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THE STUDY OF HIGHER ORDER THINKING SKILLS WITHIN A GIFTED PULL-OUT PROGRAM

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DEDICATION

I would like to dedicate this research thesis to my parents, Kathleen and Jimmy Williams. Their constant efforts and encouragement made me the person I am today. The love and sense of values they have instilled in me will be with me always. In their memory, I would like to honor them with this dedication. I know that they would be proud of me today, but I'm the one who is proud, proud of who they both were and the difference they made in so many lives.

Thank you mom and dad! I love and miss you both very much!

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RESEARCH STANCE

From the time I was a little girl, I wanted to be a teacher, but I also thought about several other career choices. As a student at a two-year community college, I opted to major in computer programming, but after two semesters of technology exploration, I changed my major to early childhood education. I had a love for children and always seemed to find a connection with them. As I experienced success in the education field, I decided that I wanted more. I had never really been encouraged by my parents to attend college in the first place; they didn't possess college degrees and were doing well, so why should I need more? I decided that teaching was what I wanted no matter what or who influenced my career path. I applied to a four year college, was accepted, transferred my existing credits, and worked very hard towards my goal of becoming a certified elementary school teacher.

Unfortunately, during my first student teaching assignment, my mother passed away from cancer. At that point I wanted to quit. I was the oldest of three children and had assumed family responsibilities and obligations that were consuming my professional goals. A few days after my mother's funeral my uncle pulled me aside, looked me in the eyes, and with sincerity said, " You do realize you HAVE to go back and finish school. That is what your mother would want for you and you need for yourself." From that day on in the process of

making my mother proud and achieving my own goal, I became more committed than ever to becoming a teacher.

After obtaining my degree in elementary education with a concentration in mathematics, I substitute taught for two years. This experience provided me with multiple opportunities to explore what I wanted and didn't want to teach. I explored all different age levels from Kindergarten to a few high school assignments. I substitute taught in regular and special education classrooms. I finally landed a full-time position in the state of Virginia – many miles from my family in Pennsylvania. My first assignment as a fourth grade classroom teacher taught me much more than any text or undergraduate class had done about classroom teaching, educational goals and my personal teaching style.

Once I had my OWN classroom encapsulated within a traditional environment, I explored various classroom behavior strategies, different teaching styles and ways in which I could communicate with my students. I learned how to incorporate what the district mandated I teach through curriculum manuals and materials, with what I wanted my students to learn and take from my classroom. I attended extra-curricular activities and supported my students with their personal endeavors. I collaborated with and learned a great deal from colleagues as well as my students. My colleagues and I implemented special programs and incentives, designed to facilitate the various needs, both intellectual and personal, of those students within our classrooms. Although this first professional teaching

experience provided me with a great deal, I don't really believe it provided my students with the individual, personal learning experiences that matter so much to me today.

Five years into my career of teaching with a traditional style classroom, I took advantage of an opportunity to receive specialized instruction focusing on the education of gifted students. This experience brought me to a new teaching endeavor. For two years I taught identified gifted students mainstreamed within the regular education environment. I was provided with opportunities to explore new concepts such as curriculum compacting and alternative, or tiered assignments. These teaching strategies allowed me to better meet and challenge the varied intellectual abilities of my students through differentiated instruction.

The next year, I found myself teaching in a full-time fourth grade center-based gifted program. This teaching experience and environment opened a totally new world for me. My students came from twelve surrounding schools and received, in addition to regular curriculum content/standards for fourth grade, gifted programming involving a variety of enriched content. I teamed with other teachers in my district who were involved with similar gifted programming and I was able to provide my students (and myself) with opportunities that many might not consider to be feasible within a "regular" education environment. My title changed from a regular education teacher to a center-based gifted teacher.

My role as an educator changed dramatically in this type of teaching environment. I lived in an education world of flexibility, less structure and student facilitated/directed learning experiences. Since students were able to master the required fourth grade curriculum quite rapidly, I could employ enrichment opportunities allowing for more independence and personal enrichment as students experienced a variety of individual intellectual endeavors. A great deal of content and material students encountered was project based with an emphasis on authentic assessment. As the gifted teacher, I attempted to become a facilitator rather than a dictator of educational experiences. This teaching opportunity truly got me "hooked on gifted" and made me realize that teaching gifted students was what I really loved and desired to do. I was involved with this type of gifted programming for two years before returning to Pennsylvania to be closer to my family. I began my current position as a gifted resource teacher in a pull-out program for students in grades K-8. This was very different from my previous assignment, one that was and still is quite a challenge for me as a teacher.

In my new teaching endeavor, I had no curriculum guidelines, no grade assessments and nobody with whom to team or collaborate. Somehow in between scheduling the individual parent meetings, managing the caseload paperwork, screening new students referred to the program while traveling to four different schools in the same week, I would need to meet the intellectual needs of the gifted

students assigned to me. At two of the four schools I didn't even have a classroom in which to work with my students. I was expected to find a spot *somewhere* in the building to meet with my students. I sure felt that what I was expected to provide for my students wasn't viewed as very important and now wonder how my students at the time viewed our situation. Was this what a gifted pull-out program was all about? After nearly a year of floundering with the ancient materials that my predecessor had left for me, I decided that changes needed to be made. I wanted to create a new gifted program to challenge my students and mentor them to achieve their intellectual potential. I ordered many new curriculum materials including thematic and simulation units, warm ups, and higher level, creative thinking activities. I attended workshops and implemented activities focused on effective instruction for gifted and high ability students. I also really got to know my students and their abilities and began to incorporate their interests and talents into the program design.

The gifted pull-out program allows me to work with many of the same students from year to year, which in turn, enables me to develop a better picture of individual strengths and needs. Class size, ranging from one to twelve students, is much smaller compared to the student-teacher ratio within a regular education classroom. Also, I'm not mandated to follow stringent curriculum standards, which allows for more flexibility within the program design. I meet annually with parents, students, and teachers to discuss and implement programs which are

tailored to facilitate individual goals and needs. Some curriculum adaptations are required within the regular education classroom. However, most specially designed instruction takes place within the gifted pull-out program. Current analysis of student growth/performance within the program involves student portfolios (working and showcase), teacher observations, project products, and rubric assessments.

As I began my graduate study, I was asked and expected to reflect upon my current teaching practice and attempt to investigate a "burning" question within that practice. My first investigation led me to explore how students were labeled/identified as "gifted" and to examine appropriate programming for these types of learners. Through my research I came to determine that although the screening and/or identification process varies from state to state and school to school, the multiple criteria approach to screening and means of identification are very similar to the ones implemented within my district. I took this investigation a bit farther and looked into the various types of gifted programming designs while exploring the positive and negative influences of such designs. Through this research I did come to realize that my previous experience with gifted students in a center-based structure wasn't the "norm." A pull-out program is the more common style of design emphasizing various strategies, methodologies, and programs imbedded within. No matter what type of programming is employed, it must focus on and be centered around meeting the intellectual needs of the

participants involved. This led me to my next research investigation and pilot study.

PILOT STUDY

I wanted to know if my students were aware of their reasons for participation in the pull-out program, while learning more about their personal perceptions of the current program design. I wanted to first find out what being designated as gifted meant to my students. Unfortunately, participation in a program such as a gifted program is sometimes viewed as elite: a group that is different or unique from others. What did this gifted thing mean?

Throughout my pilot study, I learned how to discover more about my students and the gifted program they encounter. I gained new insight into the qualitative research process and how I could use the process as a teacher action researcher. Also, during my pilot study I was introduced to and implemented various data collection methodologies that would assist me with answering my question. While I engaged in the various data collection methods, I learned to listen more effectively to my students, and I enjoyed what they shared with me about the whole notion of being gifted. I learned what their perspectives were about the term and the program they were involved in. In time I learned how to listen more and talk less, a challenging lesson for me as a teacher.

I collected data for my pilot study through the implementation of student surveys, informal group interviews, class discussions and participant observations. I kept this data in an annotated and coded field log. Coding of this log and the construction of the following pastiche which follows brought me to a deeper understanding of my data. According the Ely (1997), a pastiche is a way of expressing multiple tellings in a layout that emphasizes ambiguity and uncertainty.

GIFTED : A Pastiche

Gifted: "Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society."

–Former U.S. Commissioner of Education
Sidney P. Marland, Jr.

FROM THE EYES OF A CHILD
What does the word "gifted" mean to you?

Gifted means you are talented in something. If you are a gifted musician you are good at playing music. If you are gifted, you are good at something.
Gifted means you have a gift of a talent.
To have a special talent in something.
I think it means that some people are a little smarter then others so they are gifted.
It is a place where you learn hard things that are fun.
It means that I can do something really well. And usually do it right.
To me it means someone who understands and is excellent at what is being taught in a regular classroom.
I think that being "gifted" only means that I've been given the gift to excel in a regular class curriculum. I need to be challenged so I don't just zip through elementary school.
I think gifted means your talented in something. Pro baseball players are gifted in baseball. Smart people are gifted because their smart. So gifted people are special.
To me the word gifted means advanced in something or have special talent. (In the words "special talent" I mean a birth talent or a gift from God)
It means you can do more in a different classroom but still do work.
I think the word gifted means to be smarter than average. "Gifted" people are supposed to be able to do work faster and more efficient than others.
It means that I'm more intelligent that other kids and need more difficult stuff than in class. And it means I know more about things than other kids.
To me the term "gifted" means having some sort of special ability or talent that is above normal.
I think gifted means "special" and smart. I also think gifted means having fun.
I think it means learning. Just like once I learn it comes to me just like a gift. Instead if I get a gift as something. I get a gift of something I learn.

–Patai poem from students' journal response
(Grades 2 & 5)

There is a girl in my class, she is good at everything. She is even good at oral hygiene. I'm gifted in feeding the fish, not everyone can do it. It's a special gift!
–quote from Jen during a group interview

A LABEL WITH FEELINGS

I GO TO LEARN DIFFERENT THINGS THAT ARE HARDER THAN REGULAR CLASS. THEN THE KIDS SAY TO ME WELL WE ARE SUPPOSE TO LEARN HARDER THINGS. WHY DON'T WE GO THERE TOO? I REALLY DON'T KNOW WHAT TO SAY WHEN THEY SAY THAT. I DON'T WANT TO HURT THEIR FEELINGS. WE CAN LEARN THINGS QUICKER. WE HAVE A BETTER CHANCE FOR BETTER GRADES. PEOPLE LOOK UP TO YOU. THEY ASK YOU QUESTIONS. WE GET AHEAD A LITTLE BIT. WE HAVE A BETTER CHANCE OF GOOD GRADES. PEOPLE ASK YOU TOO MANY QUESTIONS. THEY ARE ALL OVER YOU. I DON'T LIKE TO TALK ABOUT IT OUTSIDE OF SCHOOL. I JUST TRY TO ACT NORMAL. KIDS DO SOMETIMES CALL ME IQ. . SOME SAY YOU LOOK LIKE IT. OTHERS CONSTANTLY SAY YOU PROBABLY HAVE THE RIGHT ANSWER. WHEN YOU GIVE THE RIGHT ANSWER 99% OF THE TIME OUT OF 100 – THEY USUALLY FIGURE IT OUT.

–EXCERPTS FROM ANECDOTES IN FIELD LOG

Through the construction of this pastiche I was able to discover a great deal about what the word and label "gifted" meant to my students and that it was a label that came with feelings. A majority of the students believed that being gifted meant they were talented at something, particularly within the academic world. They saw gifted individuals as different, smarter than average. They also thought that gifted meant "special," a gift received from birth. Although they seemed to be proud of their "gifts," I did detect a sense of anxiety among the students. Some felt that everyone expected them to have all the answers; people asked and expected a lot from them. One student even shared that peers referred to him as IQ! My students indicated that they like to be viewed as normal and that they didn't want to hurt the feelings of others because of their gifts.

This inquiry and pilot study also shed insight into students' perceptions of the program in which they were participating. Many of the students viewed the pull-out program as a fun "place" where they go to learn different, more challenging things. It's a place where they get a chance to achieve better grades. This finding surprised me because my students don't even earn grades for their performance and achievements within the program. When I completed this pilot study filled with all its findings, I began to wonder if the content that gifted students are engaging in within the program really meets and challenges their intellectual abilities. I needed to dig deeper, which led me to my current question.

My students are deserving of a program that benefits them intellectually while preparing them for real-life experiences and opportunities. The purpose and intent of the program is to provide students with opportunities and content which will meet individual needs while drawing upon personal interests and talents. The gifted program is comprised of students who tend to learn quickly and with ease, are typically independent, inquisitive learners who thrive on complexity while exhibiting an intrinsic motivation to explore new, unusual areas of content. They are students in need of more than what can often be provided within the regular education environment.

The current curriculum design of the gifted program involves engaging students in activities that require higher order thinking tasks. In addition to intellectual content, students are provided with opportunities to explore emotional needs as well. I feel that it is critically important that my students feel a purpose for their involvement in the gifted program while exploring content that enhances self-confidence and personal satisfaction. I also believe I need to feel this sense of confidence and value about the program too. Since my students don't receive a grade from me, I often feel they don't work to their fullest potential and/or demonstrate their best work. The degree of outside exploration, research or assignments in relation to class content is usually forgotten or not afforded the time compared to tasks assigned within the regular education environment. For the most part, this isn't such a concern for me at the elementary level as it is at the

middle school level. My study investigates the effects of higher order thinking skills within the current gifted pull-out program design. The design of the study examines how the program addresses and meets the intellectual, social and emotional needs of all the participants involved with the program.

LITERATURE REVIEW

Gifted Programming

A student who is mentally gifted typically has an IQ of 130 or above and will generally demonstrate behavioral, learning and creative characteristics "differently" than a matched ability or bright student. Gifted learners almost always demonstrate evidence of advancement in curriculum content areas, intensity in the realm of emotional responses and the ability to engage in higher level and abstract thinking (Van Tassel-Baska, 1995). A gifted student often requires little repetition for mastery, is highly curious, inquisitive, thrives on complexity, can elaborate upon content material, demonstrates a high level of language development, draws inferences, constructs abstractions and is less inhibited than peers to share his/her feelings, thoughts and ideas (Doina, 1997). All of these characteristics may not be evident in all gifted learners, but many will be demonstrated.

One style of gifted programming design is the **inclusion** model. This model meets the needs of gifted students through various methodologies in the

regular education classroom. The regular classroom teacher is usually responsible for delivering gifted instruction within this type of model. To be effective, regular education classroom teachers need time and opportunities to learn about strategies such as curriculum compacting, independent studies and mentors. In addition, employment of such strategies takes time to introduce, institutionalize, practice and reflect upon (Cashion and Sullenger, 2000). Depending on the district, a gifted resource teacher may work in collaboration with the regular education teacher. The instructional strategies evident in this approach range from curriculum compacting and content enrichment to grade acceleration. This program design will also vary from district to district and teacher to teacher depending on district funding and teacher training.

The more traditional type of gifted program is a **pull-out program,** requires students to be "pulled out" of the regular educational environment. These students typically meet with a gifted resource teacher and other identified gifted students to work with enriched content/material beyond what is provided in the regular education classroom. Teachers of gifted students should be knowledgeable about programming options and differentiated curriculum (Rash and Miller, 2000). The frequency, length of time and curriculum content in this program style depends on individual district policies and procedures. Feldhusen and Saylor as cited in Rash and Miller (2000) stated that a pull-out model emphasizing appropriate individual pacing in collaboration with

enrichment is the more favorable type of design because the pull-out design compared to the inclusion model of instruction allows teachers of gifted to focus enrichment or higher level instruction based upon the interests and needs of those identified as gifted.

Determining and evaluating the best method or approach to meeting the needs of gifted students requires a great amount of time and research. I believe that most educators involved with the education of the gifted would concur with the fact that gifted students need some type of specialized instruction. In addition, this instruction should be delivered within an environment where the student can work to his/her full potential. Students should be encouraged and have opportunities to develop methods of independent learning while acquiring flexible and "useful" knowledge (Heller, 1999).

Pull-out Programs and Content

The pullout model for gifted programs is the more traditional method used to provide services for gifted students. Geffen (1999) explains:

> The literature frequently states that students identified as gifted who receive gifted instruction are more likely to fulfill their potential as contributing members of society. They are also more likely to perform above average on standardized tests. On the other hand, those who are identified as very able, yet do not participate in gifted instruction, are less likely to experience the same results. (p. 48)

The ultimate goal of gifted programming should focus on the development of individual intellectual abilities and opportunities (Clark, as cited in

Hunsaker, 2000, p. 83). Program content for the gifted student should allow for varied rates of student acquisition, provide opportunities for student selection of program content, focus on open-ended tasks, and allow for in-depth learning experiences (Curry and Samara, as cited in Doina, 1997, p.39). It should be structured in a manner that focuses on individual competencies and interests, rather than being subject specific. Gifted programming allows educators to move beyond the "standards" and develop programs that model creativity, promote personal investigation, and are tailored to the uniqueness of the individuals participating (Renzulli, 2001). According to L.S. Vygostsky (1978), "learning is more than the acquisition of the ability to think; it is the acquisition of many specialized abilities for thinking about a variety of things" (p. 83). An effective gifted program allows educators to see and move beyond the basics by requiring students to focus on and utilize a variety of thinking skills.

High ability and/or gifted students also need opportunities to work and associate with peers of similar intellect and interests (Hanninen, 1994). When gifted students are provided with opportunities to work with peers of similar intellect on challenging content they are more likely to develop positive attitudes towards cooperative learning. These types of opportunities which are sometimes referred to as cluster grouping, provide gifted students with time to be together. Gifted students maybe more comfortable with the opportunity to

work with peers like them. They are also more likely to choose and explore more challenging tasks with students of similar intellect, ability and interest (Winebrenner and Devlin, 1996).

In addition to the intellectual or academic domains, gifted programs should also address social/emotional domains. The affective domain is found to be just as important as the "academic" domains and needs to be equally supported and validated within curriculum designs for gifted students (Matthews, 1997). As John Dewey (1938) phrased it, "basing education upon personal experiences may mean more multiplied and more intimate contacts between the mature and the immature than ever existed in the traditional schools, and consequently more, rather than less, guidance by others" (p. 21). Ignoring social pressures and anti-intellectual climates present in many schools can have a negative effect on the social and emotional well being of gifted students (Plucker, 1998).

