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ABSTRACT

This research examines how a developmentally appropriate educational program in the early years can affect the development of gifted children. The qualitative research specifically focused on a multi-age, multi-ability setting with partial implementation of a whole language program, a systematic writing process and with some flexibility in grouping of students. Eleven teachers and approximately 260 students in an ungraded primary school were involved, with 3 first year and 30 second year students identified as gifted. The study found that gifted children followed a somewhat accelerated curriculum. Teachers felt that there were definite social benefits to integrating the gifted and nongifted students. The multi-age, multi-ability setting seemed to allow young students not identified as gifted to progress more rapidly than they might have in a traditional graded classroom, as they were exposed to higher level instruction. There was little evidence of the development of creative productivity or multiple intelligences other than linguistic and logical-mathematical. Interviews with teachers indicated their willingness to allow students to do above-grade level work and to use higher level materials with some children. Interview questions are provided in an appendix. (Contains 12 references.) (JDD)

Research in Progress: Development of Giftedness in the Multi-age, Multi-ability Primary School

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Research in Progress: Development of Giftedness

in the Multi-age, Multi-ability Primary School

While others have considered the developmental nature of giftedness itself, this research in progress approaches the topic from a somewhat different angle: how a developmentally appropriate educational program in the early years can affect the development of giftedness in children. These early years seem particularly important in the development of giftedness for a number of reasons. It is here that children first form their self-concepts as learners in a formal educational setting, ones that can become a self-fulfilling prophecy. It is here, too, that teachers form first impressions of children as learners, impressions that may prove resistant to change (Rist, 1978). Minority and economically disadvantaged children have the most to lose, making it particularly important that the early years of school help students develop the gifts and talents they have and see themselves as successful and joyous learners. The primary years are important for more advantaged learners as well. If learning come easily and they are not challenged, these students may not develop the study skills, perseverance, and emotional resiliency to deal with later situations, in school and in life, that don't result in immediate success. Students may also be unprepared for situations that don't conform to the teacher-centered instruction and clearly-defined problems usually found in schools. A developmentally appropriate primary school could start all children off on the right foot by emphasizing success through varied learning and teaching styles in a variety of areas of content, thereby increasing the likelihood of developing giftedness in a greater number of children.

Renzulli (1977, 1981) has talked for many years about the idea of "making giftedness" by exposing children to areas of potential interest and encouraging creativity and task commitment in areas of interest as a way to foster creative productivity. His recommendations seem quite consistent with the developmentally appropriate curriculum advocated by the National Association for the Education of Young Children (1988) as well as ungraded primary programs. Among the major reforms mandated statewide in Kentucky in 1990 were such "ungraded primary schools" for children in grades K-3 by the beginning of the 1992-93 school year. Critical attributes that define the focus of the ungraded primary

schools are: developmentally appropriate practice; multi-age, multi-ability classrooms; continuous progress; authentic assessment; qualitative reporting methods; professional teamwork; and parental involvement (JCPS, 1991).

The primary school is based on the belief that children develop at different rates and that a developmentally appropriate curriculum, spread over four years, will maximize success for a greater number of students. This approach contrasts with what some see as the current lockstep system that retains some children, declaring them failures, and limits the growth of others by assuming all children should be at a certain curricular level by the end of a given school year. Some parents and teachers have concerns about whether children's needs, particularly older students' and gifted students', will be met in the multi-age, multi-ability primary setting. Much of the publicity, and a selling point during consideration of the legislation, centered around increasing opportunities for success in the early grades, particularly for at-risk children. Along with this focus on "bringing up the bottom" and the belief among many that gifted students will make it on their own, teachers and parents are genuinely concerned about whether it will be possible to challenge students who represent as much as a five grade span of ability.

Others more optimistic see the primary school as an opportunity to expose children to higher expectations and more challenging instructional methods and curriculum. The more open-ended and challenging curriculum demanded by the primary school should contribute to the identification of gifted students, particularly those not identified by more traditional measures, and may indeed contribute to the development of giftedness in a greater number of students. In particular, it has the potential to provide greater opportunities for students from populations that are traditionally under-represented in gifted programs.

