Departmentalization in the 5th Grade Classroom: Re-thinking the Elementary School Model

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Re-thinking the Elementary School Model

Delise Andrews
Lincoln, Nebraska

A report on an action research project submitted in partial fulfillment of the requirements for participation in the Math in the Middle Institute.
University of Nebraska-Lincoln

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Abstract

In this action research study of my 5th grade classroom, I investigated the benefits of a modified block schedule and departmentalization. The research consisted of dividing the 5th grade curriculum into three blocks. Each block consisted of two primary subject areas: Mathematics was paired with Social Studies, Reading was paired with Health, and Writing was paired with Science. These groupings were designed to accommodate district time-allotment requirements and the strengths of each teacher within the 5th grade team. Thus, one teacher taught all of the Mathematics and Social Studies, another all of the Reading and Health, and another all of the Writing and Science. Students had classes with each teacher, each school day. I discovered that this departmentalization had many benefits to both students and teachers. As a result of this research, we plan to continue with our new schedule and further develop it to more fully exploit the educational and professional advantages we found to be a part of the project.
In thinking about what questions I might research in the context of my 5th grade classroom, I was at first overwhelmed by the possibilities. The longer I work to develop my craft, the more I see opportunities to learn and improve as a teacher. One idea seemed to rise above the rest, though. During nearly every year of my career, I have been responsible for instruction of multiple subject areas. In a single school day, a 5th grade teacher will plan and teach many, if not all, of the elements of the elementary curriculum including Reading, Writing (including Grammar and Composition), Mathematics, and Unit Studies (including Social Studies, Science, and Health).

This was my first year at this school, and I liked the way my team “departmentalized” the Unit Studies curriculum. This meant that I was responsible for teaching Social Studies to all of the 5th grade students, while the other teachers each taught one of the other Unit Studies subjects. As a team, we all agreed that this sharing of responsibilities meant a slightly reduced workload for teachers and higher quality instruction for students in these subject areas. The opportunity to focus our planning on one subject area, rather than three, allowed us the time to more fully develop lessons and more carefully construct learning opportunities.

As I began to develop an action research project, I wondered if we might expand our departmentalization to the remainder of our curriculum. After sharing the idea with my team, we approached our administration and together decided to go forward. My research project then focused on the potential benefits a departmentalized block schedule might bring to both teachers and students. To further departmentalize our curriculum, we divided the day into three 90-minute blocks consisting of two subjects each. Students would rotate through the three blocks each day, and each teacher would be responsible for one block of two subjects. After considering district requirements and teacher strengths, we decided that the blocks would be Mathematics and Social Studies, Reading and Health, and Writing and Science. We created six rotation schedules in order to maintain mostly heterogeneous groupings.
and yet accommodate special programs such as ELL (English Language Learners) and Special Education.

I was thrilled to have the opportunity to explore this idea, but the thought of adding the role of researcher to my already full plate was daunting. In addition to my duties as a classroom teacher, I was working for the district mathematics department to assist with the implementation of a new curriculum and taking graduate classes at the University of Nebraska-Lincoln. It was important to me that I be effective in the role of researcher without compromising any of my other responsibilities.

**Problem of Practice**

At the outset of this research project, I was teaching in a 5th grade, heterogeneous classroom. As a 5th grade teacher in the Lincoln Public Schools system I had the responsibility of teaching my students in all subject areas. The school I began teaching at this year had made the decision to departmentalize the Unit Studies curriculum in an effort to somewhat reduce the preparation load for 5th grade teachers. There were three teachers on the 5th grade team. Departmentalization of the Unit Studies curriculum meant that one of us taught Science, one taught Social Studies, and one taught Health. I was responsible for teaching Social Studies.

We did see a benefit in this small change. Rather than being required to plan for three different subjects in a limited time, we were each able to use that time to create careful and detailed plans for just one subject. We were, however, still responsible for planning and teaching quite a few different subjects. Along with our Unit Studies focus area, each 5th grade teacher also planned and taught Literacy (Reading, Spelling, Composition, and Grammar), and Mathematics. Although we taught nearly every subject, we did not have a consistent class roster throughout the day. In order to meet student needs and accommodate ELL (English Language Learners) and Special Education services, students were regrouped multiple times during the day.
Prior to departmentalization, students spent some time in homerooms, but most of their day was spent moving from classroom to classroom for various classes. This regrouping, which for some students meant changing classrooms up to five times in a single school day, was necessary for various reasons. Students of limited English proficiency were required to participate in pull-out or inclusion Reading and Writing classes in order to receive support. Students with specific learning disabilities, likewise, participated in inclusion Reading, Writing, and Mathematics classes. Additionally, those students who were identified as gifted or high-ability learners had to be grouped together for Reading and Mathematics instruction in order to meet district requirements.