Development of Higher Order Thinking Skills

Higher order thinking occurs when an individual takes new information and relates/extends it to complex material. Demonstration of higher order thinking occurs when students can elaborate on given material, make inferences, and construct relationships (Resnick, as cited in Lewis and Smith, 1993, p. 133).

The employment of this thinking will depend on intellectual abilities of the learner and the teaching of these skills. Students must be exposed to material

that requires much more than recall of information we provide them (Lewis & Smith, 1993). According to Paulo Freire (1993) the education of students must move beyond a banking system. In Friere's opinion, in regards to the banking system, teachers too often deposit what they want students to know instead of communicating with students and requiring much more of their true ability. Teachers need to provide students with opportunities to question, analyze, hypothesize, offer opinions with reasons, compare, contrast, synthesize, and evaluate content (Lipman, 2003). Educational systems shouldn't just make deposits, but rather investments in student learning experiences.

Another component included in the development of higher order thinking is the ability to define and redefine problems in both realistic and fantasy situations (Hoover, 1994). If teachers want to encourage insightful thinking, they need to provide students with opportunities to encounter less structured or more flexible content. Students need the luxury of defining and redefining content problems within areas of focus (Sternberg & Lubart, 2003). To allow for this, schools and programs need to emphasize different perspectives of the world, integrate subject matters rather than teach them as separate entities and units, and focus more attention on problem-solving strategies and skills (Jausovec, 1994). As Lisa Delpit (2002) phrased it, "The object is not to lower standards or just teach what is interesting to the students, but to find the students' interests and build an academic program around them" (p. 45).

Educators need to recognize various intellectual styles that are evident within all classrooms. Recognizing such styles is critical since these are the ways in which individuals choose to employ their intelligences as well as their knowledge (Sternberg & Lubart, 2003).

Not only do we need to encourage diversity and individualism with content, but we need to put a value on creative endeavors as well. Providing opportunities which allow students to solve problems creatively, independently and within groups, helps develop children's talents and is a valuable skill in respects to global economy (Plucker, 1998). Students need to realize and feel that their creative endeavors are important and valued by others. Sternberg & Lubart (2003) state that if we encourage and want students to engage with content creatively, then we need to value their attempts to do so. Schools need to reward creativity of all forms in the same manner that academic and/or athletic realms are rewarded (Sternberg & Lubart, 2003).

Additionally, to promote the use of higher order thinking, educational programming for gifted students should include, but not necessarily limited to, opportunities to explore various programs emphasizing the use of specific thinking skills. Programs such as CSMP (Comprehensive School Mathematics Program), HOTS (Higher-Order Thinking Skills), Odyssey, SAGE, and IE (Instrumental Enrichment) have been widely studied and found to be effective (Cotton, 2001).

The effects on student outcomes involving such thinking skills were found to enhance academic achievement while providing support for instruction in other specific skill areas (Cotton, 2001).

An analysis of one particular research investigation (Kelly, 1999) reveals that both males and females maintained similar perceptions of higher order thinking skills, which should not be viewed as gender specific. Also noted is the fact that the perceptions and attitudes of teachers involving inquiry and the development of higher-order thinking skills plays a key role in enhancing these skills (Kelly, 1999).

Effects of Gifted Programming

Evaluating the effects of gifted programming must be purposeful and must address whether or not the programming provided meets individual intended goals (Hunsaker, 2000). The intentions of and purpose for gifted programming needs to be evident to educators, parents, students and decision-makers. Hunsaker (2000) states that all those involved with educating the gifted need to know that gifted students are receiving a sound basic education, an excellent education and a "gifted" education. Public advocacy helps set effective and meaningful goals within gifted programs. The education of gifted students should be viewed as a service, not a label. Support from groups such as business leaders, school administrators and personnel, psychologists and community leaders have much to offer to and gain from effective gifted

programs. Kiger (1998) states that advocates of gifted programming play a vital and crucial role in programming effectiveness.

Through personal experience gained by teaching in a variety of classroom settings and environments, I have observed that the evaluation and assessment techniques used for gifted students and their performance within a particular venue are usually much different from those utilized for students within a regular education setting. Student portfolios, surveys, achievement tests, performance-based activities and questionnaires can be utilized to assess students within a gifted program. Authentic assessments that emphasize motivational factors and product critiques involving students, their peers and teachers were found to be highly effective (Fall, 1998). Most evaluations of gifted programs and their effectiveness rely heavily upon self-evaluation or student surveys. Student input can become a very critical asset when reflecting upon and determining the effects of gifted programming. Documentation will reveal students' experiences and reactions to program designs while providing insight into programming strengths and weaknesses.

In conclusion, a great deal of the literature suggests that the field of gifted education is in need of more qualitative type research. Research involving the education of gifted and/or high ability students would only improve upon and make positive changes within the field of gifted education. It would make individuals (in both the professional and public realms) more aware of the

importance of gifted education and help bring more unity with other fields within education (Sabatini, 2001). Most importantly, it would assist with providing content for gifted students who would benefit intellectually, meeting more diverse needs while preparing individuals for life long experiences.

RESEARCH METHODOLOGY

The study of higher order thinking skills within a gifted program allowed me to observe and document many of the intellectual, educational and social experiences of the participants involved. It is my belief that students within a gifted program need to utilize their ability to think at progressively higher levels. The use of this ability will ensure that the quality of their thinking continues to develop and strengthen. Throughout this study, students engaged in a variety of activities designed to employ their ability to analyze, synthesize, reason, and think inductively and deductively, while encountering curriculum content within the gifted program.

I first began the process of this research design and study by submitting my proposal to the Human Subjects Internal Review Board (HSIRB) at Moravian College. After careful review of my objectives, goals, methodology, data analysis and student safeguards, the research study was approved. I collected data from September 10, 2003 until December 18, 2003.

According to Arhar, Holly, and Kasten (2001) it is critical to obtain permission from administrators, parents, and students before beginning a teacher action research study. I obtained written permission from the school principal and the parents of students participating in the study. In addition, I also received oral permission from the students themselves. Following Arhar, Holly and Kasten's (2001) advice, I attempted to create a consent form that clearly stated my topic, the purpose of the study, including a brief description of the study and how the participants will be involved.

To ensure my trustworthiness as a researcher, I described the potential risks (which were minimal) and benefits of participation. I also provided procedures that were taken to insure anonymity and confidentiality while giving students an option to stop participating in the study without any consequences rendered. The obtainment of permission also included my contact numbers with the invitation to contact me at any time if questions about the study should arise.

All the participants in my study and their parents were notified of this research endeavor by a parent letter sent home the beginning of September in conjunction with my introduction and class discussion about the study. A copy of the parent consent letter utilized for this research is included as Appendix A. Parental permission was obtained from all six participants in the study, and data collected is documented in this action research thesis. Additionally, I personally

discussed and obtained permission from my building principal through a principal consent letter to conduct this study. A copy of the principal consent letter is included as Appendix B.

I kept a field log recording chronological notes of my observations, thoughts, and documentation involving weekly events within the classroom. A field log composed by recording notes about research observations is a critical, common data collection tool used by many action researchers (Arhar, Holly, & Kasten, 2001).

I observed and recorded (by hand) the actions and performance of my students at least twice a week. I only see my students twice a week, so I recorded participant observations just about every class period throughout the duration of the research period. A participation observation is an observation made by the researcher engaging in varying degrees with the observed persons or activity (Arhar, Holly, & Kasten, 2001).

As I would expand anecdotal notes into entries in my field log, not only did I include the play by play actions and performance of my students, but I included my interactions with them as well. I also included my personal reactions or interpretations of what I observed, offset by brackets and labeled observer comments. I numbered each line of my field log entries and maintained a large left-hand margin so that I could add reflective commentary and later codes to my log throughout the data collection process (Ely, Vinz, Downing, and Anzul,

1997). Participant observations, which became an integral part of my field log, provided me with a tremendous amount of data concerning my students and the activities in which they were engaged while in my classroom.

I administered two student surveys, the first one in October and the second one in December, to gather information from students pertaining to programming content and their individual performance. MacLean and Mohr (1999) state that, "survey data can show you the scope of your questions and tune you in to the general understandings of your students" (p. 42). Copies of both surveys utilized are included as Appendices C and D. Students anonymously completed the two surveys focused on individual profiles, intellectual abilities, interests and needs. The first survey administered was an attitude scale. This type of scale is designed to measure the strength of an attitude, opinion or underlying belief (Ahar, Holly and Kasten, 2001). The second of the two surveys, designed to be a narrative survey (MacLean and Mohr, 1999), provided me with a great amount of insight into to my students' perceptions about and involvement in the gifted pull-out program.

I informed my students about accomplishment/process portfolios and their purpose. In class I referred to these portfolios as reflective writing journals (Law, 2002). The students wrote about events such as subject and curriculum content, peer interactions, programming content and personal performance while allowing opportunities for personal reflection. I provided each participant with a journal

filled with blank, white lined paper to create a reflective writing journal that students utilized throughout the research process. Law (2002) outlines how accomplishment and process portfolios provide students with opportunities to reflect upon and write about their experiences and performance while engaging with content material. Although the manner in which I utilized accomplishment or response writing portfolios differs from the examples provided by Law (2002), the underlying intent of the portfolio was similar.

I conducted individual and group interviews in early November to gain more insight into my students' perceptions about the gifted program, mainly the utilization of higher order thinking skills. Questions used during the group and individual interviews are included as Appendix E. The interviews were informal in nature, and I attempted not to provide interpretations during the interviews as Arhar, Holly & Kasten (2001) suggest. The intent of the group interview was to ascertain student feelings about their progress performance with higher level thinking tasks within the pull-out program. This provided another opportunity for the students to express their feelings about their involvement and performance with programming content. One-on-one interviews with three of the six participants gave me an opportunity to acquire additional personal commentary. Both types of interviews explored students' perceptions of what works, what doesn't work and ideas for improvement, related to higher order thinking skills within programming content. As stated by MacLean and Mohr (1999), "students are often very helpful

and honest in interviews, if they believe you are able to listen and to, occasionally, hear a difficult message" (p. 46). Prior to conducting both the individual and group interviews, I informed the participants that I wanted them to be completely honest and open with me during these interviews. I assured them that what they said or shared with me during the interviews would only be used for research purposes and later utilized to possibly make changes within the current gifted programming design. I made sure that my students were aware of the fact that I was listening to them, no matter what they intended to share.

I collected and examined student work (drafts and final products) throughout my research endeavor focusing on the use of higher order thinking skills within the program. I collected student work in various phases (brainstorming, drafts, revised, and final products) and examined it for use of higher order thinking skills. Within these products I observed each student's ability to analyze, synthesize or evaluate content material. Students stored collected work in portfolios – both working and showcase portfolios (MacLean and Mohr, 1999). A copy of a showcase portfolio cover sheet in included as Appendix F. Showcase portfolios are established quarterly from completed projects and activities while the working portfolios are for ongoing daily use. Showcase portfolios are typically utilized for final product analysis and shared with parents during annual GIEP meetings. MacLean and Mohr (1999) express the notion that student work could possibly serve as the focal point of teacher research data.

MY STORY

Let the research begin! My question had been developed, my methods of research and analysis had been established, while my anxiety and anticipation for findings heightened. It was time to observe and document the involvement, actions and performance of students while utilizing their higher order thinking skills within the gifted pull-out program.

Setting

The participants in this research study are fifth grade identified gifted students taking part in a gifted pull-out program. The program is tailored to meet individual intellectual needs outside of the regular education environment. Eligibility for participation results from meeting the state mandated multiple criteria guidelines for gifted compiled through school and psychologist testing instruments. The length of time each participant has been involved with the program ranges from recent identification to one to five years of participation.

The current make-up of the class consists of two girls and four boys possessing varied levels of intellectual abilities, interests and needs. Students identified as gifted meet twice a week with similarly identified peers of similar intellect for forty-five minutes sessions. There are, however, often times when our schedule conflicts with regular education programs and field trips, causing us to lose some time within the program. The classroom environment of the gifted pull-out

program is typically less formal and less structured than that of the regular education classroom with class size in the gifted program averaging five to seven students per grade level. As the gifted support teacher, I provide curriculum content which incorporates individual student interests while exploring thematic units. Cooperative group activities and presentations are also heavily emphasized throughout program content. Consultation with students' regular education teachers is provided to assist classroom teachers with content adaptations within the basic curriculum. Individual annual meetings with parents and classroom teachers are also established to monitor and determine annual goals for gifted students within and outside of the gifted program.

The school that the participants attend, housing the largest population of gifted students throughout the three elementary schools in the district, is a K-5 elementary school housing kindergarten through fifth grade. Currently, thirteen of the sixteen elementary gifted students throughout the district attend this school. It should also be noted that a greater percentage of special education students identified within the district are also provided services within this school environment.

The school is located in the most rural setting within the district. Students attending this school, for the most part, stem from socially and economically affluent backgrounds. The degree of parent involvement and participation in the education of students is high in this close knit community committed to

education. The school has also recently undergone major construction renovations, providing the gifted program with a much larger classroom adjacent to the school's computer lab. Various unit/theme studies employed within the program provide the opportunity for students to integrate the use of technology, and such units almost always excite the students.

Description of Participants

I was able to compose the following participant descriptions by working with a majority of these students for the past several years. The descriptions, formulated at the onset of data collection were created through my observations and reflection upon student performance within my classroom, as well as their social and emotional interactions. The order in which the students appear are arranged chronologically as they entered the gifted program.

Kelly

Kelly has been involved with the program since she was identified as gifted during the middle to end of her first grade year. She tends to grasp complex concepts with ease and perseveres with challenging content until she is completely satisfied with her results. Kelly is inquisitive and won't hesitate to share her ideas and thoughts with her peers. She exhibits strong problem solving skills while demonstrating the ability to connect her learning to higher-level content experiences. Kelly is also very down to earth. She responds and relates well to her peers and serves as a positive role model for those around her. Kelly

always seems to recognize and bring out the best in others. Her wonderful attitude and good nature allow her to succeed in both academic and personal endeavors. Kelly's insightfulness often adds a great deal to our class environment.

Zane

Zane joined the program at the same time as Kelly. He grasps new concepts with ease and demonstrates the ability to connect basic learning skills to higher level conceptual tasks. Zane is currently placed in a one year advanced placement math program, which provides him with sixth grade math instruction from his fifth grade teacher three times a week before his official school day begins. Zane was eager to engage in this higher-level math instruction and has performed extremely well with this curriculum. Zane is not inhibited at all by his peers when it comes to expressing his feelings, thoughts and ideas. He enjoys material involving higher level content material while exhibiting intrinsic motivation to explore new areas of study. Zane often explore activities outside of class requiring the utilization of higher order thinking tasks and often requests to continue or complete assignments at home rather than during class. It's not unusual for him to bring into class a book or an activity that he has stumbled upon and desires to share with the class.

It should be noted here that Zane struggles with the notion of being wrong or unsure of a solution. If and when this occurs he gets a confused look on his face

and will respond by stating that he meant that or was just getting ready to say that. He seems to get very frustrated with himself and/or the teacher during these times. I try to emphasize with him that I don't expect him or anyone else in the class to be perfect or always have the right, correct answer. Some situations just don't require that. Zane is a polite student and quite accepted among his peers. He enjoys assisting others when appropriate, but will rarely ask (or admit) to needing assistance himself.

Roger

Roger was identified and entered the program approximately three years ago. He demonstrates his higher level thinking abilities through verbal and written tasks and typically grasps new concepts with ease. Roger seems to enjoy most activities involving mathematics and appears to be more receptive to and gravitate towards activities involving numbers. Roger will sometimes get careless with his work and may rush through it in hope of moving more quickly to the next task. His efforts don't always reflect a great deal of thought or effort. Roger tends not to be inquisitive and may hesitate to respond to situations if he is not completely sure of his answers, often allowing others to dictate group activities. While Roger is a well-liked, cooperative student, he sometimes responds to class situations with wild or somewhat silly responses.

Doug

Doug has been involved with the program for approximately two years, and I'm inclined to describe Doug as a quiet, yet confident student. Doug loves most math activities and enjoys writing poetry. He particularly enjoys playing the 24 Math Challenge game, which involves manipulating numbers mentally to equate the sum of twenty-four. Doug is preparing for the 24 Math Challenge school tournament, which takes place in April. He practices at home, in the classroom, even during car rides with his family. Doug is somewhat reserved in nature and will often hesitate to share his ideas and thoughts unless he is completely sure that his response is a correct one. The use of higher order thinking skills is not always clearly evident with Doug or within his work. His work and level of performance both orally and written are somewhat inconsistent. Doug can be diligent at times and will often extend his learning experiences outside of our class meeting times. He conducts additional research and engages in activities that augment content covered in class. Doug is cooperative and works well with his peers.

Katie

Katie was identified and entered the program approximately two years ago. She is willing to explore new areas of study while exhibiting motivation to engage in higher level content activities. Out of the six participants documented in this study, I see Katie struggle the most. Some of her language skills such as writing and spelling are weak when compared to the language skills of other identified

gifted students. She also struggles with higher-level math concepts. Katie seems to enjoy participating in the program and has made the comment several times that she wished we would meet more than only twice a week. Although Katie is quite enthusiastic and eager to explore content material during class, she rarely extends her experiences beyond class. She is involved with many extra-curricular activities outside of school. Overall, Katie is a pleasant, personable student who also works well with and responds well to those around her.

Joey

Joey entered the program at the beginning of the last school year. Joey has a great deal more ability then he sometimes lets on. He holds himself to his own high expectations and will persevere until he accomplishes his goals. Joey is also very artistic. He loves to draw and prefers to share his talents, ideas, and thoughts through this medium rather than through written expression. Whenever he is afforded the opportunity, his products always seem to reflect his ability and interest in art. Joey can be a quiet student, but he enjoys getting a chuckle out of his peers during group discussions and activities. He can also be self-critical at times, will hesitate to take credit for his abilities and often questions those abilities through verbal and written responses. Joey is polite, cooperative, and works well independently and with peers, but it should be noted that he tends to be more productive and to perform better when working independently rather than with peers.

Study Introduction

I introduced my research study by giving my students some background information about the purpose and intent of my project. I tried to share as much information I could with them about my research to the extent of their ability to understand and the nature of my inquiry.