It is the intent of the study to examine how the critical attributes of primary school are implemented and the extent to which existing positive expectations and concerns are realized as theory moves into practice. This year-long study examines academic, intellectual, social, and emotional outcomes for students in the first year of an ungraded primary school. Because some students had been

in ability-grouped classes the previous year, the study also documents the first year of heterogeneous grouping.

Method

Subjects

Subjects include all "first" and "second" grade students (approximately 260) and their eleven teachers in the pilot year of an ungraded primary program in one elementary school in a medium-sized Southern city. Of these, three first year and 30 second year students were identified as gifted by the school district. Current first year students were identified the previous year in kindergarten, where they needed 90 of a possible 100 points on a weighted matrix of the Stanford Early School Achievement Test (20), a teacher checklist (40), and an interview in which they drew a picture and either told about it or wrote a story (40). Older students need seven of a total of ten possible points on a matrix of the combined stanines of the verbal, quantitative, and non-verbal portions of the Cognitive Abilities Test, grade point average from the previous 2 years, and standardized achievement test total battery stanines. In addition to the gifted students, about ten identified learning disabled students are mainstreamed and have the assistance of an LD resource teacher, while one primary student participates in a separate full-time LD program. One physically handicapped child is mainstreamed with a full-time aide, while another more severely disabled child occasionally participates with one of the classes.

The school population of 855 includes two fairly distinct groups of students. About 77% are predominantly white and from upper-middle to high-SES families; the remaining 23% are black and from low-SES families. While almost all students ride busses, the latter group was assigned to the school in order to fulfill district desegregation guidelines. All identified gifted students are from the higher-SES group. There is a great deal of parent participation in the school, both in attendance at meetings and volunteering, though virtually all of the participating parents are from the higher-SES group.

The nine teachers interviewed have from four to 23 years experience in elementary school and zero to eighteen years experience in the primary grades. [One long-term substitute and the teacher working with a self contained group were not interviewed.] Six teachers had taught first or second

grade the previous year, two within the last five years, and one had never taught first or second grade. Three of the nine teachers had taught self-contained gifted classes, all at the third grade level. Of these, one had taught for one year, another for three years, and the last for four years, ten years earlier.

These eleven teachers volunteered for the pilot of the ungraded primary, with many of them changing grade level to do so. Teachers and parents had met for several months the previous year to plan the pilot, and teachers continued to meet throughout the summer for in-service and planning. The teachers are arranged in two teams, one with four teachers and the other with six. The eleventh teacher works in a predominantly self-contained setting with sixteen students identified as needing intensive help.

Procedure

This study is part of a jointly funded project to promote collaboration among people in the school system and the university. The main goal of this project is to maximize potential in the primary school, with particular attention to gifted students. Therefore, in addition to studying the effects of the primary school on identified and potential gifted students, the researcher is also involved in shaping the primary experience. She has presented two day-long workshops for the teachers, consulted informally with them and with the building administrators, and participated in occasional meetings of the primary team. In late January the researcher began working with one teacher on each team to pilot a particular strategy designed to increase challenge in the classroom. One teacher will pilot curriculum compacting with her top math group, in which she pre-assesses students to determine which students might already have mastered the upcoming curriculum concepts. Those students will be excused from instruction and practice activities and will instead work on enrichment activities. Another teacher will pilot literature circles, using books of varying levels of challenge to accommodate the abilities of students in her primary class.

Data gathering and analysis

Qualitative research methods are being used and data will include: field notes of interviews with teachers and students and of classroom observations; parent comments; standardized test scores; sociograms; and student products. In particular, case studies are being done on eight students across

the two teaching teams: four students who have been identified as gifted (two first year and two second year), two mainstreamed learning disabled, and two comprehensive ("regular") first year students.

During the fall 1991 semester the researcher observed in the eleven classrooms, helping students and teachers as the need arose, for a full day once a week. She made observations of classroom interactions, curriculum, and instruction as well as conducting specific observations of each of the eight students chosen for the case studies. The eight students were interviewed individually in the fall and again in January. All teachers were interviewed individually in January as well. (See Appendix A for the interview schedule for teachers and Appendix B for the interview schedule for students.)

Intended "Treatment"

While the researcher herself did not implement a treatment, the research involved the effects of the primary school on students of varying ability levels. It therefore seems important to describe the innovation under study.