I thought expanding our departmentalization of subject matter might benefit us in more ways than one. We all agreed that we felt much better about our instruction in Unit Studies as a result of our narrowed focus. We were able to plan more engaging lessons, and students seemed to perform better as a result. We wanted to stretch this idea to other subject matter. Specifically, we wanted to departmentalize the core curriculum of Literacy, Writing, and Mathematics. We paired each of the core subjects with a Unit Studies subject to create three “blocks.” Students’ days were then split into thirds. Each student would spend one period with each teacher. In one classroom, students would study Mathematics and Social Studies, in another classroom, students would study Literacy and Health, and then another period would be spent learning Writing and Science.

At the time, my students experienced multiple transitions during the day. My own focus was also very divided. In needing to look at each student from multiple perspectives and find interventions to suit their needs in a variety of areas, I often felt as though I didn’t really have the time to truly learn about any one student or their very distinct needs. I had some students who needed re-teaching in Mathematics, some who needed additional work in Reading, some who struggled to write a complete sentence, and then those who had needs in multiple areas. There were also students needing enrichment
in various subject matter – students who I felt were too often overlooked in light of the seemingly more urgent needs of the strugglers.

I believed that being able to focus on a more limited number of subjects would allow me to more carefully evaluate and support those students who were struggling as well as those who excelled. Students would also benefit from more focused and carefully planned lessons. With fewer subjects to plan, teachers would be able to spend more time on those that they did teach. As a result, plans would be more specific to individual student needs and would include more meaningful examples for students. Teachers would also be able to narrow the focus of their re-teaching and enrichment.

Finally, as a team, we would each have an opportunity to work with every student. This would give us, as colleagues, a unique opportunity to collaborate. Often times, a particular student might relate differently to different teachers. Perhaps our varied experiences with students would help us to together create more effective supports and interventions.

If departmentalization of curriculum at the 5th grade level proved successful for our students, we might begin to consider if it could be effective for all 5th grade students. As a result of recent studies in middle-level education, a general shift has been made to a “middle-level philosophy” in our district. Students are moved to middle school in 6th grade. Initially, this proved difficult for our students, and 6th grade scores dropped. In an attempt to ease the transition, our district changed 6th grade classrooms back to a more elementary homeroom style model. Although 6th grade scores improved, 7th grade scores then became a concern. If our students found success in our model, we might begin to consider that, rather than move the elementary model up, perhaps we should move the middle-level model down, making the shift in 5th grade.

When I began this study, our students’ scores on standardized testing were low and had not been showing improvement. After changing to a departmentalized model, I hoped to see improvement in these scores. In addition, I wanted to evaluate the success of this group of students during their
subsequent transition to middle school. Specifically, I wondered if they would be better able to make the transition. Would they feel better prepared? Would their teachers see a difference?

**Literature Review**

Elementary school teachers are often referred to as “generalists.” They are teachers who teach all subject areas. This is a major difference between elementary and middle level education and instruction. Most of the research I have read considers middle level grades to include 5th grade, yet 5th grade classrooms remain in the buildings of elementary schools and, typically, in the same instructional model as the other elementary level grades. Students are grouped in “homeroom” settings, where one teacher is the primary conduit for all learning that takes place. That teacher is responsible for Reading, Grammar, Spelling, Composition, Mathematics, Social Studies, Science, and Health. This means that the focus of the teacher is very divided. My study seeks to determine whether we should consider more of a middle level philosophy in the instruction of 5th grade students. In particular, would mathematics instruction in 5th grade improve if taught by a math specialist?

There is really a paucity of literature related to this topic, as it seems not many studies have been done in this regard. However, several related studies did provide meaningful and relevant information. Practical wisdom suggests that a teacher who is responsible for teaching a wide variety of subject matter cannot possibly be an expert in each area. In fact, it is likely that most teachers do not have time to develop any of the curricular areas as well as they could if their focus was not divided. Reys and Fennell (2003) suggest it is “unrealistic” to expect elementary teachers to have specialized, expert knowledge in many subjects. Ma (1999) says that what teachers in the United States are expected to accomplish with limited time is “impossible.”

It is with this in mind that we might begin to consider the reasonableness of specialization at the 5th grade level. The Conference Board of Mathematical Sciences (CBMS) published a report in 2001 suggesting that 5th grade mathematics should be taught by a specialist. A powerful benefit of
specialization at the 5th grade level would be the opportunity for teachers to spend time developing their own conceptual basis for the mathematics they are responsible for teaching. Hill, Rowan, and Ball (2005) found there to be a significant relationship between the mathematical knowledge held by teachers and the achievement of their students. This poses a problem for many teachers in the United States, who are often uncomfortable with higher-level conceptual mathematical understanding. They are, likewise, unable to be flexible in the application of that knowledge to instruction and learning within their classrooms. (CBMS, 2000 & Ma, 1999) For teachers to become more proficient at higher levels of mathematics, they must find time outside of the classroom to devote to new learning in the field. Teachers must also have sufficient time to plan and prepare their lessons with greater care, learning how their students learn and understand the mathematics they are teaching. This can be done more easily if the teacher has fewer subject areas to plan and prepare for. Thus, specialization provides an opportunity for teachers to pursue new learning and create higher quality lessons for students. Hill, Rowan, and Ball (2005) are quick to point out that increasing the number of courses a teacher has taken does not translate to increased learning for their students. Rather, a teacher must take opportunities to increase and enrich their own conceptual understanding of both the mathematics and the mathematics instruction.