I shared with them that their participation in the study was strictly voluntary and if they decided at any time they wanted to drop out of the research study, they could. I assured them that doing so would have no impact upon their participation in the gifted program. In addition, I shared that their identities would be masked by pseudonyms. They immediately wanted to know if they could chose their pseudonym names. Throughout this introductory process Kelly kept stating, "Yea, I know what this is all about, I did this last year." I allowed Kelly and her peers to self-select the pseudonyms that I use throughout this document. I then proceeded to share and review with them the parent consent letter that I intended to send home. I instructed them to read over the letter carefully and ask me any additional questions they may have.

After a few minutes Kelly asked, "Can I just sign my mom's signature to this letter? I know she will sign it. We did it last year." I appreciated her eagerness, but reassured her that her parents would need to sign the letter before she could become a participant in the study.

Five out of the six returned their permission slips within the week. Joey's guardian asked for a bit more clarification about what would be discussed during the group or individual interviews. I shared the questions that I intended to ask, and Joey's signed consent form arrived the next day. It was time to begin our research!

I began the next class by introducing my students to Bloom's Taxonomy. My intent for this was to make the students aware of the various levels so that they could begin to think metacognitively about their own thinking. I gave them a handout describing Bloom's Taxonomy including example activities for each level, drew a ladder on the board and labeled the various levels to serve as a visual. After I shared this sixth level Kelly immediately blurted out, "I think I have the ability to think at the evaluation level, but I don't always think there." All of the other students chimed in agreeing with her, that about 90% of their school day are spent at the knowledge and comprehension levels. I proceeded to share with them that many of the activities planned for them this year would allow them to work more at the application, analysis, synthesis, and evaluation levels. Katie immediately raised her hand and said, "Ms. Good, are you going to make it so that we think at these higher levels all day, or just when we are in here?" That was an interesting question, and I wasn't quite sure how to respond. I decided to inquire what type of thinking they preferred to do. All six once again agreed, explaining that they preferred more of the types of activities identified as

application, analysis, synthesis and evaluation. I questioned why they wouldn't prefer activities requiring them to think at the knowledge or comprehension levels, and they stated that those types of activities would to be too boring or too easy. I was intrigued by this, since they had unanimously agreed that the knowledge and comprehension-level work they experienced most of their day required them to think at these levels. The theory of Bloom's Taxonomy, now that it was familiar territory, would be referenced and utilized by participants and me throughout various upcoming activities.

We typically began every class with a warm up requiring students to employ a variety of thinking tasks. The students were already accustomed to this process and usually became immediately engaged in the activities. Some of the warm up activities were completed independently. Sometimes they were done with a partner or within small groups.

Many social interactions occurred during the warm up activity time, even when students were working independently. Often they would bring up social issues or discuss among themselves problem solving for a particular activity. Usually warm up activities were completed and reviewed during the first fifteen minutes of class. Sometimes, depending on the activity, it took a few days before solutions were reviewed. A majority of the time, warm up activities didn't get completed outside of class, and the students shared comments such as, "I had other homework to do", or "I forgot about it until this morning." After we

reviewed these activities in class, I collected the students' work with the warm up activities to record individual performance even though students didn't receive formal grades for their work within the gifted program.

One day, early in the semester as students entered the room, Zane asked if he could provide a warm up activity. I willingly accepted his eagerness and instructed the class that he had created that day's activity. Zane stood in front of the class, confident and full of excitement as he patiently waited for the class to settle down, then proudly provided instructions to complete his warm up. He added that his uncle was given this activity during a job interview. A copy of Zane's warm up activity is included as Appendix G.

As students worked to complete the warm up, Zane walked around the room to monitor their work. Doug and Joey immediately realized the trick to this activity and waited for the others to respond. Kelly stated after completing number nine that she had failed the test. Katie and Roger kept plugging away and didn't realize until the last question what this activity was all about. After everyone had his or her laughs, we discussed why they had proceeded as they had. Kelly and Katie both responded that they felt they don't listen to instructions carefully and need to be more attentive to that fact. Joey stated that he was very gullible – even though he caught on to the activity right from the beginning. We also discussed why an employer would conduct such an activity during an interview. Kelly stated that she felt they did this to see who follows directions carefully, especially

while on the job. The other students agreed with her and shared that they understood why someone would be asked to complete this type of an activity during an interview.

During the middle of October, about a week before the parent Open House, I provided the students with the opportunity to create a warm up activity of their own to share with parents during this night. I stated that they could design any type of activity they desired, whether it be a matrix, a reasoning or logic activity. It was totally up to them. I did tell them I would need it by the next day so that I could review it and prepare it for the next time I would see them, the day of Open House. Kelly and Zane both created a warm up activity to share with their peers and parents during the Open House. A copy of Kelly's warm up activity is included as Appendix H.

During the beginning of this research study, students were working on completing an activity from the previous year. They were finishing individual tasks required of them to publish a magazine. They spent a few class periods writing, editing, and publishing individual work for the magazine they called *Kid Zone*. Their first issue included many different articles reflecting students' interest. They chose their articles, brainstormed, and voted on a title, front, and back covers. As a group, they decided who would hold the editor's position, the one with the most responsibility. They began this project near the end of last year

and were determine to complete it as their first project this year. A copy of their first magazine publication is included as Appendix I.

Kelly, the editor in chief, published school news, a name game and tips on how to succeed in school. Zane created a never-ending story about stickball, funny facts, Zane Libs – a version of Mad Libs. Katie wrote an advice column and informative piece about students being overweight. Roger wrote a story about Little League Baseball, and Doug created a Park Place Poem page. Joey's contribution to the magazine reflected his interest in art with a comic brainteaser page and a word puzzle. The students were very proud and pleased with the publication of this magazine. The magazine was published and shared with parents during Open House night, with other peers in the program and was bar coded for library circulation. We took time to enjoy the magazine and share comments about each other's pieces the day after Open House. Kelly asked, "Could the class produce another issue?"

I responded, "This is a decision for the class to make." There was a unanimous vote to publish another issue. They did, however, suggest that they include the 4th grade students in the next publication, which we scheduled for print near the middle to end of March, allowing us to move on to a variety of other activities.

One activity that the students explored near mid-September was called Tower Power. This activity required students to investigate how they could build a tall freestanding structure.

The only materials students could use were index cards and a pair of scissors. Their structures had to stand freely for at least one minute before they could take a measurement. Before they began construction they were required to complete an investigator's log, which posed the investigation question to the students, and required them to indicate any questions they had and record details to explore while engaging in this activity. They also had to state their source of information and draw a sketch of their idea before construction began. I reminded the students daily that they may need to make several changes to their preliminary sketch once they began to construct their towers. I spent two class periods reviewing their logs and sketches with them before they began building their towers. I wanted to make sure they were putting forth the effort and thought before they jumped right into constructing. All the students predicted their anticipated tower heights and were afforded ample brainstorming time throughout the process of this activity. Predictions ranged from Zane's 10 inches to Kelly's three feet in height. By the end of September they were all at the construction phase of the activity. I shared with the students that they needed to inform me when they were ready to take a final measurement along with a photo of their tower. As they brainstormed and constructed their towers, I walked around the room taking notes and periodically

questioned them about their construction ideas. I allowed the students about 4 or 5 working sessions before I asked that they begin to construct a final tower allowing them to take a final measurement and photo. The students typically chose to scatter about the room to construct their towers while I played classical music in the background, as they were busy building. Preliminary height measurements for each student were periodically recorded on the board to assist with monitoring individual performance and progress.

Throughout construction sessions, I would discuss with them and listed on the board final project requirements. Each student needed to have a visual illustration, a written description, a measurement, and a photo of his or her final tower structure.

Zane started off with a bang on this activity. He was working on a second design after just a day of brainstorming and often talked to himself while constructing. He would say things like, " Let's see how tall this thing is." and "How should I do this?" Once he commented, "This building looks like the Leaning Tower of Pisa." As Zane constructed throughout this activity process he continued to make comments to himself. One day he commented aloud, to nobody in particular, " Sears Tower wasn't built in a day, neither will mine."

Zane's structures were very different than those of his peers. He would fold his cards like a tent and then stack them on top of each other, but he found that he really wasn't getting any height to his tower. Zane would take measurements of

his ideas periodically, and one time he asked if it would be ok if he couldn't sketch his idea. When I asked him what problems he was experiencing, he would often reply that he wasn't sure. One day after several attempted designs, he looked at me and said, "This is my final. How can I build onto this?" Zane's structure was approximately 17 inches tall with about 500 cards used within the base.

Before I had a chance to reply, Kelly interjected and said, " Well – redesign your building."

Zane said, " I'm not going any farther than 17 inches because that is close to what my prediction was and it will fall." He looked at his structure and stated, " Maybe I should redesign the top. I thought I should build a bigger base so that I can add some to the height." Zane then knocked down his structure.

Near the final days of this activity and after at least several attempted designs, Zane commented, " Today I built a spiral. I wish I had a lot more time in one day here. Then I could build it up." The next class day he walked over to his stack of cards and said, " I'm dumb – I don't have a level of thinking" as he stared down at his sixth crumbled design.

Joey built various structures and then checked on other students' buildings to see how they were doing. One day Joey looked at Doug's tower and asked, " Doug, may I ask you a question? What is the secret to your success?" Doug didn't respond at all to Joey's question and continued to build his tower.

Doug kept pretty much to himself, working quietly on his own creation in a remote section of the classroom. He was working on his final tower long before the other students were ready to commit to a final design. At one point Joey looked at Doug and said, " Hey Doug, your structure is taller than you." Doug took a measurement of 4ft. and 7 ½ inches that day. One day during construction, I observed Doug look at the clock and say, " Only 7 hours and 30 minutes until tonight." It was Open House night and he wanted his structure to survive so that he could share it with his parents. Doug created a sign to put in front of his tower, which read, " Don't walk fast near or too close to tower." Unfortunately, due to my own haste in leaving the room to travel to my next school that day, the slight wind from my "luggage" caused his tower to tumble. I felt terrible with no time to spare to even begin the rebuilding process. When Doug approached his structure that evening he stated, " I knew it wasn't going to stand that long." I proceeded to share with Doug the unfortunate situation that caused his tower to fall. He immediately replied, " That's OK. I will just build it up again tomorrow."

Katie and Kelly reworked and redesigned their ideas several times during construction sessions. They would sketch different designs, attempt to construct and reconstruct while providing each other with advice as they diligently built their towers. On one of Kelly's third or fourth attempts with her second design, she announced, " Ms. Good, I have a new way to measure. I'm going to measure one column and then count the columns once I'm done. What a great method."

I replied, "That is a great idea."

Kelly proceeded to measure a column of a constructed tower and it fell.

Katie moved from sketching a design to building a model and then writing a description. She tried out several different ideas and designs consisting of triangular shapes constructed from folding cards and lying them on a base of flat cards, taking a near final measurement of 1ft 9 ½ inches. After taking this measurement she turned to me and said, " Ms. Good, I raised my height by 4 ½ inches. Good for me!" Although Katie's structure wasn't the most successfully built tower, she was diligent in her endeavors and confident with her success. The smallest amount of increase in height encouraged her to continue with her efforts. I was proud of her for that and encouraged her work whenever possible while providing her with constructive criticism for improvement.

Roger worked quite differently than the other students during this activity. He was much more reserved, quiet about his tower construction and performance. Roger developed several sketch ideas at home and used his ideas for construction of his tower in class. Many times he seemed a bit preoccupied during the working sessions, wandering around the classroom conversing and observing what his peers were creating. Roger attempted three different design styles before concluding the construction of his final tower structure. His tower was labeled with a sign during Parent Open House that read, "Do not: 1. Run by, 2. Touch, 3. Measure tower."

All of the students had several designs fail, and their towers fell, but they all continued to plug away at a new one or revise a previous sketch. After the students had approximately five or six days to play with different ideas, we had a group discussion about their progress. I prompted them to think about and share orally what was frustrating or challenging them about this project. Zane explained that he couldn't figure out how to build stronger supports. When I inquired what he thought the problem was he stated, "I don't know, I just can't figure it out."

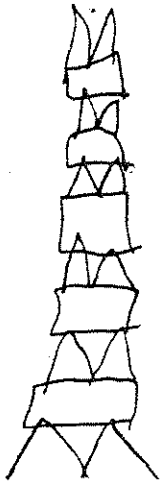
Kelly immediately put her arms up in the air swaying them back and forth and said, " Mine is like seaweed – it should be more like corral." She then stopped moving her arms and kept them straight up in the air – without movement. Kelly knew what she wanted to do; she just had to figure out how to do it. She needed to make her structure more sound, sturdier than she had been designing it.

When the Tower Power activity finally had come to an end, every student completed a Tower Power Investigator's wrap up activity along with a final measurement and photo of their final product. After I read over the questions on the wrap up activity and allowed for some further clarification, Zane stated, " I can't do this. I don't have a final design." I suggested he use one of his previous designs. He replied, " I can't. I don't remember what it looked like." While attempting to draw a sketch, he stated to himself, " I'll build one at home so I don't have to do it around people." I believe Zane was trying to say in so many

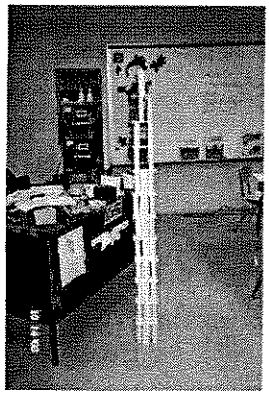
words that he lacked the confidence or skill to complete the activity and was adverse to comparison with others.

The following is a summary created from each student's wrap up activity, preliminary sketch design, final measurements and photographs of final structures.

Doug investigated how to get the tallest tower. He began by bending index cards and when that didn't work, he played with various designs until he found out how to make it taller. Doug learned that he could actually build a castle of playing cards, by bending them. His mother, after admiring his activity, approached me during Open House and shared with me that he would try this at home with index cards. A problem that he encountered was that he couldn't get the base of his tower sturdy enough for the rest of it to stand as he wanted. When asked what math skills were utilized in this activity Doug responded by stating that instead of using a ruler to measure height and risking that his tower might fall, he measured the height of one pillar, counted the number of pillars and then multiplied. Doug indicated that he would make a better base next time so the whole thing would stay sturdy. Doug seemed to enjoy the Tower Power activity and felt proud of his performance. He was able to verbalize his thoughts and produce an increasingly better product according to his own ongoing analysis of the problem.



Doug's Preliminary Sketch

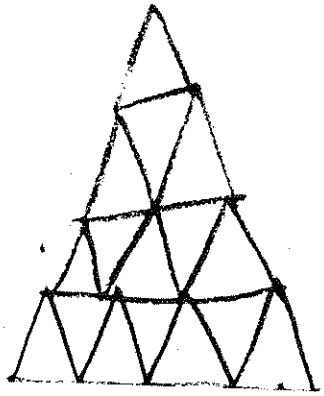


Doug's Tower

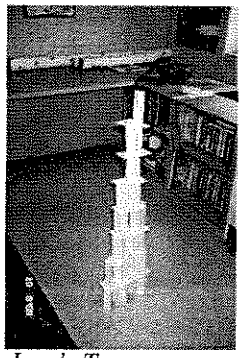
Final Height: 5 feet ½ inches

Joey investigated how to build the tallest tower possible with just index cards. He found that by stacking cards while they're folded "the hot dog way", they're taller and better able to support each other. Joey learned that stacking cards takes tactics, geometrical thinking, and determination. He learned to take a new direction by analyzing his mistakes. One problem that he encountered was needing more cards at the base of his tower to support the upper levels. He asked himself if his idea was realistic for almost every design he made. Joey regularly measured and then estimated the height. He also used geometrical ideas such as using rectangular shapes to make the tower taller and sturdier. Joey indicated that if he were to begin the project again he would try to use scissors a little more. Joey regularly brainstormed ideas, analyzed what he had done, and made

necessary changes to succeed with his endeavor. Joey had a positive outlook on this project, was able to verbalize his thoughts and analyzed his progress to improve his performance. He always encouraged others as he was constructing, while staying focused on his own tasks.



Joey's Preliminary Sketch



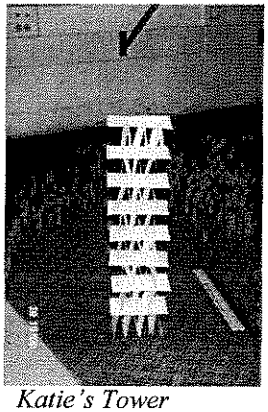
Joey's Tower

Final Height: 3 feet 7 inches

Katie investigated how to get the tallest freestanding building made only out of index cards. She remembered that she had seen a program on TV about building card towers and decided that she wanted to try something like that. Katie explained that she didn't want her structure to be like the "Leaning Tower of Pisa." She continually encountered new problems as she worked to build her tower higher. Along the way, she asked herself why her tower wouldn't stand as she wondered how tall she could make it. Katie utilized math skills throughout this project by measuring the height of her tower and using triangular shapes. She would make her tower different next time by cutting the ends of the cards and

fitting them together. Katie enjoyed the activity and was determined to succeed despite setbacks along the way. She was, at times, quiet during construction and sometimes apprehensive about changing her ideas. Katie never gave up and was pleased with even making small strides in the height of her tower.

Katie's Preliminary Sketch

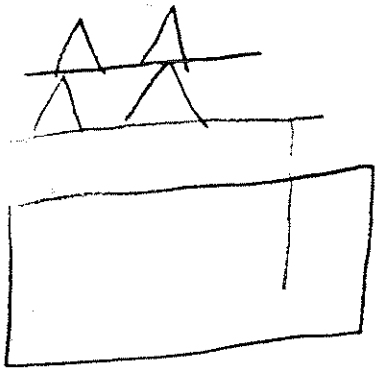


Katie's Tower

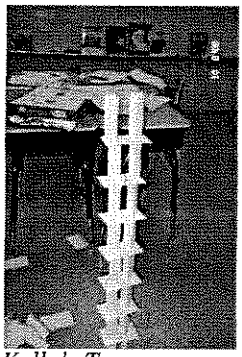
Final Height: 2 feet 3 inches

Kelly investigated how to get the tallest tower. "By the appearance of my tower you can see that it is a tall structure in my opinion." She learned through this activity that she could get very frustrated. She also learned "something that looks easy can be hard. Very." She added, " Some problems I encountered are frustration. Failing to build a sturdy structure and frustration." One way she felt she used math in this activity was by measuring each column in her tower, then multiplying this by the number of columns. When asked what she would do differently next time Kelly wrote, " I would put more thought in the whole

project." Kelly was frustrated at times, but determined to reach her goal. She would analyze her ideas and make changes if necessary. Kelly wasn't as dedicated to this project as she was with publishing the magazine. Since we were doing the magazine and tower power somewhat simultaneously, this may have distracted her or influenced her performance a bit.