Curriculum. The curriculum and instructional methods of the primary school should be developmentally appropriate. Whole language, in which students deal with reading and writing as communication systems rather than sets of discrete skills, is a cornerstone. In whole language, emergent readers are introduced to reading and writing through listening to literature read by the teacher, reading picture and predictable books, reading along as a group from big books or stories written on chart paper, and writing and illustrating their own books. Invented spelling and less-than-perfect grammar and punctuation are accepted as part of the developmental process of writing, while the focus is on the meaning being conveyed by the child (Routman, 1991). Students keep literature logs in which they record what they have read, react to the stories or books, and may respond to questions posed by the teacher. They have periodic reading conferences, where the teacher can monitor progress by listening while the student reads aloud a story or part of a book s/he has chosen, discuss the story, and note areas in which the student might need extra help or challenge. Students also may participate in literature circles in which five to eight students discuss a book they have all read.

Teachers in primary school would also use the writing process. Here students participate in pre-writing activities to get ideas, then write and publish books of their own, which then become reading

material for other students. Depending on the level of the child, these books could consist entirely of pictures or be as elaborate as a small chapter book. As students become more confident and able, the steps of revision and editing are introduced.

Mathematics instruction would use manipulatives extensively and focus on having students understand the concepts underlying mathematics and arithmetic algorithms. It would also include problem solving and topics beyond computation, such as categorization and attributes. Materials might include unifix cubes, attribute blocks, people pieces, and calculators.

A developmentally appropriate curriculum for the primary school would also include integration of studies within thematic units. For example, in a unit about animals students might measure and record information about the class guinea pig, design, implement, and analyze surveys about pets, read and write stories about animals, visit with a veterinarian or animal shelter worker, go to the zoo, choose a problem to solve, design posters, write a play, etc., as a way to integrate concepts and skills of math, science, visual and performing arts, social studies, and language arts through the study of animals.

Grouping. While basic groupings in the ungraded primary are multi-age and multi-ability, there are continual re-groupings of students in large and small groups. These short-term groups allow for mini-lessons to a particular sub-group of students in need of the same skill or may center around student interests. Literature circles may sometimes be formed around interest in a particular book, while at other times may allow students to read and discuss books at their level of complexity.

Actual "Treatment"

For a variety of reasons, a full implementation of the primary school concept has not occurred to date. The Comprehensive School Mathematics Program, CSMP (CEMREL, 1978), is taught to all students in order to fulfill the prescribed district curriculum for identified gifted students. In addition, the district had adopted the newest Scott, Foresman (1991) mathematics texts (a decision made independent of the primary school planning) and teachers felt obligated to use them. As part of the primary school planning, they did adopt Journeys (Ginn & Company of Canada, 1989), a commercial language arts program that integrates reading, writing, listening, and speaking and seems consistent with most tenets of the whole language approach. This was a radically different approach to teaching

literacy for eight of the eleven teachers, and one that is not easily assimilated. Most teachers did attend in-service sessions about the Journeys program, but a few were assigned to the primary school after those workshops had taken place. While there was a strong philosophical commitment, there was little active support for the whole language approach during the school year. Parents in this school are quite vocal and involved and even though the new program was explained during open houses and orientation, teachers perceived parents as still expecting a traditional approach to language arts in the form of homework, spelling lists, instruction in handwriting, etc.

Other mitigating factors that were not anticipated when the year began included: uncertainty about student enrollment and faculty staffing during the first few weeks of school (and consequent re-arrangement of some classes); the sick leave of one of the primary teachers (beginning in October and continuing to this day) and her replacement with a long-term substitute with neither training nor participation in the planning of the primary; adjustment of previous third grade teachers to six and seven year old students, a new curriculum, and, in one case, movement from a self-contained gifted class to a younger heterogeneously grouped class; the shifting of the LD resource teacher (who herself had just moved from a severely and profoundly handicapped class the year before) to a self-contained classroom and the subsequent transfer of another teacher to the resource role; and less support than had been anticipated from the administrative staff due to health problems and other pressing issues that arose in the school. Since December, a great deal of time, energy, and emotion has been taken up by a controversial student assignment plan proposed by the district. Teachers have been pulled from the classroom to meet with parents and district personnel, numerous meetings have been held, and it is the subject of most conversations. The result is that planning for next year's K-3 primary school, which would involve an assessment of the things done this year and possible modifications, has been put on the back burner. Be that as it may, some aspects of the ungraded primary have been implemented.

