is not differentiation, and I hope to be more useful to fellow teachers by providing ideas, activities, and assistance to them whenever possible.

Secondly, I discovered through parent feedback that parents want the best for their gifted learners. They recognize that these children have specific learning needs, and they want these needs to be met in both the regular

classroom and the gifted setting. My parents recognized that these students learn best when allowed to work with other gifted students, that these children learn from each other, and that this healthy competition often encourages their students to push harder and learn more. On the whole my parents recognized what Tomlinson (2002) purported—students need to be reflective about what they learn, how their learning affects who they are, what they believe, what they can do, and how their attitudes and behavior affect the development and options of other people. My goal is to continue to foster a positive relationship with parents and continue to seek their input about the needs and goals of their gifted children.

Lastly, the interviews I conducted with my administrators revealed the priorities they feel should be focused on by the elementary gifted program. Higher order thinking skills and creative problem solving are activities my administration feels we should continue, and I plan to do just that. I was also happy to hear that my administration feels that we are headed in the right direction with our gifted program. As they seek alternatives to Friday teacher meetings and scheduling issues, I will be able to devote more time to working with classroom teachers and completing testing in a timelier manner. My administration supports the idea that our gifted and talented population must learn in an environment where students can fully develop their abilities and interests without losing their sense of membership as part of the class (Parke, 1989). I appreciate the support they provide my students, parents, classroom teachers, and me.

PLAN FOR FUTURE ACTION

Based upon my conclusions, the following is a list that I propose as part of a plan for further action.

- Work more closely with Quail Run classroom teachers to help them implement differentiation strategies in their own classrooms.
- Continue to differentiate instruction in my own classroom, using even more activities with involve compacting, contracting, independent studies, incorporating technology, interest centers, etc.
- Continue to involve the parents of my gifted students in order to keep them informed and gain from their insights.

- Work with school administration to achieve school-wide learning goals, as well as specifically improve the Quail Run gifted program.
- Assist as needed as my administrators seek to work out scheduling concerns with Specials and gifted testing.

It is my hope that through this action research project and these proposals, I will not only improve my teaching significantly but help to influence elementary gifted education in Houston County. I agree with Tomlinson's (2000) assertion that curriculum and instruction must fit each individual, gifted students must have choices about what to learn and how, students must take part in setting learning goals, and the classroom must connect with the experiences and interests of the individual. It is this type of curriculum and instruction that I hope to provide my students with, each day.

APPENDIX A

Parent Questionnaire

Please indicate your responses to the questions below. Additional comments are welcomed in the spaces provided.

1. What grade is your child in presently? _____

2. Is this your child's first year served in the FOCUS program? _____
If not, how many years has your child been in the program? _____

3. Indicate with an X what characteristic(s) describe your child.
___ Very alert
___ Long attention span
___ Good memory
___ Learns quickly
___ Has an advanced vocabulary
___ Very observant
___ Curious
___ Creative
___ Has a vivid imagination
___ Makes good grades
___ None of the above.

4. Indicate with an X what instructional strategies you feel best benefit your gifted child.
___ Interest centers
___ Incorporating technology into the classroom
___ Allowing for choices about ways to complete assignments
___ Allowing student input into curriculum planning
___ Implementing independent studies, to allow students to research on their own
___ Learning through field trips
___ Other (Please describe below).

5. What subject is your child's most favorite?

6. What subject is your child's least favorite?

7. What subject does your child receive the best grades in?

8. What subject does your child receive the worst grades in?

9. Do you feel that instruction in FOCUS should differ from that in the regular classroom?

If no, please explain below.

10. If your answer to #9 was yes, in what way(s) should it differ? Please indicate with an X all that apply.
___ More advanced study
___ More student independence
___ More accelerated study
___ More individualized instruction
___ Smaller class sizes
___ More varied means of instruction
___ Other (Please describe below).

11. Please describe any positive feedback you have received from your child about their learning experiences in the regular classroom.