Kelly's Preliminary Sketch

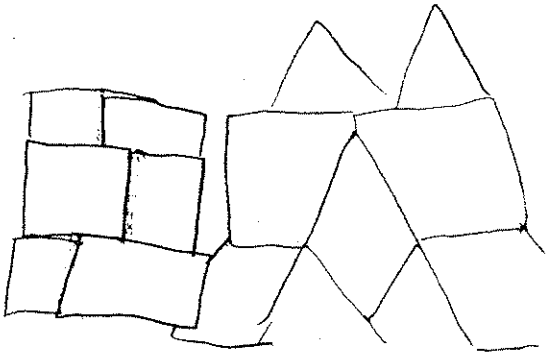


Kelly's Tower

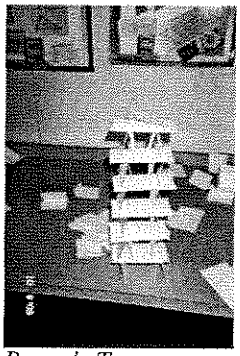
Final Height: 3 feet 7 inches

Roger's investigation involved the construct of a tower that stands for one minute. He got his final design idea from his first design. His first design had many cards at the bottom for the support. Roger learned from this activity that there are many different ways to make a tower. The only problem he felt he encountered throughout this process was that when people walked by, it fell over. Roger utilized math skills throughout this activity by measuring how tall a bent card was and then multiplying that by the number of layers he had. Next time Roger attempted this type of activity he would add more support to the bottom of

his tower. Roger was strong in the beginning of this investigation. He would build off by himself, take cards home to try different ideas, and stayed focused on his tasks during class. When Roger moved his "construction site" near the other students, he socialized more, and didn't really exhibit the enthusiasm observed in the beginning of this activity. Maybe he was bored with it or possibly didn't feel he was progressing as desired – getting the height he wanted.



Roger's Preliminary Sketch

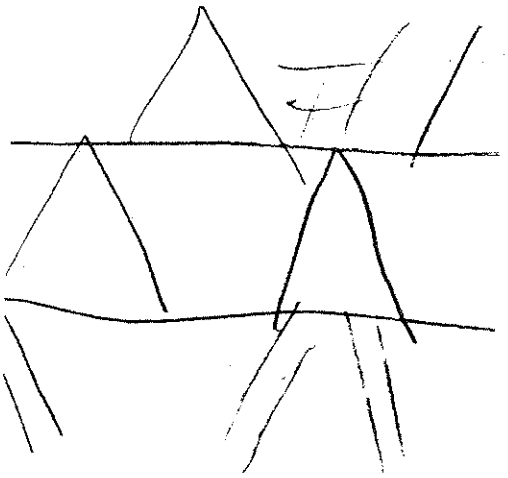


Roger's Tower

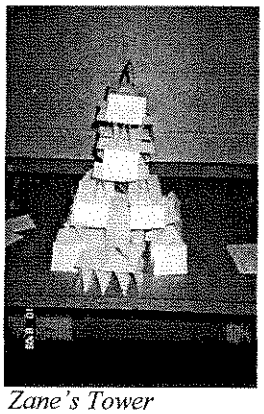
Final Height: 2 feet 5 inches

Zane's investigation (after his second attempt at writing this) was, "I investigated how to build a tower, but I can't." When asked what he learned he stated, " Nothing. Oh yeah, I'm not an architect." When asked to identify problems he encountered he said, " I can't make a tower. I don't know. I can't build a tower in this place. I can't do it with people around me." One question that came to mind for Zane was why his tower couldn't stand. The only math skill he thought he used in this process was measuring. When asked what he

would do differently next time, Zane wrote, " I won't build a tower. I'm not doing it again, so I can't build a tower." Zane never did create a structure with any real height or form to it. I just can't understand or figure out WHY he wasn't able to do this. Is he too concrete? Was this too abstract for him? Was he fearful of actually building one that didn't get as high as one of his peers' towers did? All through this process, whether it was through response journals, my inquiry, group discussions or participant observations, Zane never really addressed what the problem was or how he felt challenged with this activity. An activity that I had imagined to be somewhat of an easier, fun experience, unfortunately for Zane turned out turned out to be a challenge that he did not relish.



Zane's Preliminary Sketch



Zane's Tower

Final Height: 1 foot 7 inches

An informal discussion with my students after the completion of the Tower Power wrap-up activity led to more insight about their experience with this particular activity. I asked them during this discussion, " If you had to rate the Tower Power activity for upcoming students on a scale from one to ten, with ten being the highest rating, what would you give it?" Roger gave it a 14 stating that he liked to build stuff. Joey gave it a nine, noting that this activity got him thinking. Kelly gave it an eight and one half, stating that she liked it a lot, but it was frustrating. Zane's response to this rating was pi. When I asked him what me meant he said, " I like the number pi." When I inquired further about his response and why he gave it such a rating, he responded by stating, " I don't know."

Student reflection journals also played an integral part in our research endeavor. At first, the students were a bit apprehensive to write in them since the writing was not the hands on type of task they were accustomed to doing. Most of the time the students wrote in their response journals during class, with the exception of a few occasions when they needed to completed it at home for the next class period. The first assignment in writing journals required the students to think about what level of thinking they thought they were employing while completing that day's activity. I provided them with an example of what I was looking for and shared that I would respond back to them in their journals for the next class. Most of the time, especially in the beginning, the students were doing

a variety of activities. Some were completing their responsibilities for the magazine, while others were beginning their tasks for Tower Power. This did provide for a variety of responses during any given day, especially the first response.

In Zane's first journal he wrote that he was thinking UNDER the ladder, a reference to the Bloom's Taxonomy visual. He continued to share that he usually doesn't think that high and he sure didn't on the day he worked on "spicing up his writing pieces" for the magazine by adding graphics to his work. Joey had quite a lengthy first response. He stated that he was challenged by the day's warm up activity and was stumped by the controversy posed in the problem.
Joey felt he worked at the application level of thinking while working with content that day. He said, "I think my level of thinking for the warm up activity was at the application level because I applied this to what I would do during that situation."

As time passed and more efforts were put into constructing their towers, Zane's responses began to change. After a few attempted designs he commented that he felt he was working at the application or comprehension levels of thinking. He wrote, "My buildings have been candles in the wind. I want them to be forest fires ever growing." Zane did share that he liked the Tower Power activity but felt it was complicated. One of Joey's journal writings in relation to his performance with the Tower Power activity indicated that he had to sketch some

ideas first and then put them into practice. He stated, " Mine seemed okay at first, but eventually it capsized." Doug responded in his journal by stating that he really liked Tower Power and liked trying to find a way to keep his tower up.

After a few journal writings and responses, I shared with the students that I had posed a few new questions in response to their writings. I specifically wanted them to provide me with a bit more elaboration in their responses. Rather than just telling me they were thinking at the application or analysis levels, I wanted them to share why they believed they were thinking at a particular level.

Near the end of the Tower Power activity more personal reflections appeared in journal writings. One of Katie's writing stated, "I think I was thinking on the application level. I was building my tower and using my brain."

Joey wrote, "Today at gifted, Kelly made a matrix warm up. It was pretty easy because the clues were total give away. I have also achieved my tower power goal of 3ft. 7 in. My level of thinking was analysis because with Tower Power, I had to analyze my strengths and weaknesses and improve them. I also had to analyze the clues on the matrixes."

Zane wrote, "I was probably at the application and analysis levels. I do not know why I made a new design that would be easier to go higher. I accidentally hit it with a ruler and it fell. Go forest fire!"

Doug's reflection read, "I think my thinking level is in the synthesis because I've been doing Tower Power and just keep rebuilding my tower. I also think so

because we've been working on the magazine also. Tower Power is fun and challenging!"

On September 25th, I administered the first student survey. I explained to the students that I would be using this information as part of my research. Its purpose was to indicate to me what their feelings were about participating in the gifted program and the thinking skills they felt they utilized during their experiences in and out of the program. I also informed the students that they didn't need to indicate their names on their surveys if they didn't want to. Before they started I did share with them that I wanted them to be completely honest with me about their responses. I didn't want them to hold back or worry about what I thought – I wanted to know what they truly thought and felt. I read over each question and provided them with time to ask for clarification or additional questions. The students had no questions and completed the surveys in about 2-3 minutes time. Refer to sample student survey included as Appendix C.

Responses to this survey provided me with an abundant amount of insight concerning the participants' feelings about involvement in the program and the thinking skills utilized within and outside of the program.

All six of the participants look forward to their participating in the program. One student's response was yes with the remaining five indicating that they sometimes find the projects and assignments difficult and need to think "differently" as they attempt tasks in class. The same response was received in

regards to them feeling challenged with the activities and projects explored in class. When asked if they utilized the same thinking skills required within the program outside of class within their regular class assignments, responses varied. One student indicated no; one said sometimes; three of them said not really; and one indicated yes. In regards to the question implying that their participation in the program was important to them and their intellectual needs, four of the six students indicated yes with two responses indicating sometimes.

The next unit of study involved some writings of Edgar Allan Poe. I decided to implement this unit so that the students could explore and engage with literature elements at a much higher, more involved level of content. The exploration of writings by Edgar Allan Poe also allowed me to incorporate student acting and writing within the contents of the unit study. This unit was very different than the Tower Power activity. It was a study of literature that the students wouldn't typically explore within the regular education environment. I introduced this unit by exploring a brief biography of Poe, including his early years, growing up, becoming a professional writer, his personal life and reputation, and his final days. As we discussed the content of this biography Kelly raised her hand and said, " Poe was like me, but a little more. He pushes stuff to the limit like I do. He was gifted and clever, but I think my childhood is better than his was." I was impressed by Kelly's comparison to Poe and her ability to explore the similarities and differences between their lives.

To experience Poe's literature firsthand, we engaged in a dramatization of his "The Masque of the Red Death." After being assigned character parts and creating props to represent their character, the students presented a Readers' Theatre play. I did need to discuss with them my version of Readers' Theatre and how we would perform this piece, explaining that they would be reading their parts in front of class utilizing their props at various times to emphasize their character's actions or statements. The students utilized approximately one and a half class periods for prop making and role rehearsal.

Before we read this piece of literature together for the first time, Zane raised his hand and asked, " Can we change our voice to make it sound like the character?"

I replied, "Sure you can."

He stated, " Good, I love that."

I began to see Zane become excited about content again as he displayed a positive attitude towards his experience. Zane was very animated with his actions during the reading of this play. He had great voice inflection including physical reactions to his role. At the end of this reading I asked the students to draw what they thought the Uninvited Guest looked like. I asked them to draw their illustration according to what they read and learned about this character. While the students were drawing we further analyzed the content of this dramatized rendition of the classic Poe tale. We discussed the plot and setting of the piece as the students shared what they thought the various aspects of the

writing meant to them. When I asked the students if they enjoyed engaging in literature in this manner, all replied definitely yes. As Zane left that day he looked at me and said, " Yes I did like it that way, but I would more if I did my best."

I replied, "I thought you did very well."

He stated, "I wanted to change my voice more – Oh well!"

I asked the students to share their Uninvited Guest illustration and comment about their character interpretations. I have decided to share their work by creating a collage with a few of the students' illustrations.

As Zane finished sharing his illustration he commented, "Mine's really stupid. I can't draw what the Uninvited Guest looks like to me."

This prompted a comment from Joey, who said, "You are a brainiac, Zane. You take 6th grade math."

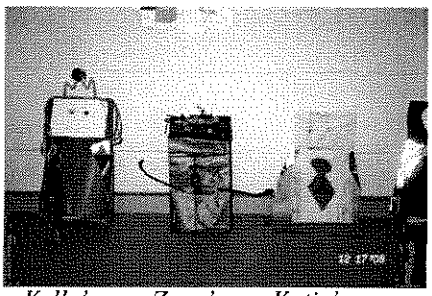
Zane looked at Joey and replied, "Well I'm not good at everything." The conversation ended. This conversation demonstrated to me the impression that others have of Zane, which are different to some degree to the impressions he has of himself. Zane was trying to say that he isn't perfect, but others tend to expect a level of perfection from him.

In order for the students to gain a better understanding of the challenges that face a writer of Poe's significance, I had them illustrate who they interpreted the uninvited guest to be. The students were provided with a creative opportunity to express what they interpreted the uninvited guest to look like and why. Some character depiction's of the uninvited guests were baggy eyes with scars, red eyes representing evil, white flesh coloring representing the living dead and a red scull to represent red death. The value of this assignment demonstrated to the students and me how we all have unique and different interpretations of the same literature.

The next piece of Poe literature we explored was a scripted adaptation of "The Purloined Letter." After discussing and interpreting what the word purloined

meant, the students decided that they wanted to do another Readers' Theatre play. Instead of making props to represent character roles, the students decided they wanted to create puppets resembling their characters. They reviewed the script, chose their own parts, and created bag puppets from art supplies in the room. As they created their character puppets, I walked around the room to observe some of their conversations and actions. At one point, Zane looked at Joey's puppet and said, "Your puppet's arms are like corral, not seaweed." Kelly proclaimed this same analogy in relation to her tower structure. This is a good example that in the gifted pull-out program, students share information without even realizing it. Included are pictures of puppets created for the reading of "The Purloined Letter."

Roger's Doug's Joey's



Kelly's Zane's Katie's

The significance of this activity was to provoke the thought process of each individual while encouraging them to show individual creative expression for each of their chosen characters. This activity was also important to allow them to just generally have some fun and for them to see that all work and no play makes

for a difficult way to learn at times. In correlation with their chosen character from "The Purloined Letter", each student was asked to create a puppet based upon their interpretation of their character roles. I was particularly impressed with the overall good time they had while adding meaning to the literature content.

Near the beginning to the middle of November, during the exploration of Poe's literature, I conducted an informal group discussion with the participants. The questions that guided our discussion are included as Appendix E. Through this discussion I wanted to learn how students' experiences with academics and social interactions vary between the regular classroom and within the pull-out program. The discussion was informal with the students forming a circle of chairs with me in the middle, in front of the classroom. Doug was absent this day, so he is not included in the summary I present here. When asked what they felt the reasons were for their participation in the pull-out program, Joey responded by stating that he wasn't challenged as much in his regular classroom and everything in the program was challenging. Roger responded by sharing that regular classes don't challenge students enough, which leads them to not pay attention and may cause them to get bad grades.

My next question asked students to share what and how things are done differently in the program than within the regular education classroom. Joey shared, " Here projects are done mostly together kind of, not independent. In our

normal class we sit there until we have to answer. In here we can speak when we want even when we are not called on."

Katie stated, "In regular class we get a book to learn from. Here you learn just as much but in a fun way by games and talking."

Kelly responded, "We are more free in here. A little more roomy, unstructured and spread out."

When I asked them what kind of thinking skills they utilized most while engaging in program content, most of the participants stated that they were required to work between the analysis and synthesis levels of thinking. Joey commented, "We learn things in our regular class and apply it here."

The second to last question asked them to share what they felt to be important about their participating in the gifted pull-out program. Roger shared that is was important to get challenged and not be bored. Zane stated, "We are learning how to think at different levels."

Kelly shared, "If we are not here to challenge ourselves, we may lose our "extraordinary" thinking – the higher level of thinking."

Katie said, "In class it's boring. I tune it out in my brain and don't learn anything. In here, I don't tune it out and I learn things."

The last question I asked was what they would change about the program. Roger and Kelly both shared that they would like to change our time together to all day rather than just 45 minutes twice a week.

Joey commented, "I think we need a little of both. The non-challenging like in our classroom and challenging things in here. Things in here let us get our brains going."

I learned a great deal from this informal group discussion. My students, through verbal expression, shared why and how their participation in the program is important to them and their intellectual needs. They shared the balance they felt between their experiences in the regular education classroom and the pull-out program. I was surprised by how honest and detailed their comments were. The students did not hesitate to share that they were bored in their classrooms and that they mostly learned from a book opposed to their learning experiences within the program. They were able to capture and express the purpose for their involvement in the gifted program. The idea that the students desired for their programming to involve more than just 45 minutes twice a day made me happy. This demonstrated to me that they really do enjoy and feel that they benefit from their experiences within the gifted pull-out program.

In the midst of all our other activities and unit studies, mid November brought the end of the first grading quarter, indicating it was time for showcase portfolios. A copy of the showcase portfolio cover sheet is included as Appendix F. Even though the students had been doing showcase portfolios for almost two years, I reviewed what they would need to pull-out of their working portfolios to include in their showcase portfolios. I reminded them of the three different categories on

the showcase cover sheet and asked that they reflect upon all the activities they had engaged in during the first quarter of the year. Chosen work could include warm up activities, Tower Power or the Poe literature unit. After making their choices and documenting their reasons, I conferenced with each of them before including their cover sheets and sample work to their showcase portfolios.

Doug chose a warm up activity called "Have Sum Fun" as his favorite piece because he found the number combination to be challenging to figure out. His greatest challenge during the first quarter was the Tower Power activity. He felt he didn't have enough support on the bottom of his tower to keep it sturdy. He didn't enjoy a warm up activity called "Dressing Logic" because he didn't understand much of what to do and found it to be too confusing.

Katie chose the "Tower Power" activity as her favorite because she found it to be fun, yet challenging. She also felt it was exciting watching everyone's tower go up. Her greatest challenge was a warm up activity called "Riddle Time," because she experienced difficulty when cracking the code. Katie stated that she really enjoyed working on the magazine because she liked typing and thinking of her own ideas.

Kelly chose a warm up activity called "The Homecoming Parade" as her favorite piece because she loves matrices and enjoyed the challenge. Kelly found the "Magic Square" activity to be her greatest challenge because she couldn't

figure it out. She didn't like reading the biography of Edgar Allan Poe because she found it boring, noting she had no use for it.

Joey chose "The Homecoming Parade" matrix warm up activity to be his favorite because he got everything on it right and found it challenging. His greatest challenge was the "Magic Square" warm up activity. Joey found this to be difficult because he had to solve it so many different ways, and he still hadn't completed it. He shared that he really did enjoy the "Riddle Time" warm up activity because he had to solve riddles and found them to be pretty easy.