Curriculum. The teachers are all implementing the Journeys literacy program, though to differing degrees. They use the literature books and some activities recommended in the teachers' guide, but few use many of the extension activities. All hold reading conferences with students at least weekly, read to their students, provide time for independent reading, and have students keep literature

logs. Most are using the writing process, again to differing degrees and for different amounts of time. Most also include direct instruction in phonics. Many also have students work in an English book (Silver, Burdett, & Ginn, 1988) on grammar and punctuation, though that is not a significant part of the curriculum. All started out with three spelling lists of varying difficulty and many allowed students to choose the list they wanted to be responsible for on the weekly test. In response to an in-service, three or four have begun to pre-test students on the spelling list and allow children to substitute words of their own choice for the ones they already know. Some do direct instruction in handwriting and use a handwriting workbook.

In mathematics, most teachers spend some time each week using CSMP mathematics and some time working in the Scott Foresman textbook, which has a heavy emphasis on problem solving. They also use activities from the Box It, Bag It mathematics program. Some teachers use manipulatives in mathematics more regularly than others.

At the beginning of the year all teachers devoted about 45 minutes per day to "themes" -- coordinated science/social studies units. The first unit involved a study of plants from the science curriculum and farms and factories from the social studies curriculum. Around October teachers got quite frustrated at the choppiness of the schedule and perceived lack of time for literacy activities. One team's resolution was the decision to devote the themes time two days a week to writing process and one day each to phonics, geography, and computers. The other team dropped themes entirely with the intention of integrating it into literacy. Through a grant, the school has a classroom set of lap-top computers, and most teachers use these regularly, primarily for word processing. They can also schedule time weekly in the computer lab, where students work with LOGO and other programs. While some teachers use hands-on activities, most activities seen during classroom observations have involved students working at desks with written materials.

Grouping. With one exception, homeroom classes consist of 24 heterogeneously grouped students, fairly well balanced by race, gender, and age. Each has from one to nine identified gifted students, with mainstreamed learning disabled students placed in only four of the classes to facilitate the work of the LD partnership teacher. Early in the year the teachers decided to group sixteen of the least

prepared students in one class to provide intensive help in hopes that they could be successful on the teams in the future. The previous LD partnership teacher took this group and, while some of them occasionally participate with one of the teams for selected activities, it operates pretty much as a self-contained class.

Initially both teams ability-grouped students for mathematics, with one team maintaining those ability groups for themes (science, social studies, and the writing process) while the other team re-mixed the students heterogeneously for themes. In November the first team decided to keep their homerooms intact for all activities except mathematics, which is ability grouped across the six classes. The other team continues to teach literacy to their homeroom students but switches students and teachers for mathematics and themes.

Within homeroom classes, most teachers divide their students into two fairly stable groups for part of the instructional time, using different curricular materials and giving different assignments to the groups. The higher group is referred to as "the Spanish children" (as only identified gifted students attend Spanish classes) or "the older children" even though the groups may include some students who do not go to Spanish or who are six year olds. While most teachers formed their groups after consideration of the needs and abilities of individual students, a few appear to divide them strictly along "grade" lines.

Results

There is much data related to the effectiveness of the multi-age, multi-ability primary for meeting the needs of students, be they gifted, learning disabled, or "regular." This report will be limited to whether this primary program to date has been meeting the needs of identified gifted students and if it has developed giftedness in a greater number of additional students.

For reasons explained in a previous section, the intended treatment has not yet been fully implemented. Therefore the results reported in this section reflect outcomes of the elements that have been present: multi-age, multi-ability grouping; partial implementation of a whole language program and the writing process; and some flexibility in grouping of students.

Meeting Needs of Identified Students

Academic. The few identified first year gifted students were clearly doing above-grade level work. Some teachers had them working with the older students while others gave them more advanced work that was different from the older children's. Second year gifted children seemed to be following a somewhat accelerated curriculum, being grouped in math and working in a different level English book.