12. Please describe any positive feedback you have received from your child about their learning experiences in the FOCUS gifted classroom.

APPENDIX B

Classroom Teacher Questionnaire

Please indicate your responses to the questions below. Additional comments are welcomed in the spaces provided.

1. Do you presently teach students also served in the FOCUS gifted classroom? _____ If so, how many? _____

2. What grade do you teach? _____

3. Indicate with an X what general characteristic(s) describe your gifted students.
___ Very alert
___ Long attention spans
___ Good memories
___ Learn quickly
___ Have advanced vocabularies
___ Very observant
___ Curious
___Creative
___Have vivid imaginations
___ Make good grades
___ Other (Please describe below.)

4. Indicate with an X what instructional strategies you have tried in the regular classroom to assist your gifted children.
___ Interest centers
___ Incorporating more technology
___ Allowing for choices about ways to complete assignments (contracting)
___ Allowing student input into curriculum planning
___ Implementing independent studies, to allow students to research independently
___ Learning through field trips
___ Pre-testing before beginning new areas of study (compacting)
___ Cubing
___ Other (Please describe below).

5. Is there a specific subject your gifted students prefer? ____

6. Which subject is it? _____

7. Why do you think they like this one best? (Please explain below.)

8. Please state below any specific learning needs you have noted in your gifted children, which differ from your regular education students.

9. Do you feel that instruction in FOCUS should differ from that in the regular classroom? _____
If no, please explain why not in the space below.

10. If your answer the #9 was yes, in what way(s) should it differ? Please indicate with an X all that apply.
___ More advanced study
___ More student independence
___ More accelerated study
___ More individualized instruction
___ Smaller class sizes
___ More instruction through varied means (for example, through the Internet, guest speakers)
___ Other (Please describe below).

11. Do you find that mixed ability grouping benefits your class as a whole? Yes No
Please explain your response below.

12. Do you find that mixed ability grouping benefits your gifted students? Yes No
Please explain your response below.

APPENDIX C

FOCUS/Gifted Teacher Questionnaire

Please indicate your responses to the questions below. Additional comments are welcomed in the spaces provided.

1. How many gifted students do you currently serve? _____ Which grade levels do you serve? _____	2. Which model do you use? (Please check one.) ____ Resource ___ Collaborative ___ Consultative
3. Indicate with an X what general characteristic(s) describe your gifted students. ___ Very alert ___ Long attention spans ___ Good memories ___ Learn quickly ___ Have advanced vocabularies ___ Very observant ___ Curious ___Creative ___Have vivid imaginations ___ Make good grades ___ Other (Please describe below.)	4. Indicate with an X what instructional strategies you have tried in the gifted classroom to assist your gifted children. ___ Interest centers ___ Incorporating more technology ___ Allowing for choices about ways to complete assignments (contracting) ___ Allowing student input into curriculum planning ___ Implementing independent studies, to allow students to research independently ___ Learning through field trips ___ Pre-testing before beginning new areas of study (compacting) ___ Cubing ___ Other (Please describe below).
5. Is there a specific subject your gifted students prefer? ____	6. Which subject is it? _____
7. Why do you feel that students like this one best? (Please explain below.)	8. Please state below any specific learning needs you have noted in your gifted children, which differ from regular education students.

(Continued next page)

APPENDIX C *(continued)*

9. Do you feel that instruction in FOCUS should differ from that in the regular classroom? _____
If no, please explain why not in the space below.

10. If your answer the #9 was yes, in what way(s) should it differ? Please indicate with an X all that apply.
___ More advanced study
___ More student independence
___ More accelerated study
___ More individualized instruction
___ Smaller class sizes
___ More instruction through varied means (for example, through the Internet, guest speakers)
___ Other (Please describe below).

11. Do you feel that mixed ability grouping benefits the student body as a whole?
Yes No
Please explain your response.

12. Do you feel that mixed ability grouping benefits your gifted students?
Yes No
Please explain your response.

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