Roger's favorite activity was "Tower Power". He has liked to build things since he was two years old and he has fun every time he builds something. His greatest challenge was the "Magic Square" warm up activity because it was hard for him to find the exact combinations. Roger shared that he enjoyed the Edgar Allan Poe literature because he had fun with it and he likes to be in plays.

Zane chose "The Masque of the Red Death" literature piece as his favorite activity because it was a play and he now liked acting. His greatest challenge was the "Tower Power" activity. He didn't know why this was his greatest challenge other than it was hard to build. The activity that he enjoyed working on most was the "Riddle Time" warm up activity because it was very challenging.

From the students' responses and choice of activities I learned that warm up activities played an important role, equal to the larger unit studies and projects, in their learning experiences. They were able to identify what was challenging for

them and why. Additionally, the students were also able to share what activities they felt were enjoyable and why. Individual conferences with them about their showcase portfolio selections provided additional insight and commentary about their choices.

Near the middle to end of November I conducted individual interviews with Kelly, Joey and Zane. Although all students had the opportunity to be interviewed, three of the six opted to work on their projects instead. The three students who did partake in the interviews are particularly verbal students, not hesitant or intimidated to share their thoughts or ideas when asked. I conducted the interviews informally with Kelly, Joey, and Zane as the other students worked on their individual tasks.

The first question asked the students to reflect and comment on what they felt to be positive benefits to participating in the pull-out program. Zane said, "I get challenged thinking and I don't normally have to think. It's complicated."

Joey replied, "It develops our brains well. For me, it challenges you a lot because there are things I don't know and I have to learn them. Here we get to be creative too."

Kelly stated, "I get to get away from my teacher and I get to come see you because you're nice. It is more free and you tell us what to do and we have more freedom."

I then asked the participants what they felt were drawbacks to participating in the program. Zane replied, "I miss time in my other class."

Joey stated, "I really don't think there are any."

Kelly said, "I have to makeup classwork when I get back to class. I like coming here."

The last question asked the participants to state if they prefer working independently, with a partner or in groups when completing class assignments or projects. Zane said, "It depends on what it is. When it is more challenging, I sometimes work better alone. Sometimes with someone else."

Joey replied, "I prefer to work with a partner, so I can get help."

Kelly answered, "I like to work with Katie, but I don't mind when I'm paired with the boys."

I clarified her answer by asking, "You prefer working with a partner or in a group rather than alone?"

She responded, "Yes, that is another reason I like to come here."

From these responses I was able to visualize a clearer picture of how the students feel about their participation in the program and why they feel this way. Although I wasn't surprised by their honest responses, it was quite enlightening to hear their line of reasoning. Once again, responses reflected what the students felt to be positive benefits to participating in the program, as well as negative ones. This activity helped me to reflect upon what was working and what possibly

needed to be changed within the contents of the program. Their voices communicated to me what the students saw and what they wanted and expected to continue with their encounters.

After reflecting upon the students' writing response journals, I decided that I wanted to make a few instructional changes. I felt that the students really did view the Poe literature unit to be challenging and fun, but I questioned the higher level, intellectual challenges of the unit and wondered if they needed more. I decided that in collaboration with Poe the students would explore an activity called Fold and Fly. This activity was another hands on activity, very similar to the Tower Power activity. Since my data reflected that a majority of the students enjoyed the Tower Power activity and felt challenged with various aspects of the unit, I decided to implement the Fold and Fly activity.

I introduced this activity by asking the students if any of them ever made paper airplanes. Several of the participants raised their hands. I then asked how many of them were allowed to fly that airplane in school. No hands went up. I shared that the activity they were beginning to explore required them to investigate how far they could make a paper airplane fly. I reviewed with them the project guidelines and shared that they could use any material available to construct their planes.

Once the investigation sheet was reviewed, questions began to fly. Kelly asked, "Can we take pictures of our planes in case we have to contact the Guinness Book of Records?"

I stated, "Of course you can."

Joey looked at me and asked, "How do we make a paper airplane?" Not realizing that Joey really didn't know how to make a paper airplane I said that he could design an airplane out of any paper and other common materials. He then asked, "Can I compare my ideas to a real airplane and design from that?"

I stated that he surely could.

Doug asked, "Can we do test runs with our planes so that we can alter the design?"

I replied, "That would be an excellent idea."

Kelly then asked, "Should I bring my brother's book in about airplanes and how are we going to make a runway?"

I told her that would be great if she could bring in her brother's book while I encouraged her to reference other sources for her design also. At that point I didn't think about a runway, but quickly decided that the contest would take place in the school gymnasium and runways would be created out of cones. I also encouraged the students to conduct outside research about plane designs. I encouraged them to use the Internet or reference books for construction ideas. Once all the preliminary questions had been asked, the students were directed to

complete an investigator's log sheet just like the one used in the Tower Power activity. I immediately waited for Zane's reaction to this activity and log assignment since his frustrating and negative experience with the Tower Power activity. After a few minutes he said, "I'm going to make it fly farther than the others did. I want to get in the book of world records."

The students completed their log sheets, designed plane sketches and created many variations of their ideas and designs. As the students designed, tested and redesigned planes, I walked around the room to offer advice or just to observe their work. One day during plane construction I noticed that Kelly was teaching Joey how to build a paper airplane. She was teaching him how to make the folds. Katie commented, "I'm trying to make mine like a jet."

Kelly replied, "Maybe you shouldn't make it like a jet, they have too much weight." Katie didn't recognize Kelly's comment and continued creating her design.

During the second day of construction, Joey looked at me, showed me his plane, and asked, "Ms. Good, do you think these wings will work?" He them immediately turned to Doug and asked him the same question. Without waiting for a response Joey moved to the safe flying zone to test run his plane. No luck! It plunged right into the floor! Joey commented aloud to nobody in particular, "There is no way I will be able to reverse these wing adaptations. Perhaps it needs to be more feather like. Should the wings be more stiff?" The wings of his

plane were very long and floppy in relation to the rest of his plane. He took two pieces of paper, folded them in half and used them as wings, one per side. Doug and Roger were off in the distance creating smaller, more petite plane designs. Kelly designed several planes and then resorted to Internet research. She commented while researching, "Aerodynamics, this stuff is confusing to me." While researching she would occasionally turn around to watch what the other students, particularly Doug and Roger, were designing. Zane utilized the Internet several times during class to inquire about outside paper airplane research. One day during a test flight while attempting to fly his plane Zane said, "Look out – messed up plane coming through."

Roger commented, "It came back to you."

Zane replied, "It's supposed to; it's a boomerang plane."

As a whole group, we established contest rules and posted them on the board for easy reference. While we were brainstorming the contest rules, Zane raised his hand to ask, "Are we taking an average flight distance or the best of three flights?" The students had originally established the rule that we would take an average of three flights.

Kelly interjected and stated, "Well, let's see." She proceeded to demonstrate an example problem on the board by taking the average of three fictitious flights.

Zane responded, "I think we should record the best of three flights, not an average."

The following is a list of rules established for the paper airplane contest:

Measure distance (point it comes to rest).

Plane must stay inside the runway.

Measure flight duration.

Must start behind or at the start line.

Take the best of three flights.

Only one plane per person may be used in the contest.

Unfortunately due to time constraints, scheduling conflicts, snow closings and delays, this contest, which was scheduled for mid January, was not conducted until the middle of February.

In collaboration with the Fold and Fly activity and after reading the scripted adaptation of the "The Purloined Letter," the students engaged in a writing extension activity. This instruction decision was based upon the need to incorporate some writing into content tasks while working collaboratively with peers. We had spent a lot of time with hands-on, more manipulative type activities, so I decided that I needed to incorporate some writing into an aspect of the programming content. Also, the students responded so positively to exploring literature through Readers' Theatre, I thought that they would really enjoy performing their own pieces as well. This writing task provided them with creative opportunities to share their own thoughts and ideas relating to literature explored in class.

The extension writing activity, completed in pairs, required the students to write an additional scene, a scene 8, to the adaptation of "The Purloined Letter." I encouraged them to use the literature script of "The Purloined Letter' explored in class as a reference while they created this new scene. I also informed them that I wasn't setting any limitations on their scene writing. I didn't want to limit their writing. I was more concerned with quality rather than quantity. However, I did ask that the students use the same characters, adding one or two if needed as they created their scenes. I didn't want them to get silly or off course with their writing task. The students chose their own partners and paired up just as I expected they would. Zane worked with Roger, Kelly with Katie, and Doug worked with Joey. Once again, as they worked I walked around the room to listen and inquire when needed.

Zane and Roger started brainstorming by sharing with each other their individual ideas. Soon after this the two boys moved to lying on the floor and began writing their scene. Zane pretty much took over the scene and after one class period, this pair of students was ready to conference and publish the scene.

At first, Kelly began rereading scene 7 to herself while Katie was rattling off her own ideas about their scene. Overall, this pair worked collaboratively when creating and writing the scene. They shared and considered each other's ideas and incorporated both in their final script.

Doug also began by rereading scene 7 to himself as Joey wrote down his own ideas for their scene 8. Joey began writing the scene before Doug was even ready with an idea. Joey seemed to dictate the ideas in this group and assumed the leadership role when it came to writing, conferencing and publishing the scene. Overall, the students were provided with a brainstorming session while three class periods were utilized for writing, revising and publishing scene 8.

I conferenced with all three groups at least once prior to them publishing their writing to share with their peers. At the end of the third class period, all scenes were published on the computer and then shared as a Readers' Theatre. The scene 8 scripts that the three pairs of partners created as a culminating activity to the Poe literature unit are included as published pieces by the students.

SCENE 8

Created by Kelly and Katie

Narrator- The queen is at Minister D's house accusing him of his crime.

Minister D – (opening the door) May I help you?

Queen – Yes, perhaps you can help me find out how my letter appeared in your home.

Minister D – (with envy and denial) I'm sure I don't know what you are talking about.

Queen – Then you won't mind letting my detective have a look around?

Minister D – Well, all right then.

Dupin – (Walking toward the fake letter) What's this?

Minister D – Nothing.

Dupin – Open it. (Hands letter to Minister D)

Minister D – (Hesitating) Okay then. (Opens it)

Queen – (Holds REAL letter up) Is this what you are looking for?

Minister D – Umm...

Dupin – You're under arrest, Minister D for stealing property of the queen.

SCENE EIGHT

Created by Zane and Roger

Narrator: A town meeting was called to discuss the manner of Minister D's death.

King: Minister D, you shall be sentenced to death in the dungeon.

Minister D[faking innocent]: What did I do? Why will I be arrested?

Queen: You will be arrested for blackmail and theft. Dupin shall be awarded town hero, Edgar, seize Minister D!

Narrator: Right before I could grab Minister D, Dupin suddenly fell to the ground. Minister D laughed menacingly.

King: Rush Dupin to the medical center!

Narrator: At the medical center...

Doctor: It's too late for Dupin.

Townspeople[cry, cry, whimper, cry, blow nose]: Dupin!!!!!!!!!!!!!!!!

Everybody: Noooooooo!

Prefect: Goodbye, odd friend. [To king and queen] I will gladly accept his award.

Townspeople [groaning]: Awwwww!

Narrator: Prefect accepted the award and everybody (except Dupin and Minister D) lived happily ever after.

SCENE EIGHT

Created by Joey and Doug

NARRATOR: Meanwhile, at Minster D's house, he is reading Dupin's false letter, for it is unknown to him that Dupin tricked him. Or maybe not...

MINISTER D; I can't believe that this has happened! I was so not careful! How could those fools have found it in plain sight?

NARRATOR: Looks like Dupin is in trouble! But wait! Where has Edgar gone too?

EDGAR: NOOOO! OWWOWOW!

MINISTER D: (Laughing maniacally) HAHAHAHAHA! You fool! You have paid dearly for your insolent tricks! You die here!

EDGAR: It wasn't me, it was Dupin!

NARRATOR: Minister D is gone, but hearing the bang and screams, Dupin Finds Edgar seemingly half-dead!

DUPIN: Edgaaarrr! Noooo! How can this be? I'm so sorry!

EDGAR: Stop the waterworks! I'm fine! Whoever attempted to shoot me missed, so I played dead!

DUPIN: You gave me a scare! I should turn on you!

EDGAR: Come! I think Minister D did it!

DUPIN: What? It makes perfect sense though.

NARRATOR: Dupin and Edgar rush to Minister D's house.

MINISTER D: Well, well, fool! I already got rid of your pathetic friend!

EDGAR: I wouldn't be too sure of that!

MINISTER D: But, but, but how?

EDGAR: Simple, I sidestepped!

NARRATOR: Dupin starts telling bad puns to stop Minster D attacking either one of the two friend again.

MINISTER D: I give up! Make it stop! Make it stop! Take me away!

All three scenes were shared in a Readers' Theatre format. As a group we first recapped how the adapted literature form of "The Purloined Letter" had ended. The pairs of students proceeded to reveal their scenes by reenacting their scripts. The students had a wonderful time with this experience. They laughed and

discussed the different variations of scenes. After all the scenes had been shared Zane asked if we could do this again some time. I assured him that we would.

As journal writing progressed throughout the study, students' responses involved more elaboration along with personal reflection. One of Joey's writings in mid November read, "Today, we continued our magic squares. They are very hard. We haven't even finished them. I think that my level of thinking was the knowledge level because I had to know addition and other things for the magic square warm up."

Katie's the same day read, "I think I was thinking at the application level. Finishing tower power wasn't that hard. The Edgar Allen Poe thing is exciting. It's fun to pretend to be different people. The cube warm up was extremely hard and for that I think I was thinking at the analysis level. When I would get one line to = 64 the other line won't."

Zane had quite an interesting response this day too. He wrote, " I thought at the knowledge level today. I only made a puppet, so I could not think very hard. But when I did the magic square, I thought higher. I need to tell you something Pneumono ultramicroscopic silico volcano coniosis! Phew! Lucky I got that off my chest! Bye!" I was sure to inquire about a further explanation on this journal response. Zane's response back to my question was that this word is a disease from quartz dust. He wasn't sure how he knew this. He just did and he knew

how to spell it too. That day he drew a picture of a ball on his journal and wrote on the top of it, I play baseball!

On December 18th, I administered my final data collection survey. A copy of this survey is included as Appendix D. I asked students to be as detailed and specific as they could with their responses. I gave participants about 20 minutes of class time to complete this survey, and they could opt to take it home to complete if they preferred to work on another class activity. Some of the participants chose to complete the survey during class; others decided to take it home to completed. The following piece is a pastiche summarizing individual student responses to this survey.

Pastiche: Student Final Reflections on Programming Content

The things I enjoyed working with.....

Paper Airplanes because it's fun to get ideas and then make'em.
Tower Power because it was fun trying to make a tower of index cards. It took a lot of time and practice to make it tall and steady.
Matrixes because I enjoy the challenge of trying to figure out the info. on the paper.
Plexers because I had to use things that I had learned or knew existed to solve interesting riddles. I have never gotten one all right, so I constantly push myself to try harder and think harder to solve one and get it all right.
Poe's plays because I could pretend to be another person and do a funny voice. I think we should write our own plays and act them out.
Matrixes because they are fun and challenging at the same time.

The things I felt very challenged with.....

Everything because I come here to be challenged and things are challenging too.
This and matrixes because I'm not good with surveys and I think matrixes are just hard.
Magic squares because I had to know what numbers I could use, what numbers I had used, and what numbers I should use.
Picture mysteries because they were hard to figure out since some objects were used over 300 years ago.
Paper Airplane project because it is very hard to get many things of the plan like the point, the wings, and the back fold right to let it glide far.
Magic squares because it's hard to think of one thing and then also think how it will effect in the next row.

The thinking skills I used to complete the activities and projects in class.....

I used Bloom's Taxonomy a lot. After I was done with something I would look at it.
I had to use thinking skills for the magazine project because I had to use editing and reading skills to revise my articles.
I used the analysis thinking skills because some of the activities were kind of hard.
Analysis, knowledge, comprehension, and application because I had to analyze the subject, use what I've learned to solve it, and comprehend it, and apply it to me.
I used about ½ comprehension because I averaged the levels I used. I usually was in analysis or comprehension.
I used mostly analysis and synthesis.

The things I would change about program content and activities.....

- It should be one hour each class.
- Nothing
- I would change the length because we only have 45 minutes to get things done.
- I would have us have gifted for 1 hour and 45 minutes because we need to have a little bit of both challenging stuff and not so challenging stuff to balance us out.
- I think we can write our own plan and act them out.
- We would have a 1 room schoolhouse.....yes, I'm serious!

The creation of this pastiche suggested to me that the students were honestly able to express the types of activities they enjoyed working on throughout the program and why. They were able to verbalize the reasons they enjoyed a particular activity and because it was fun, it challenged them to think in different ways or they were able to make believe being another person. During the reflection of this pastiche, I was able to determine what challenged my students within the program along with the intellectual impact it had upon them. The students were able to express the thinking skills they utilized in class by referencing the higher levels of Bloom's Taxonomy.

The most enlightening part of the pastiche for me was that I discovered what the students would change about the program and its content. What I learned from this data, was that my students truly enjoy their experiences within the program and really wouldn't change much if afforded the opportunity. The main entity they expressed the desire to change was to extend our time together beyond just our 45 minutes twice a week.

What I took from the creation of this pastiche was that my students benefit from their participation in the program in many different ways. Some changes and alterations within the program will be continuous, but what my students are experiencing currently within the program seems to be useful to them.

ANALYSIS

Arhar, Holly and Kasten (2001) define analysis as, "taking things apart" (p. 191). In an effort to triangulate and analyze my research data I utilized various techniques, providing me with multiple opportunities to interpret my data along the way.

Near the middle of my research study and data collection, I coded my field log and began to look for themes in the data. Ely (1997) shares Coffey's idea that coding is the process of assigning names or labels to the data based upon your concept of the study. I coded my log by rereading the entries and labeled various aspects of the data with titles that would stand out to me. I developed several categories from coding which allowed me to see what data I had. The coding process required me to observe and reflect upon what was continually emerging from my data. MacLean and Mohr (1999) remind us that, " teacher-researchers do not collect data for very long without stopping to reflect, analyze, and reset their sights (p. 57). Additionally, the process of coding allowed me to reflect upon the data and make changes within my study before the collection of data came to a conclusion.