Interviews with the four identified gifted students chosen for case studies found them somewhat satisfied with their school experience. All seemed happy and could name many things they liked doing. They were asked if reading, writing, and math activities seemed too easy, too hard, or just right. Two found language arts too easy, with the third saying it was easy but occasionally hard and the fourth saying it was pretty fair, which she defined as both easy and just right. All could name things they were taught that they already knew how to do, and only one, a first year student, could name something she had learned that she hadn't previously known how to do. The three students with a somewhat modified program said math was "just right," while the other, an older child, found it too easy. Again, all could name things they had been taught that they already knew how to do. All but one could also name something new they had learned.

Observations were done in the classrooms of these students in late fall. In many cases the activities did not seem appropriately challenging for the identified gifted students, particularly the older ones: brainstorming words with particular letter blends; clapping the syllables of three syllable words; grammar exercises in the English book about capitalization of proper nouns; listening to a story; after instruction, printing single letters on small blackboards then doing handwriting exercises from a workbook; replacing a word with its synonym from the spelling list; etc. Others did seem open ended enough that they might engender challenge: finding different ways to show ten on a CSMP mini-computer; creating equations that will equal fourteen; after reading about dinosaurs, measuring in the hall to see how long and tall they actually were; sharing their books in the author's chair, which involved student feedback to the author; writing process; independent reading; etc.

Those instances that did seem appropriately challenging were more likely to occur in language arts. One child served as an editor during the writing process workshop, where students approached him and his partner for feedback on their work in progress. Because of the emphasis on meaning over

mechanics, this task did require higher level thinking on the part of the "editors" while also taking advantage of their skill in grammar, punctuation, and spelling. Independent reading allowed students to read books consistent with their ability level and interest. Similarly the writing process allowed this same open-endedness. While one student's book consisted of only pictures to tell his story, the identified gifted student's book reflected his opinion about who should have been part of the all-star baseball team. He was dissatisfied when the "official" all star team was announced so, after a great deal of thought, he chose his own best player at each position. Each page of his book had several sentences about the player along with a drawing.

Teacher opinion about how well the program was meeting gifted students' needs ranged from comments like "no one's complaining" and "they're doing fine" to the perception that they're not being hurt but may not be getting as much as they would in separate gifted classes. "I think socially it's a good advantage. . . . I'm not quite so sure about academics. I think they haven't been hurt but I'm not sure that they've made a lot of gains." Several felt that students would receive a higher level curriculum if they were grouped separately, and one was quite forceful, "Hell, no, I can't do what [previous teacher of self contained gifted class] did with them!"

While parent input has not yet been sought for the research, one parent of a very bright older gifted child did initiate contact to discuss other placement options for her child. She feels that primary school may eventually be able to meet the needs of bright older children but that it wasn't currently working for her child this year.

Social. All teachers felt there were definite social benefits to integrating the gifted students and many felt these outweighed the potential academic gains that might come from separate classes. Many comments echoed this one, "They need to know what the real world is about. They got to function and socialize with blacks, low whites, you know, everyone." Several reacted to what they saw as negative elements of the previous separate program. "I used to think when they were all together in one room, you know all this is the [gifted] room, they got snotty. They'd think all the other classes were retarded or dumb or something and we're the best class going. But when they stay in here they find out they

may be great in reading, but in math there's some other kids who are just as good or better than they are. I think it sort of keeps their head on their shoulders a little."

Many spoke of the value to other children of having these positive role models in the class. "By being here he can see the other half and the other kids need to pull him. They need someone in the class that they can pull things from and John provides that, Ashley provides that, even Mark." [Students were those identified as gifted. These and all other names have been changed.] From a different perspective, "And they have the ability to be role models in a room where I don't think in [a separate gifted class] a lot of them were role models; they were just people struggling along. In these kind of rooms they are wonderful role models. And so I think a lot of their skills as leaders are developed in these rooms more so than they would be developed in a [separate gifted class] because there were too many leaders in there." One however, was indignant on the subject. "I don't feel like there's a necessity to get bogged down in the ungraded primary and act like these kids are . . . their function is to be models. That's not their function! Their function is to do their thing, but you can't do their thing and meet the needs of the wide range and keep up with what they need to do cause they go too . . . they're off, you know. And I just think they need, I mean why have it? Why identify them, why even discuss it if you're going to put them into a group where the teacher is going to have a range like that and they're never going to be able to have some time when they can move right along. But I think I feel that way only because I've watched [gifted] kids before interact in a group because I've had them as groups."

Two of the four gifted students interviewed were asked if they would like to spend more time during the day with the other gifted students, those with whom they had Spanish. The older one preferred the high ability group, saying they were his friends (from his neighborhood). The younger, one of only three six year olds to go to Spanish, said that was enough time and that she preferred her homeroom group. The other older student was asked if he wished second grade were separate rather than mixed with first graders, and he replied that it was better if we all do the same work. He now feels that he works by himself a lot and prefers it when there are others with whom to work. The other younger student does not go to Spanish, so was not asked.

Making Giftedness

One hypothesis is that multi-age, multi-ability primary schools can help "make giftedness" by allowing students not previously identified as gifted to demonstrate advanced abilities in response to a more challenging curriculum. The structure of the primary school can remove artificial ceilings that might have limited students' demonstration of their abilities and also provide instruction to which students might respond differentially, thus revealing giftedness. The latter would seem particularly applicable to students from disadvantaged backgrounds who might not yet have developed their abilities to a level that would be recognized by an identification process for gifted programs. To what extent did that occur in this research setting?

Traditional academics. This setting did seem to allow young non-identified students to progress more rapidly than they might have in a traditional graded classroom. They are exposed to higher level instruction and often learn from it even when they are not the intended recipients. They also learn from the older children around them. "Our handwriting book doesn't have cursive in it. . . . [The teacher] teaches us on the board, too." When asked if she thought she could do the work in the book used by the older gifted students, she said, "I did Megan's (a gifted second year student) this morning and got every letter right." While neither team has first year students in the top math group, many are in the next group and receive instruction more advanced than they would in a traditional first grade.

Teachers seem unanimous that first year students as a group have gained much from the ungraded primary. "They're more mature, probably. They matured faster with the help of the second graders. They like to take chances in the aspect that they like to try some of the things the older children do and have picked up on some things that they may not have been exposed to before, you know if they were in just a first grade classroom." "First graders in the primary, I think they're exposed to a lot more than in a regular first grade classroom, a lot more. . . . And they remember, too." When asked to what she attributed this, she replied, "Teaching more to the second grade level. A lot of things I do whole group and they're just involved in them. Those first year students who are able to remember, and understand, I mean they get it."

Benefits for older children exist as well. Seven of the nine teachers have identified a total of 17 second year students who do the same work as the identified gifted students, allowing them to take on a more challenging curriculum. All students benefit from the open-endedness of the writing process, independent reading, and whole language curriculum.

The multi-age, multi-ability setting seems to have liberated teachers from some expectations, which in turn has affected students. One teacher says, "All of these children have to function at [a gifted] level. They all have to do what the [gifted] kids do." When asked why, she replied, "Cause I said so (laughs). No, just because that's the curriculum I'm going to use at that ability level and I can gear it down for them , but they do basically the same things." In response to a question about the difference between first year students in the primary and traditional first graders, she said, "That could be because we never taught the curriculum at that level before. [If we had done that higher curriculum in the regular first grade class] it might have been the same, I don't know that." Another said, "I'm not as afraid to let them go ahead as I might have been before. . . . But this year it's like it's okay to do it sooner than I did it, I guess. I don't feel like I'm getting too far ahead of myself. That maybe I would have felt that way last year."

Alternative views of giftedness. When giftedness is considered through other perspectives than a traditional academic one, benefits of this program to date are not clear. There was little evidence of the development of creative productivity (Renzulli, 1977) or multiple intelligences other than linguistic and logical-mathematical (Gardner, 1983) in observations or interviews. No instruction was devoted to these areas and there were few if any opportunities for these behaviors to be demonstrated.

When teachers described how they chose students to do more advanced work, it was often in traditional terms. "They were finishing too quickly, the majority of the time all of the answers were correct, and I just felt they needed something more challenging." "The first thing was that they read very well in independent reading and when they read to me. And they were reading books that were beyond what I thought was their grade level. And they had a good thinking process, where they explained things well." "They always responded; they always were right. And you could tell they understood what they read, read with expression." Some referred to learning quickly and easily, but

only one described areas of particular ability: "They're able to do the work, motivated, do quality work. Some are based on true areas of giftedness -- Susie drama, Maria really enjoys math, so there are areas I pulled out for individual people. Most of these kids did not pass the [gifted] test, but they have areas they truly excel in." Two mentioned the artistic talent of students who were otherwise fairly unsuccessful academically, but there didn't seem to be any modification of their program with respect to this talent.