After a majority of my log was coded, I then organized my codes into bins, from which theme statements emerged, providing me with further insight into my study of higher order thinking skills. Ely (1997) reports, "a theme can be defined

as a statement of meaning that runs through all or most of the pertinent data, carrying heavy emotional or factual input" (p. 206). The themes of my study summarized the pertinent data within my study.

I created memos, vignettes and pastiches reflecting participant observation, survey, interview and discussion group results. These analysis tools provided me with information about individual and group feelings involving my students' intellectual encounters and experiences throughout the gifted pull-out program.

Arhar, Holly and Kasten (2001) describe analytic memos as notes to ourselves that help us weed through the data and notice things that we did not or maybe would not have notice before. Analytic memos, created periodically through the research process, helped me make changes within my study and directed me with what I needed to do next based upon those changes. These memos served as reminders to me as to what I needed to make sure I completed or administered before the study came to a close. They guided and assisted me when my data showed me that instructional changes needed to be made within the contents of the program. Analytic memos required me to compare, question and make speculations about the data collected for my study.

Reflective memos, written as reflective pieces in response to educational theorists such as Dewey, Freire, Vygostsky and Delpit, were also created throughout the data collection process. These memos, stylistically similar to analytic memos, were created by reflecting upon various reading explored

throughout my research endeavor. Reflective memos helped me connect the philosophies of educational experts to my study. The topics of these memos documented social issues such as peer interactions, dialoguing, and the role of a teacher in an educational environment. They compared the road of progressive education to a more traditional one. They focused on the educative experiences students need to encounter for future responsibilities and success in life.

In addition to the connections that reflective memos helped me make with outside literature, they also helped me make connections with the data inside my study. I created memos about personal student dilemmas, my coding method, and the bins and themes that emerged from the coding process. The creation of the memos also required me to reflect upon and form analyzed interpretations of my participant observations and student work.

The creation of vignettes really helped summarize my collection of data in addition to revealing findings from that data. Vignettes can stand-alone or be represented as small pieces of a portrait that often fade into a larger one (Arhar, Holly and Kasten, 2001). A vignette helps provide a reader with a mental or visual picture of what occurred with the data.

Another method I used to analyze data was to explain how my students felt and reacted to study components through the creation of a pastiche. Ely (1997) states that a pastiche is a way of telling a story in a mixed form or layout emphasizing ambiguity and uncertainty. I created several pastiches throughout my study

revealing student emotions, comments or reactions to content explored throughout the research process.

Arhar, Holly and Kasten (2001) reveal that "student essays, poetry, problem-solving, work, journals, and the many types of performances that students use to demonstrate their understanding and appreciations are ways to document student learning" (p.161). The collection of student work was essential for my analysis process. Work such as daily and student created activities, journal responses, student portfolios, and project products were collected and analyzed throughout the research process for individual growth, progress and performance. As I analyzed student work produced in various venues, I looked for their ability to synthesize, hypothesize, compare, contrast, elaborate or make inferences with content material. For example, with the Tower Power activity, I examined student work in various forms, such as log sheets, journal responses and performance tasks. I reflected upon these different products to observe the students' ability to define or redefine their problems in a realistic situation.

Within response journals, I analyzed students' ability to express what levels of thinking they felt they were performing at with the different activities they encountered and why. This was an important part to the analysis of my data. After several attempts of journaling, the students got real good about communicating their performance level and provided reasons to support their ideas.

Additionally, I analyzed student work to get a better look at their intellectual accomplishments providing me opportunities to focus on students' interests while building upon their intellectual experiences within the program. For example, showcase portfolios allowed me to analyze what a particular student was struggling with, what individual students liked and why, what they felt challenged with at the same time, what products or tasks they were proud of.

Student work was also analyzed for the evidence of peer involvement and interactions. I observed and compared how students performed independently and cooperatively with peers. I examined if they preferred to work alone or with a partner, did they work well in groups, how did their performance or progress change when working independently compared to engaging with peers.

The analysis of student work, in all its different styles, allowed me to facilitate content within a gifted pull-out program that was intellectual challenging, as well as emotionally and socially valuable to those involved.

FINDINGS

MacLean and Mohr (1999) report that teacher action research requires the researcher to keep track of the teaching process and the students' reactions. It further employs the researcher to collect and analyze data, organize it into findings and then consider the implications of those findings. Organizing the data

into findings is one process; considering and acting upon the research implications is quite another.

One of the major findings revealed through the process of my research study was the fact that participation in the gifted pull-out program is meaningful and does serve a purpose for those involved. I began to see this theme emerge from my pilot study data, but this theme truly resonated within this study. This finding alone helped confirm to me that the gifted program and its contents does impact student learning in a meaningful way. The different aspects of my research study and data collection allowed me to observe and examine how students differentiated their experiences both intellectually and social within the regular education classroom and the gifted support classroom. The investigation of higher order thinking skills explored how students' sense of risk taking, dialogue, level of thinking, peer interactions, reactions and self-reflection are evident and critical components to the success of the gifted pull-out program.

When surveyed during the beginning of my study, all six of the participants in the study responded that they looked forward to their participation in the gifted program. A majority of them felt that the content encountered within the program was difficult or challenging for them. Four out of the six participants surveyed felt that participating in the program was important to them and their intellectual needs. The results of this survey conveyed to me that the students, as a whole,

look forward to participating in a program that challenges their intellectual needs by requiring them to perform at varying levels, utilizing higher level skills.

Unfortunately, the survey results indicated that the skills utilized within the program are rarely recalled or carried over into the regular education environment. This was disheartening and left me with some concerns. How can this be changed? Don't gifted or bright students deserve more from their educational experiences? Shouldn't the needs of gifted students be considered and met just as the needs of less ability students are met? One major concern I have is the fact that gifted students not be viewed as gifted just within the confines of the gifted classroom. They are not gifted just 45 minutes, twice a week. Their skills need to be utilized while their intellectual needs are being met throughout the course of the school day. The finding that students don't feel challenged outside of the gifted pull-out program is a negative aspect to the current programming design.

On a more positive note, findings from my study revealed many benefits to participating in such a program that addresses the varied levels of needs and interests among those involved. The current programming style involves a large percent of class content as the teacher being the facilitator of experiences with students working on their own, with a partner or in groups. Not a great deal of lecture is involved in the class structure. This type of environment allows for more individualism and flexibility when addressing the intellectual, social and

emotional needs of gifted students. In opposition to the banking concept of education, requiring students to be depositories and the teacher to be depositors as stated by Freire (1970), the current design of the gifted program doesn't make deposits, but rather investments in students' learning experiences. A typical day was not always so typical within the pull-out program, especially in comparison to the content and structure of a regular education classroom. The study of higher order thinking skills documented and analyzed how students reacted, discussed and performed with content far beyond the banking concept of education.

For the most part, each class period began with a warm up activity that employed and challenged students' higher order thinking skills in various ways. Different activities required the employment of skills such as deductive and inductive reasoning, critical thinking, problem solving, analytical and problem solving tasks. The implementation and consistency of these activities kept the students thinking and often influenced them to create warm up activities of their own. For example, Zane and Kelly both created warm up activities of their own accord.

Although warm up activities are a great tool to use to get the students started, they didn't really explore or extend these assignments outside of the allotted class time. I often encouraged them to explore or continue warm up activities when they had some free time within the regular education classroom or at home, but students often commented that they didn't have the time to pursue these activities

outside of our class. They were often inundated with other school assignments or extra curricular responsibilities. This realization made me rethink the use of warm up activities in a sense that they needed to be short activities, realistically completed during class.

After the warm up activity, most class periods began with me informing or reviewing with the students our goals for the day. Typically, once the students got started on daily tasks, not much teacher redirection was observed or needed while the students were engaging in programming content. The students were fairly independent when it came to staying on task and focused on the intent of the goals for a particular day. Although many outside regular education responsibilities or schedules interfered with class time, students were interested in and preferred to engage in content requiring them to work at higher levels of thinking. This content was specifically more inviting to them when it involved hands-on type activities or tasks.

At the beginning of every year, I require all my students to provide me with input about their personal interests and talents. This input is critical to the design of the gifted program and the content explored. Implementing areas of curriculum content that my students have interest in while interacting with material that facilitated and challenged their intellectual abilities contributed greatly to the students' progress and success within the program. This idea is consistent with what Delpit (2002) states when she says that, "The object is not to

lower standards or just teach what is interesting to the students, but to find the students' interests and build an academic program around them" (p. 45). The input received from my students at the beginning of the year greatly influenced and changed what I had planned for and outlined the curriculum to cover.

One activity that became particularly important to the students this year was the publication of their class magazine. Although Kelly, the editor and chief, seemed to run the ship and keep the boat afloat, the other students exhibited a great sense of dedication and pride when it came to this project. I have to admit, they were far more dedicated to the completion and publication of this project than I was. They started this project near the end of last year and I had outlined other plans and activities for this year. This wasn't a project that I had planned to explore, especially since I wanted to gather data about their participation in other types of activities. I just wasn't sure how this particular activity would demonstrate the use of higher order thinking skills, but I now realize it did.

What I discovered through this project and the analysis of my data was the fact that writing the class magazine gave the students ownership to an experience within the gifted program. They established a sense of value and pride that truly impressed me. The creation and publication of the magazine provided the students with opportunities to express their individual interests and talents within their writing tasks. Vygotsky (1978) confirms this finding by stating, "Writing must be relevant to life – in the same way that we require a relevant arithmetic.

Writing should be meaningful for children, …an intrinsic need should be aroused in them, and…writing should be incorporated into a task that is necessary and relevant for life" (p. 118). With other activities and projects that involved writing, they always asked how long the response needed to be or proposed that they do something other than writing. This writing activity turned out to be quite different. Not only did the publication of this magazine provide my students with a voice in their learning experiences, but additionally connected this activity to relevant issues and interests within their lives.

The students chose their writing tasks and assignments for the magazine, not me. They created and developed the layout for their magazine, not me. Upon their request and mostly Kelly's efforts, the first publication of their magazine was bar coded and submitted for school library circulation. They are currently working on pieces for a second publication during the middle to end of March and have plans to publish at least three editions of *Kid Zone* by the end of this year.

Of course, another important activity within our curriculum, was the Tower Power project. I initially wasn't planning to incorporate this activity into the programming content this year either. I didn't initially see the importance of this activity, and I felt it required too much of our class time to complete. I came to realize that working through this activity requires the utilization of higher order thinking skills and tasks. Once again, the input received from my students at the beginning of the year helped to change my mind. The students couldn't wait to

explore this activity that they saw my fifth grade students working on last year. The Tower Power activity and all its facets helped me to capture an insight into my students' thinking and their own learning experiences. Through the implementation of this project, I was able to see how an activity like this allowed me to really incorporate my students' interests into curriculum exploration while meeting and challenging their intellectual needs.

An activity involving the building of towers using index cards, one which I perceived from the beginning to be rather simple but creative by design, was much more complex and at times frustrating, in many cases successful and in some not so successful. I found this to be especially true with Zane, a student who is often viewed by others, peers and familiar adults, as knowing it all. Zane is gifted in many areas. He is the only student at his grade level, in addition to the six participants, who is advanced placed one year for math. Zane does well in all academic areas; he is verbally expressive and doesn't hesitate to question an opinion or idea if he feels it is incorrect. He is a student who is always eager to share his talents with others, but he is not always without hesitation or doubt. Zane typically needs to be right and doesn't like to admit when he is wrong. He can be self critical, which became quite apparent throughout the exploration of the Tower Power activity. He had high hopes and goals in the beginning, but never quite obtained his desired results or performance.

This particular vignette, created from my observations and data collection pieces, portrays Zane's personality and attitude about himself and his intellectual abilities.

Zane Vignette

Zane the Brain!!!

My name is Zane, although I'm often called the "Brain".

You see, I'm what they called gifted.

I have been for quite a few years now.

Everyone knows I'm this way.

I always seem to have the right answer, but if not, it usually isn't my fault.

In school, I even go to a special class.

If I don't do as well on a project, like some of my friends – it's because I'm too distracted or bothered by them around me.

You see, I believe they are always looking at me for the answers.

This interferes with what I can or am expected to do.

You know – because I'm gifted.

You see, we are all "gifted" in this special class.

But – I'm the "giftedest" one of all – my friends in class think that too! I even take a different math class than they do!

Look – I can spell Pneumonoultramicroscope-silicovolcanoconiosis! Can you?

You see, everyone "thinks" I should have all the answers because I'm gifted. Everyone that is, but me!

When you are gifted like me, shouldn't you be good at EVERYTHING you do?

Like creating and building a tower, or illustrating a character from a play?

What about solving hard problems or finding a solution before anyone is the class?

Shouldn't you be good at all of those things when you are gifted?

What would my teacher and friends think if I weren't good at ALL those things?

You see, I'm gifted and really need others to always see that too!

Zane, like most gifted students, can be gifted in many different domains and intellectual areas, but does not necessarily excel at everything he does. This was an important realization that my data has revealed. I still don't know why Zane encountered such difficulty with the Tower Power activity or felt so little success with his performance. No matter how I tried to explore, investigate or help Zane through this dilemma, I just couldn't get to the bottom of it. I don't believe he could either. I spent a lot of data collection time and energy trying to figure out what Zane's problem was and how his peers or I could help him. It was not until I had to document my findings that I was able to reaffirm one major fact.

Possibly, Zane wasn't as confused with this project as I thought he was. Maybe he felt that others around him, including myself, were uncertain about his performance with this activity.

I learned a great deal from Zane's frustration and failed accomplishments. Dewey (1938) reveals, " The educator by the very nature of his work is obliged to see his present work in terms of what it accomplishes, or fails to accomplish, for a future whose objects are linked with those of the present" (p. 76). My study required me to document, analyze and continually reflect upon my practice which enabled me to employ practices that allowed my students to connect to their learning experiences within the classroom to life experiences beyond the classroom. Zane may never grow up to be an architect or engineer, but I'm confident that his experiences with this activity will make a positive influence on some aspect of his life beyond the classroom. Zane's experience also revealed the fact that as good educators, we need to provide our students with experiences that are linked to their past, present and future if we truly want to accomplish our goal as an educator. In support of Geffen (1999), gifted literature states that identified gifted students receiving gifted instruction are more likely to fulfill their potential as individuals and become contributing members to society than those that don't receive gifted instruction. The experiences my students encounter with the gifted program may not always be successful ones, but life long learning ones in the making.

My data reminded me that gifted students are not perfect. They can't do everything; nor should they be expected to do so. Many of the students while engaging in this activity grappled with both failure and success, developing a sense of accomplishment during this hands-on activity. Zane didn't personally feel successful in his endeavors, even with encouragement and observed accomplishments. Despite his efforts, even though Zane did not accomplish the goal established by this exercise, the result of his efforts proved that with every goal we may not necessarily reach the level to which we aspire; never the less, we reach a level above where we thought we could go. Additionally, I believe this challenge was good for Zane because he was challenged in ways that he may have never been challenged before. It is not uncommon for a gifted student to breeze through academic or intellectual encounters and it is critical that gifted programs provide a variety of challenging activities. Gifted students need these challenges if they are going to experience success and failure with real life encounters.

The use of student reflective response journals also provided me with a great deal of insight about my students and their involvement in the program. The students were able to reflect upon and write about their metacognitive thinking and performance for a specified period of time, as well as personal and social issues. On average, student responses usually reflected that they were thinking or interacting with program content at the application, analysis or synthesis levels of Bloom's cognitive taxonomy. They referred to a lot of the programming content

and activities explored in class as fun. This alarmed me at first, because I wondered how content employing the utilization of higher order thinking skills could be so fun. Shouldn't this be harder for them? I soon realized that, to my students, more challenging, difficult tasks were fun, and this was a good thing.

Response journals also served as a positive means of dialogue with my students. They provided me with opportunities to react and respond to individual thoughts and written reflections. After the students and I documented a response, it was not uncommon for a conversation to result. For example, one day after reflecting and responding to their thought processes and encounters with the Tower Power activity, a discussion ensued about their written reactions. As I passed back all response journals with my comments or questions to them included, students immediately began to read through their journals and a group discussion was generated. The students began to create and share aloud analogies making comparisons with their responses documented in the journals. Zane and Kelly's comments during one particular group discussion really stood out to me. The conversation, which took place during the middle of the Tower Power activity and seemed to take place just between the two of them, focused on their individual performance with the Tower Power project. The conversation went as follows:

Kelly: Mine is like seaweed, it should be more like corral.

Zane: My buildings have been candles in the wind. I want them to be

> forest fires ever growing. Sears Tower wasn't built in a day, neither will mine. I built a spiral. I wish I had a lot more time in one day here. Then I could build it up.

Although I did find response journals to be quite helpful when it came to gathering insight into what my students were thinking, I also observed that students were more expressive verbally rather than through written expression.

Because participants had a great voice throughout this study, it was an easy finding to conclude that the students had rewarding experiences in the program on both social and emotional levels. Whether that voice was in the exploration of curriculum content, dialogue experiences or social issue encounters, they had a lot to say. Dewey (1938) believed that, "enforced quiet and acquiescence prevent pupils from disclosing their real natures" (p. 62). I would have to say that a major component of our classroom involved the interaction and dialoguing between the students and me. We talked all the time about everything. I agree with Freire's belief (1970) that, "Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication, and without communication there can be no true education" (pgs. 92-93). For my students to think, act and produce critically, they needed to communicate. The act of higher order, creative and critical thinking would not have occurred without the evidence of dialogue within my classroom. My students explored, inquired and justified their ideas through the use of dialogue.

My study required me to listen carefully to the many stories my students created through dialogue.

From my research and data analysis I learned how to listen and talk more with my students. Not only did my students interact with me and each other about intellectual issues, but with personal and social ones as well. Dewey (1938) stated, "The principle that development of experience comes about through interaction means that education is essentially a social process" (p. 58). Within the gifted program we have formed a community group. My study has demonstrated to me that my students seem to wear a different hat when interacting within the program. Social interactions are both employed and focused on throughout the programming design. My students are afforded opportunities to speak freely about intellectual content and encounters, social and emotional issues. It is through these discussions that higher order thinking skills are utilized. Friere (1970) states, " The investigation of thematics involves the investigation of the people's thinking – thinking which occurs only in and among people together seeking out reality" (p. 108). I found that my study, evident in the data collected through participant observations, group discussions or survey responses, revealed that peer interactions among individuals with similar interests, talents and abilities is a critical component to educational growth and life long learning experiences. This finding, to me, makes the design of the gifted pull-out

program and all its content, imperative to the successful education of the gifted student.

THE CYCLE OF ACTION RESEARCH

The existence of teacher action research is critical to the growth and learning experiences of students and teachers alike. As stated by Arhar, Holly and Kasten (2001), "Action research implies an orientation to research, a form of professional practice, a research process, and, for teachers, a reflective way of teaching" (p.15). I have explored the process of teacher reflection with all its benefits through my study of higher order thinking skills within a gifted program. I was able to formulate and explore a topic that directly involved my students and my teaching practice, not a textbook or curriculum guide topic. The benefits of my action research endeavor provided me with a great amount of insight about my students, my teaching and myself. Where do I go from here?

First and foremost, I believe I haven't quite finished this research endeavor just yet. To do that, I need to further extend what I have observed, documented and learned through this experience with those involved with the education of gifted students. One major, yet simple way I plan to carry on this cycle is through informal conversations with administrators, colleagues, parents and students. As stated by, MacLean and Mohr (1999), "When you explain teacher research to

others, it helps you clarify it yourself. Even if they don't want to do teacher research or worry about its value, they will see its usefulness for you" (p. 155). Not only do I see how my action research has contributed to my students and me, but I'm hopeful that it will contribute even in a small way to others outside our gifted classroom environment.

I often struggle with the solitary environment of gifted education within the vast world of our educational systems. Research is somewhat limited in this field, as well as, all too often, the appropriate resources available to provided gifted students with the educational experiences to which they are entitled. My study has proven to me that I need to continue doing all I can to make changes within the realm of gifted education. I hope to discover more about this world of gifted myself. Since I constantly struggle with various aspects of the current design of the program, I can't stop now not if I want to improve upon my teaching practices and the learning experiences of those involved.

After exploring this action research endeavor at the elementary level, I feel fairly confident that the students engaging with the program during the primary ages are experiencing and benefiting from an effective gifted program. The students practically knock down the door to begin their day in the classroom. However, I'm not so confident of the current design at the middle school level. In addition to the typical hormonal changes that come with students of that age, I feel that there are programming glitches that need to be addressed.

One major component lacking in the middle school is a lack of motivation, especially in the upper middle school levels. Incorporating an effective component into the middle school programming may be just what I need to further explore. Johnson (2000) expresses that gifted students need to be motivated. Without motivation, students are less likely to participate or become involved in their school. The constant need for motivation is not only visible within the pull-out program, but within the regular education environment as well. Occasionally, teachers of my middle school students will approach me complaining that one or a few of my students lack motivation or effort within their classrooms and are not living up to their potential. My next focus of research needs to investigate how I can assist classroom teachers with making curriculum content engaging and meaningful to the gifted student. I need to explore and share ways in which the school environment creates an atmosphere of realistic excellence and meaningful accomplishments, not one that requires perfection. I need to look at ways in which classroom teachers and I can capture not only my students', but all students' attention so that the content they explore and encounter is meaningful and relevant to their lives.

More focus emphasizing the affective domain within the gifted pull-out program at the elementary level is also an area that I intend to explore within my next cycle of research. Recent research suggests that when addressing the needs of students, the concept of emotional intelligence should be viewed as important

as cognitive intelligence (Johnson, 2000). I believe this idea and its suggestions resonated with many of the participants within my study, especially Zane. In collaboration with facilitating a gifted program that addresses and meets the intellectual needs of my students, I also need to incorporate components that provide students with opportunities to become more involved with their own social and emotional needs. I need to inquire about and implement more specialized instruction that enhances students' self-concepts along with recognizing individual growth and accomplishments. I don't want my students to get lost in the intellectual world that a gifted student often needs to live in. I need to continue to look at programming more through their eyes and feelings. One way to continue to facilitate this process would be to incorporate more effective strategies and goals within their gifted individualized educational plans. These types of goals, designed for implementation with a gifted pull-out program as well as within a regular education classroom would provide students with the social and emotional components influencing their educational and life learning experiences.

As I reflect upon what I have learned from my study of higher order thinking skills within a gifted pull-out program, I can't help but view the changes that have already occurred within my students and me.

As I learn more about my students and what they need, not only intellectually, but emotionally and socially as well, I will come even closer to providing what my students desire and strive for as learning individuals.

As my students and I travel down our respective paths of education, I will continue to strive to understand how important they are to my continual growth as a teacher, and how vital we are to each others' success.

This will continue to be not only my gift to them, but their gift to me as well.

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Appendix A
Parent Consent Form

September 17, 2003

Dear Parents,

During the 2003-2004 school year, I will be completing courses towards a Master's degree in Curriculum and Instruction at Moravian College. The courses I take require me to observe and analyze my current teaching methods while attempting to provide the best learning experience for your child.

One of the requirements of Moravian's program is that I conduct a systematic study of my own teaching practices. My research study (September – December 2003) will focus on the effects of gifted pull-out programming with relationship to students' higher order thinking skills. Higher order thinking occurs when students can elaborate on given material, make inferences, construct relationships, analyze, hypothesize, compare, contrast, synthesize and evaluate content. All students within the program engage in activities/content requiring the utilization of higher order thinking skills that are critical to gifted programming and needed to challenge and enhance each student's intellectual abilities.

Through this research study I hope to better understand the effects of gifted programming. I will begin my study by administering an evaluation tool that summarizes students' intellectual abilities, academic skills, creativity, leadership and artistic talents. The progression of my study will involve student surveys, interviews, discussion groups, the collection of student products and portfolios. I will be observing and reflecting upon these instruments throughout my research endeavor. This data will help me analyze current program content and the impact it has on developing/enhancing students' higher order thinking skills. It will also assist me with developing more effective specially designed instruction plans for all students involved in the gifted program.

All students in the gifted program will be involved with curriculum requiring the employment of higher order thinking skills as part of the regular gifted programming design. However, participation in this study is entirely voluntary and will not affect your child's gifted programming eligibility in any way. In no way will participation, non-participation, or withdrawal during this study have any influence on any aspect of the class. Your child may choose to withdraw from the study at any time. If your child is withdrawn from the study, I will not use any information pertaining to your child in the write up of my research report.

All of the participants' names will be kept confidential and minor details of students' work may be altered to ensure confidentiality. Neither your child's name, nor the name of any student, faculty member, or cooperating institution will appear in any written report or publication of this study and/or its findings. All research materials and related documents will be secured in a locked cabinet and shredded at the conclusion of this study.

If you have any questions about my in-class project, or if you would like to make any suggestions or comments concerning this study, please contact me at (school phone number) or e-mail me at (e-mail address). My faculty sponsor is Dr. Joseph Shosh, Education Department, Moravian College, (phone number)or e-mail at(e-mail address).

If this meets your approval, please sign and return the bottom portion of this letter at your convenience. Thank you in advance for your help and assistance.

Sincerely,

Michele Good
Gifted Support Teacher

I attest that I am the student's legally authorized representative and that I read and understand this consent form, and received a copy.

Parent/Guardian Signature_____ Date_____

Student's name _____

Appendix B
Principal Consent Form

September 11, 2003

Dear (principal's name),

During the 2003-2004 school year, I will be completing courses towards a Master's degree in Curriculum and Instruction at Moravian College. The courses I take will require me to observe and analyze my current teaching methods while attempting to provide the best learning experiences for my students.

One of the requirements of Moravian's program is that I conduct a systematic study of my own teaching practices. My research study (September – December 2003) will focus on the effects of gifted pull-out programming with relationship to students' higher order thinking skills. Higher order thinking occurs when students can elaborate on given material, make inferences, construct relationships, analyze, hypothesize, compare, contrast, synthesize and evaluate content. All students within the program engage in activities/content requiring the utilization of higher order thinking skills that are critical to gifted programming and needed to challenge and enhance each student's intellectual abilities.

Through this research study I hope to better understand the effects of gifted programming. I will begin my study by administering an evaluation tool that summarizes students' intellectual abilities, academic skills, creativity, leadership and artistic talents. The progression of my study will involve student surveys, interviews, discussion groups, the collection of student products and portfolios. I will be observing and reflecting upon these instruments throughout my research endeavor. This data will help me analyze current program content and the impact it has on developing/enhancing students' higher order thinking skills. It will also assist me with developing more effective specially designed instruction plans for all students involved in the gifted program.

All students in the gifted program will be involved with curriculum requiring the employment of higher order thinking skills as part of the regular gifted programming design. However, participation in this study is entirely voluntary and will not affect students' gifted programming eligibility in any way. In no way will participation, non-participation, or withdrawal during this study have any influence on any aspect of the class. Students may choose to withdraw from the study at any time. If a student is withdrawn from the study, I will not use any information pertaining to the student in the write up of my research report.

All of the participants' names will be kept confidential and minor details of students' work may be altered to ensure confidentiality. Neither students' names, nor the name of any faculty member, or cooperating institution will appear in any written report or publication of this study and/or its findings. All research materials and related documents will be secured in a locked cabinet and shredded at the conclusion of this study.

If you have any questions about my in-class project, or if you would like to make any suggestions or comments concerning this study, please contact me at (school phone number) or e-mail me at (e-mail address). My faculty sponsor is Dr. Joseph Shosh, Education Department, Moravian College, (610) 861 – 1482 or e-mail at jshosh@moravian.edu. If this meets your approval, please sign and return the bottom portion of this letter at your convenience. Thank you in advance for your guidance and assistance.

Sincerely,
Michele Good
Gifted Support Teacher

I understand that Michele Good will be conducting a qualitative action research study involving the effects of higher order thinking skills within the gifted pull-out program. I have read the above information and give consent to conduct this study.

Principal Signature_____ Date_____

Appendix C

STUDENT SURVEY

1. **I look forward to participating in the gifted program.**

   Yes Sometimes Not really No

2. **I find the projects/assignments difficult.**

   Yes Sometimes Not really No

3. **I need to think "differently" as I attempt things in class.**

   Yes Sometimes Not really No

4. **I feel challenged with the activities/projects/research explored during class.**

   Yes Sometimes Not really No

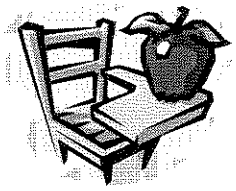
5. **I use the thinking skills used in class also in my regular class work assignments.**

   Yes Sometimes Not really No

6. **Participating in the program is important to me and my intellectual needs.**

   Yes Sometimes Not really No

Appendix D



Student Survey

Directions: Please complete the following questions by reflecting on activities/projects explored during the past several months. Be as detailed and specific as you can.

1. I really enjoyed working with/on_____because
   _____
   _____
   _____

2. I used the following thinking skills to complete various activities/assignments/projects:
   _____
   _____
   _____

3. I felt very challenged with _____ because
   _____
   _____
   _____

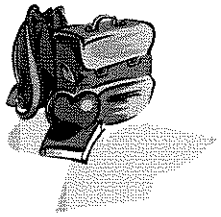
4. Things I would change about program content and/or activities would be (explain)
   _____
   _____
   _____

Appendix E

Proposed Interview/Discussion Questions

- What do you feel the reasons are for participation in the pull-out program?
- What kinds of things are done **differently** in the program than within the regular education classroom?
- What kind of thinking skills do you feel you use most while working with program content?
  (Knowledge and use of Bloom's taxonomy of cognitive skills will be evident.)
- Describe some program activities that require you to utilize your "analysis" skills.
  (Activities that required you to analyze, compare, contrast, investigate, identify, explain, hypothesis or advertise.)
- Describe some program activities that require you to utilize your "synthesis" skills.
  (Activities that required you to create, invent, compose, predict, plan, construct, design, imagine, improve, propose, devise or formulate.)
- Describe some program activities that require you to utilize your "evaluation" skills.
  (Activities that required you to judge, select, choose, decide, justify, debate, argue, discuss, recommend or determine.)
- What do you feel is important about participating in the pull-out program?
- What would you change about the program?
- What do you feel are the positive benefits to participating in the pull-out program?
- What do you feel are the negative benefits to participating in the program?
- Do you prefer to work independently, with a partner or in groups when completing class assignments/projects?

Appendix F



STUDENT PORTFOLIO REFLECTION

Title of Activity

_____1. This piece shows I really understand the content because…

Title of Activity

_____2. I enjoyed working on this piece (activity) the **most** because…

Title of Activity

_____3. I enjoyed working on this piece (activity) the **least** because…

Appendix H

Zane's Warm Up Activities

1. Read all instructions carefully.
2. Read the whole test before starting.
3. Write your name on the top right hand corner of this paper.
4. Draw a pig on the top left hand corner of this paper.
5. Write "A. K. A. Spongebob" underneath your name.
6. Write the words "I'm security!" in the top center of the paper.
7. Write the numbers 1-6 on the paper and also write 11.
8. Flip the paper and multiply 3444 times 7777 on the back.
9. Draw a dollar bill on the back of this sheet.
10. Write your name backwards in the space below and write " Happy Birthday" before it.
11. Draw a face on the back of this sheet.
12. Do not go past Question # 3.

Find a state in each sentence below.

1. "I thought about that exasperating question for hours," said John.
2. "If you connect I c-u-t you get I cut!" said the youngest child.
3. "Why is the iron ore gone?" asked the other one.
4. "Al, ask a counselor if you need help," said Luke.
5. "This cream is sour, I think!" said the chef.
6. Mary did a hobby demonstration at our school.
7. I find a lab amazing.
8. "Why is Emma in every act?" asked the ringmaster.
9. We studied over months' worth of lessons in one day.
10. "Oh, I owe you five bucks!" I said.

Appendix H

Kelly's Warm Up Activity

Gone Camping

Bob, Jen, Rob, Jess, and Kim are going on a family trip. Use the clues to figure out if they are the "mother," "daughter," "father," "*eldest daughter*," or "the son." Also find out the most important thing they brought. There are 6 clues to help you. GOOD LUCK!

1. Kim loves her stuffed animal and big sis!
2. Bob is the father.
3. Jen got her brother a tent for his birthday.
4. Jen is always hungry.
5. Jess will not get lost.
6. Jess loves her husband and family a lot!

	Mother	Father	Sister	Eldest Sister	Brother	Map	Food	Tent	Water	Teddy
Bob										
Rob										
Jen										
Jess										
Kim										

B y s

Appendix I

Class Magazine

School News

As you know our school has news too! Things like testing, field trips, PTA meetings, bookfairs, fundraisers and the construction are good examples of school news. Inch by inch the construction gets further along. We know the 4th graders are pumped up about instrumental lessons too.

How To.....

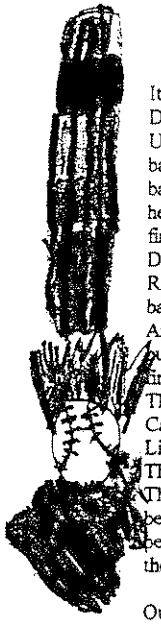
Succeed in School

1. **ALWAYS study!**
2. **Get all your necessary sleep.**
3. **Complete all your homework and maybe some extra credit too.**
4. **Pay attention.**
5. **Be prepared for all your classes.**
6. **Be respectful to your teacher. This would help with your people skills too.**
7. **Always work to your fullest potential.**

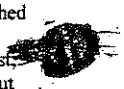
Stickball

My Never Ending Season

By



It was June 15th. I was on the Williams Eagles. We were going to play the Bridgeton Mad Dawgs. We were the away team. It was the first inning. Sky was pitching for Bridgeton. Up to bat first was Fonzy. Sky pitched the ball very fast. Fonzy swung and he missed the ball. Sky pitched a slow ball. Fonzy hit it to the center fielder, X-ray. X-ray missed the ball. Fonzy ran as fast as he could. It was a double. Next up was Ducky. On the first ball, he hit a triple. I was up next. Everybody on the team yelled, "C'mon Dictionary!" The first ball was high. I didn't swing. My coach screamed, "Hit it like a real stickball player, Dictionary!" The next ball was perfect. I hit it to the fence. I got a home run! Next up is Ricky. He hit the ball straight to Sky. Sky dropped the ball. Sky threw the ball to the first baseman, Bad Boy. But Ricky got there a nanosecond before the ball. "Safe," said Little Ant, the umpire. Next up was Cashmere #1. He hit a triple. Ricky made it safely home, but Cashmere #1 was out at third. Sixth in the batting order was The Carney Man. On his first pitch, he smacked it to the right fielder, Disco Dude. Disco Dude dropped the ball. The Carney Man rounded second, trying to squeeze in one more base, when shortstop, Cave Man, caught the ball from Disco Dude and tagged him out. "Two down!" hollered Little Ant. Up to the plate stepped Kune. He was anxious to hit a homer, just like me. The first two pitches came in high, but he swung. The third pitch rolled on the ground. The count was 2 and 1. Mad Dawgs' coach switched Sky and Bad Boy. Bad Boy was the best pitcher on the team. Kune stepped back to let Bad Boy warm up. He pitched five perfect balls. Kune stepped back up to the plate. Kune was ready to hit! Bad Boy threw the ball. Kune swung hard, but low. Third strike, he was out. Now it was our turn to field.



Our starting pitcher was Coop. First up was Jiggle. Coop threw three perfect pitches in a row, Jiggle watching them all go by. He was out! Next up was KG. He stood and watched the first pitch go by, too high for him. Coop pitched another ball. KG swung. "Ike!" screamed Little Ant "1 and 1!" Coop threw the ball as hard as he could. It went so fast, KG didn't know if it was a strike or a ball. It was a strike. On the next ball, KG hit it, but it was a foul on the first base line. KG went back to the plate, and picked up his bat. It started to drizzle. Coop was about to pitch the ball, when it slipped out of his hand. The count was 2 and 2. My coach gave Coop a new, dry ball. Coop called a time out. All the infielders gathered at the pitchers mound with Coop. Coop told them, "I am going to switch with Ducky." Coop was now shortstop, and Ducky took the mound. KG stepped back to let Ducky warm up. After six pitches, KG stepped up to the plate. Ducky pitched one ball and it was a sinker. "OUT!" yelled Little Ant. Third in the batting order was Affro. He was a lefty, and the best hitter on the team. On the first pitch, it went outside and curved left. Affro hit the ball over the 200-yard fence! "Home Run!" screamed the Mad Dawgs. After Affro was X-ray. Our team knew that X-ray swung at anything. Ducky threw one ball to the ground, and X-ray bent down to swing at it. He missed the ball and Little Ant yelled, "Ike!" The next ball came in high. X-ray stood on his tippy-toes to swing at it. The ball made contact, but it was foul tip. Our catcher, Fonzy, was on

of (How far ball is in 2 seconds)

the ball. and caught the foul tip for the third out. The end of the first inning and the ~~score~~ is 4 to 1 in favor of the Eagles.