Tentative Conclusions

While few districts outside Kentucky are considering ungraded primary schools, much of the research here has applicability to any setting in which students have diverse abilities or the goal is to develop giftedness rather than simply respond to what students bring with them to school.

Impact of multi-age and multi-ability grouping

Use of a higher level curriculum in response to the multi-age, multi-ability setting has clearly allowed students, especially younger ones, to excel. Not only have opportunities for learning increased, but teacher expectations seem to have increased as well. In addition, having older and more able students in the room has provided students with a challenge as well as a source of help and learning.

The clearest advantage seems to be for students in the middle. As one teacher says, "The greatest benefit I see are for the six year olds who are middle or higher achieving six year olds, and lower or middle seven year olds." Some teachers have concerns that lower ability young students and LD students are getting lost, while others feel they will respond to a developmentally appropriate curriculum and that gains in self-concept have been significant. All seemed positive about benefits for slower second year students and those who would have been retained. Some are concerned about older bright students academic needs being met but seem to think the gains in social benefits clearly outweigh any possible loss of academic growth.

Raising Ceilings and Expanding Walls

Teachers have indicated a willingness to raise some curricular "ceilings" by allowing students to do above-grade level work and using higher level materials with some children. The open-ended nature

of the writing process and independent reading also fulfills this goal. Some are starting to pre-test children in spelling and math, allowing them do alternative assignments when they can demonstrate mastery of the curriculum that is to be taught. Many ceilings remain, however. Some can be dealt with as teachers adopt the primary school elements of short-term regrouping of students based on particular skill needs and more open-ended activities.

Developing giftedness in areas other than the traditional academic ones will happen only as the curriculum is changed to reflect a broader range of talents, skills, and abilities and instructional methods reflect a greater variety of teaching and learning styles. Students with creativity, task commitment, creative productivity, and skill in interpersonal relationships, visual and performing arts, etc. will continue to be appreciated as people, but not recognized as gifted or have these talents nurtured in any kind of systematic way unless the school itself begins to value these on an equal footing with academic ones and the curriculum reflects this value. If we have a narrow range of curriculum and instructional styles, we'll continue to see only a narrow range of giftedness and, more than likely, a narrow socio-economic range of students who qualify.

Teachers in this study have loosened the constraints of the traditional system in several ways, allowing for vertical movement through placement in higher groups and some horizontal growth through a more open-ended language arts program. But these are differences of degree, and what is required are differences of kind. If we are to nurture students other than those who are traditionally successful in school, it seems necessary to make a paradigm shift away from a focus on curriculum and toward a focus on the students. Rather than using the given curriculum as the referent ("Kathy gets downright bored doing some of that first grade stuff, so I give her second grade stuff to do and she's fine with it."), we need to use students' strengths, weaknesses, and interests as the starting point for the curriculum that is used. This shift in perspective is certainly inherent in the philosophy of the primary school and developmentally appropriate curriculum, but this research to date indicates that it is difficult to attain, even with excellent, hard-working, experienced teachers who have had training.

<u>The Medium is the Message</u>

Full benefits of the primary school and development of giftedness seem less likely to be attained in a teacher centered instructional setting. Any time you have direct instruction, even when students have been grouped by ability, it is likely that some students will not be challenged sufficiently while others may be lost. The classrooms under study differentiated literacy instruction for two subgroups within the homeroom class and grouped across all six classes for math, but pre-conceived expectations for what was to be learned still existed in those groups and may have limited the growth of some students, usually the older, brighter ones.

Conclusion

Many of the dilemmas faced by the teachers in this study parallel those of the homogeneous vs. heterogeneous grouping debates. Teachers struggled with what many saw as an inverse relationship between social and academic benefits for gifted students. While some of this may be a consequence of the previous self-contained gifted program, the concerns have been expressed elsewhere about full time separate programs, just as the concerns about bright students getting lost in heterogeneous groups have been documented (Archambault, et al., 1991). Many teachers expressed the wish that bright students could work together for an hour or two during the day on projects that would encompass creativity, higher level thinking, and student interests, and that may yet be built into the program. One person seems to capture the essence of the dilemma. She speaks as a teacher and a parent of a gifted child in the primary school.