This is what I call a Never Ending Story. I started the first inning of the stickball game. The game will have six innings. You can continue the story by writing the second inning. Below is a list of the teams and their players and positions. Your second inning version might be correct in spelling, punctuation, capitalization, and grammar.

Williams Eagles

Dictionary (when you use this name say I)	Outfielder
Ricky	Second Baseman
Fonzy	Catcher
Rojo	First Baseman
Cashmere #1	Pitcher / Outfielder
Coop	Pitcher / Shortstop
Kune	Outfielder
The Carney Man	Third Baseman
Ducky	Shortstop / Pitcher
Tom	Pitcher / Outfielder
Little Ant	Umpire

Ball 4!

Bridgeton Mad Dawgs

Sky	Pitcher / First Baseman
Jiggle	Catcher
Bad Boy	First Baseman / Pitcher / Shortstop
Jr.	Third Baseman
Disco Dude	Outfielder
Affro	Second Baseman
Caveman	Pitcher / Shortstop
X-ray	Outfielder / Pitcher
Ziggy	Outfielder
KG	Outfielder
Bob	Umpire

Need advice about pets, friends, or school?

's corner will have your answer. Let's say your pet died! How do you get over it? Try writing down how you feel and all the good times you had with your pet. You can talk to your friends. They most likely have been through something like this. This is what I did, and it helped me get over the shock of loosing a pet. You can talk to me online at my screen name, hotsugar224.

Did You Know

Did you know that 15 percent of kids are overweight? This is 8.8 million kids! This is causing a big problem. This number has doubled from 20 years ago! Health problems that obesity may influence are heart

problems, and diabetes as adults. So turn off your TV and go outside! Sign up for baseball, dance, gymnastics, soccer, basketball, or football.
Anything! The school has lots of extra curricular activities. You'll be helping your health for the years ahead and not to mention you will be having fun!!!

Park Place Poems
Written by:

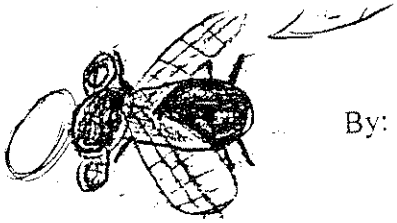
I Am What I Am

I am what I am
I'm not a dove flying over the sea
I'm not a fish swimming gracefully

I'm not a crocodile snapping constantly
I am is a simple boy with hair on my head
and toes on my feet

Changes

I watch the moon go round and round
I watch the sun go up and down
I watch the wind go high and low
I watch the rain change to snow
This is surely so – because this is all I know



Funny Facts

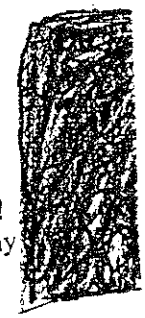
By:

Animal Facts

1. Flies taste with their feet!
2. Elephants can swim for 6 hours at a time!
3. A snail can sleep for 3 years!
4. An average hippopotamus is faster than the average man is!
5. The hummingbird is the only animal that can fly backwards!
6. The zebra's way to tell each other apart is by their stripes!

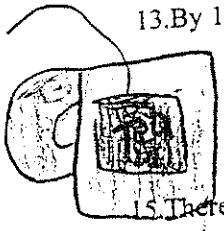
Food Facts

7. In Japan, they have square watermelons!
8. Each year, Americans spend more money on dog food than baby food!
9. Coca-Cola would be green if it didn't have coloring!
10. Americans, on average, eat 8 acres of pizza each day!



Revolutionary Facts

11. Benjamin Franklin wrote the original Declaration of Independence!
12. George Washington was the best spy in American history!
13. By 1779, more Americans were fighting in the British Army instead of the American Army!
14. There were 2 Boston Tea Parties in 1776!



Other Facts

15. There was a novel written without the letter "e" in the words in the novel!
16. The fear of long words is Hippopotomonstrosesquippedaliophobia!

Pneumonoultramicroscopic

Little League's Big History

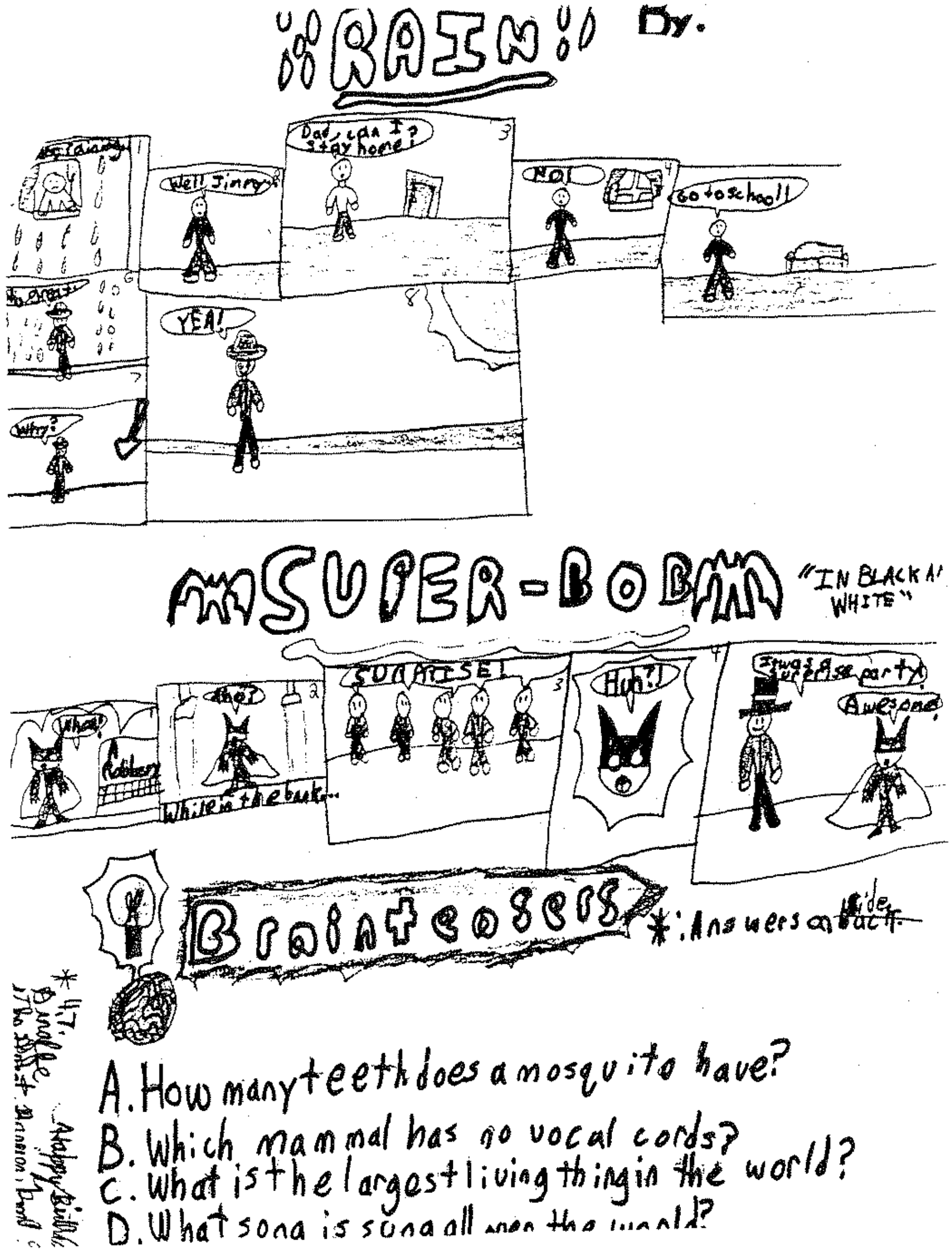
Little League was founded by Carl E. Stotz in 1939. Mr. Stotz, George Bebble, and Bert Bebble were the first managers. A $30 donation was sufficient to purchase uniforms for the first three teams and their sponsors.

Their sponsors were Lycoming Dairy, Lundy Lumber, and Jumbo Pretzel. In 1940 a second league was formed in Williamsport, PA. Rosters are limited by guidelines sanctioning the area from which the leagues can draw players, a process that continues today. In 1941 the need for workers and war material slowed the growth of Little League Baseball as the nation prepared for war. In 1943 a homerun fence was added to the original field, finally. In 1948 Lock Haven, PA won the second Little League World Series. "Alright Lock Haven!" A world record for the shortest game was set in 1950. It was exactly one hour long, wow. Nine-year-old George W. Bush played his fourth year as catcher for the Cubs in 1950.

In 1984 ABC-TV televised the World Series for the first time in history. The 50th birthday of Little League was in 1989. In 1992 Carl E. Stotz died. In 1996 the 50th birthday of The World Series was celebrated. "Happy Birthday to you!"

So as you can see Little League Baseball has a big history.

By,


RAIN
Dad, can I stay home?
Well Jinny
NO!
Go to school!
YEA!
Why?
SUPER-BOBM
"IN BLACK N' WHITE"
What!
Robbery
While in the bank...
SURPRISE!
Huh?!
It was a surprise party
Awesome!
Brainteasers
*: Answers on back.
A. How many teeth does a mosquito have?
B. Which mammal has no vocal cords?
C. What is the largest living thing in the world?
D. What song is sung all

THE NAME GAME

Find out how much money your name is worth!

Here is how to play:
Below is a list of letters and how much they are worth. Use the list to find out how much money your name is worth! For example, if your name is Bill add $10 for letter B, add $45 for letter I, and add $60 and $60 for the two L's. Add this all together and YOU'RE DONE!

A=$5

B=$10

C=$15

D=$20

E=$25

F=$30

G=$35

H=$40

I=$45

J=$50

K=$55

L=$60

M=$65

N=$70

O=$75

P=$80

Q=$85

R=$90

S=$95

T=$100

U=$105

V=$110

W=$115

X=$120

Y=$125

Z=$130

Libs

By:

Instructions for Libs:

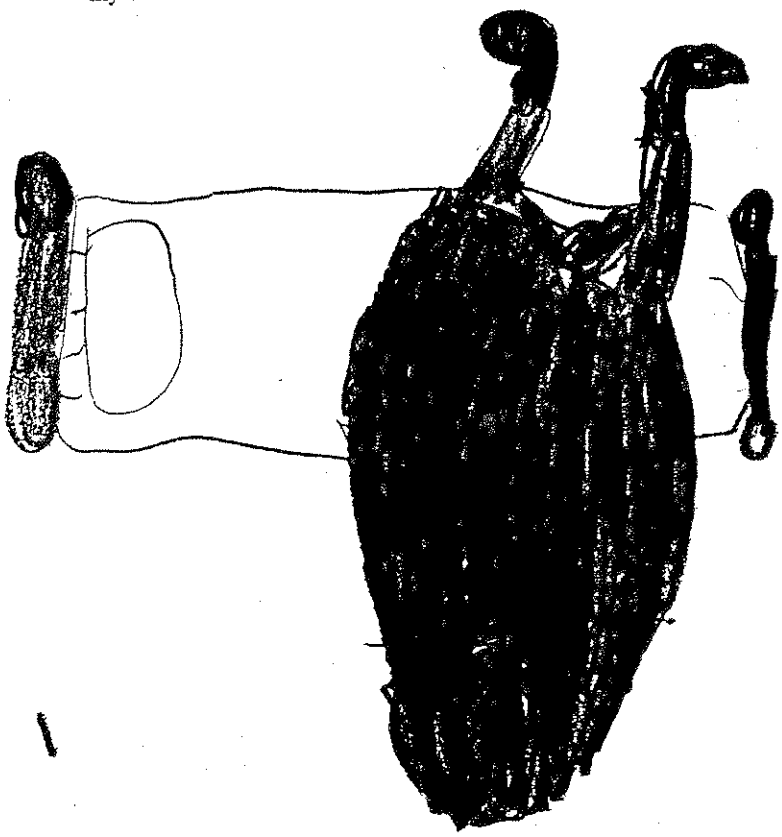
1. Get a piece of paper and number it from 1-46.
2. Look at the list of adlibs needed for the story.
3. Fill in the words of your choice as you follow down the list.
4. Be sure to follow the instructions carefully – sometimes you will be asked for the same word again.
5. Try not to repeat the adlibs, except where you are asked.
6. After you have completed the list, read the story inserting your chosen words.

1. Past tense verb (will be known as Verb #1)
2. Noun (will be known as Noun #1)
3. Animal
4. Name
5. Verb with –ed ending
6. Noun #1
7. Time (example: 3:40 p.m.)
8. Place you go often (will be known as Place #1)
9. Verb #1
10. Room in the house
11. Pick one: Upstairs or Downstairs
12. Food
13. Meal
14. Name of your school
15. Grossest food you ever had
16. Plural body part
17. Plural article of clothing (will be known as Clothing #1)
18. Place #1
19. Street you live on
20. Type of vehicle (will be known as Vehicle #1)
21. Number
22. Plural unit of time (example: seconds, millennia)
23. Verb with –ed ending
24. Clothing #1
25. Occupation (will be known as Occupation #1)
26. Verb with –ed ending
27. Verb
28. Past tense verb
29. Male friend
30. Favorite game system
31. Clothing #1
32. Favorite Food
33. Number
34. Best friend ever (known as BFE #1)
35. Plural school supply
36. Verb with –ed ending
37. Occupation #1
38. BFE #1
39. Personality trait
40. Place #1
41. Favorite teacher
42. Worst punishment ever
43. Past tense verb
44. Sickness or illness
45. Something dangerous
46. A scary animal

My Worst School Day Ever!

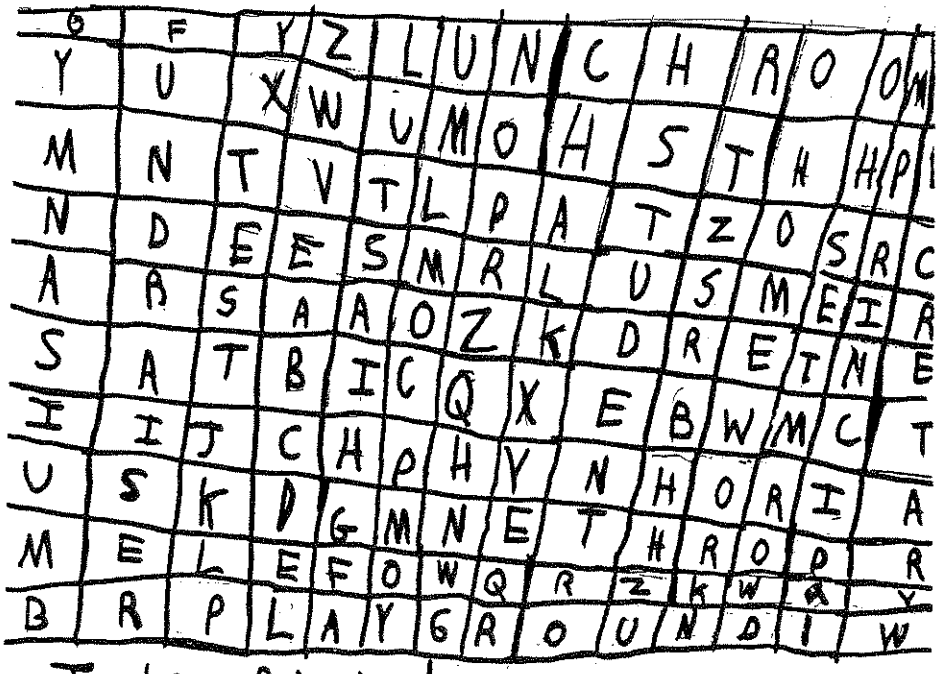
I (#1) up and turned off my (#2). My pet (#3), (#4) (#5) on my bed. I looked at my (#6). It was (#7). I was almost late for (#8). I (#9) out of my (#10) and went (#11). I had (#12) for (#13). It was better than (#14)'s (#15). I brushed my (#16). I put on my (#17). I was ready for (#18). I went down (#19) to my (#20) stop. It came (#21) (#22). Before I got on, a puddle of (#23) (#24) on my (#25). I got on. The (#26) (#27), "(#28) down!" I (#29) down next to my best friend, (#30). He didn't seem to notice my dirty (#31). "Hi," he said, "I didn't know that it was (#32) day and I packed." "Hi," I said, "I brought (#33) dollars so I could get extra." The (#34) ride went as usual. (#35) was throwing (#36) at several different kindergarteners, who (#37) to tell the (#38). But she insisted that (#39) was (#40).

When we got to (#41), (#42) was writing instructions on the board. I blinked. It couldn't say that. It told us to (#43). I was so scared I ran out into the hallway. I went to the nurse's office. The nurse asked me what I needed. I said I had a (#44). "No you don't," she said "At least you won't anymore." She jumped into the air and turned into a giant (#45) breathing (#46). She charged towards me. I fainted. I suddenly woke up. I was in my bed. It was a dream! Or was it?



Word Puzzle

Directions: Find the following school related words diagonal, across, down, or backwards.



O	F	Y	Z	L	U	N	C	H	R	O	O
Y	U	X	W	U	M	O	H	S	T	H	H
M	N	T	V	T	L	P	A	T	Z	O	S
N	D	E	E	S	M	R	L	U	S	M	E
A	A	S	A	A	O	Z	K	D	R	E	T
S	A	T	B	I	C	Q	X	E	B	W	M
I	I	J	C	H	P	H	Y	N	H	O	R
U	S	K	D	G	M	N	E	T	H	R	O
M	E	L	E	F	O	W	Q	R	Z	K	W
B	R	P	L	A	Y	G	R	O	U	N	D

Teacher
Test
Playground
Lunchroom
Gymnasium
Student
Fundraiser
Homework
Chalk
Principal
Secretary

Who's Who?

Ms. Good

2003

Kid Zone