> . . . I think we put too much emphasis on challenging people all the time. I don't think that children have to be challenged 24 hours a day in order to grow because I think we're facilitators of their learning, but I think they learn in spite of us. And I do think that sometimes maybe we don't do everything we can in these rooms . . . . Maybe if they were all self contained in a room there would be more offered to them based on that they were all on an equal plane and you had more time to do that. But I don't think that always develops the best well rounded child that you're going to develop out of a room like this. So I think you give a little bit. I think [my child] in a [gifted] room probably would do some things that aren't being done for him. You know,

> looking at my own child and knowing that my other child has been through the [gifted] program. But I think this offers him a more well rounded basis to work from myself. I'd like to see a pull-out program, is what I'd like to see. A little bit, some special projects.

So in the end, are gifted students and potentially gifted students better off in a well-implemented ungraded primary school? For identified gifted students, the full-time gifted classroom offers an accelerated curriculum and the continuous stimulation of intellectual peers. Primary school offers a more integrated, enriched, open-ended curriculum and the opportunity for interaction with a wider range of students and, in sub-groups, with intellectual peers and students who share similar interests. For potentially gifted students, primary school is clearly a better alternative, since they would not qualify for the separate gifted program. And, in keeping with Renzulli's notion that you can't really know ahead of time who's going to demonstrate gifted behavior, primary school opens the door to all students and lets the students themselves decide who walks (or runs!) through.

All in all, primary school seems better able to deal with the development of giftedness in the sensitive early years of schooling. It can increase the likelihood that disadvantaged children will have a successful start in school and develop their gifts by using a developmentally appropriate curriculum that is responsive to students strengths and weaknesses. For advantaged children, this same responsiveness to individuals can provide a greater variety of challenge through both content and process, avoiding the development of complacent learning attitudes and practices.

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Appendix A

Teacher Interview Schedule

1a. How many years have you been teaching in the elementary school?

1b. Of that, how many years have you taught 1st or 2nd grade?

1c. When was the last time you taught 1st or 2nd grade?

1d. Have you ever taught full time separate gifted classes? If so, for how long and at what grades?

2a. Which students in your homeroom have been formally identified for the gifted program?

2b. Are there others who are treated as gifted students, i.e. do the same assignments as the gifted kids?

2c. If so, how was that decision made?

3a. What differences, if any, do you see between first year students in the primary compared to first graders in the traditional graded setting?

3b To what do you attribute those differences?

4a. What differences, if any, do you see between second year students in the primary compared to second graders in the traditional graded setting?

4b To what do you attribute those differences?

5. Are there any students not currently identified as gifted that you think are potentially gifted, either by the district definition or by your own definition? Who? Why?

6a. What differences, positive or negative, do you think the ungraded primary has made for mainstreamed LD students?

6b. What differences, positive or negative, do you think the ungraded primary has made for comprehensive students?

6c. What differences, positive or negative, do you think the ungraded primary has made for gifted students?

7. Initially some were concerned about whether the ungraded primary could meet the needs of bright children, especially older ones. After five months, what do you think?

8. If it were up to you, what changes would you make in how you implement the ungraded primary?

9. Do you feel the gifted or bright students should be together for some time during the day?

Appendix B

Student Interview Schedule

1. How's it going in school so far?

2. What do you like most about school?

3. What don't you like?

4. What's you favorite part of the day -- not counting recess or lunch? Why?

5a. What kinds of things do you learn in the morning during reading/writing?

5b. Does that part of the day seem too easy, too hard, or just right for you?

5c. During that time, are there things you learn that you already know or know how to do?

5d. What have you learned about reading/writing that you didn't know before?

6a. What kinds of things are you learning in math?

6b. Does math seem too easy, too hard, or just right for you?

6c. Are there things you learn in math that you already know?

6d. What have you learned in math that you didn't know before?

7. What other things have you learned in school?

8. Do you feel like you have to really think hard about what you're doing in school? When?

9. Are there times when you can do the work without thinking very hard? When?

10. Are there things you wish you could learn about but haven't yet? What?

11. What else do you think I should know about how school seems to you?