An additional consideration related to specialization at the elementary level is scheduling and time allotment. As we arrange schedules to allow for math specialists, it is important to create sufficient time for the math lesson. In a study of block scheduling, Mattox, Hancock, and Queen (2005) discovered significant gains in student achievement when block schedules were implemented. The study notes that classes were longer and, thereby, provided teachers with the time needed to do more active learning with students. The block schedules also allowed for more limited number of classes per teacher, so teachers had sufficient time to plan and develop more detailed, effective lessons. Hill, Rowan, and Ball (2005) also indicated that additional time was an effective predictor of increased student achievement.
Of the studies I located, only one, McGrath and Rust (2002), did not support departmentalization or specialization at the elementary level. This study, conducted with 5th and 6th grade students, was limited by its small size. The authors found support for self-contained classes in the areas of Language and Science, but they found no evident differences in the area of Mathematics, Reading, or Social Studies. The authors suggested that further research was needed to gather information on this topic.

Overall, it seems that the United States is somewhat behind in thinking about mathematics instruction at the elementary level. Other countries, such as Sweden and South Korea (Reys & Fennell, 2003), and China (Ma, 1999) are working to provide focused, comprehensive math instruction even at the earliest levels (1st grade in Sweden) directed by expert, highly trained instructors. By requiring greater preparation and expertise of their teachers in specific fields, these countries demonstrate a commitment to creating rich, comprehensive instructional opportunities for young students. In light of the research, it would behoove us to take a further look at the potential benefits of specialization in the 5th grade mathematics classroom. Helping students become proficient in mathematics requires teachers who are experts in their field, not generalists who are spread too thin.

**Purpose Statement**

The purpose of this study was to determine if student performance in mathematics may be improved through departmentalization of the 5th grade curriculum. Data collection took place during the spring semester, 2006 in the researcher’s classroom. This study will attempt to answer these research questions:

- Will departmentalization of curricular areas reduce stress on teachers as they prepare their lessons?
- Will departmentalization enable teachers to create more meaningful and engaging lessons for students?
- Will departmentalization provide teachers with more time to assess student work?
- Will departmentalization increase student performance in Mathematics?
Method

In order to evaluate teacher stress levels, quality of lesson planning, and ability to assess student work, I asked teachers to complete a rubric at the outset and then again at the conclusion of the research project. This rubric was initially completed to assess teacher perceptions about the “old” more traditional schedule in which teachers planned, instructed, and assessed multiple subjects. The same rubric was used at the conclusion of the project to assess teacher perceptions about the “new” departmentalized schedule.

The descriptors on the rubric included “Time for lesson planning,” “Time for assessment of student work,” “Quality of lessons planned,” and “General feelings about the schedule.” Each descriptor was scored on a four point scale, with four representing the best possible score and one representing the worst possible score. To assess time for lesson planning, teachers scored their comfort with the available time and their frustration level with their workload. Time for assessment of student work was also scored according to teacher comfort level and then the ability to assess in a timely manner and use assessment results to guide instruction. Quality of lessons was scored on availability of time to develop meaningful and engaging lessons and also time to locate and utilize quality resources to enhance learning. Finally, teachers’ general feelings about the schedule were assessed by how likely they felt they would be to recommend the schedule to other teachers.

In order to assess the impact of our new schedule on student performance in Mathematics, I planned to compare student test scores on the Metropolitan Achievement Test (MAT) to those earned by last year’s 5th grade class. I had initially planned to compare my students’ results to their own 3rd grade results as well. I later realized that far too many variables would be involved to make such a comparison worthwhile. The test would be two years old, and with our high rate of mobility, it was unlikely that the

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composite group would be sufficiently similar as to make possible meaningful conclusions from such a comparison.

In addition to these measures, I planned to interview my principal, the teachers on my team, and a group of students who were involved. These interviews, conducted at the conclusion of the research, included questions designed to elicit participants’ opinions about the departmentalized schedule.

I had initially planned to look at the effect of departmentalization on 5th graders as they transitioned into middle school. As the project developed and the timeline became more limited, however, it became clear that such a question was simply beyond my ability to assess at this time. Not only would it have necessitated lengthening the scope of the project to include the next school year, but it would also have been difficult to track the students as they spread throughout the district to various middle schools. Though I find the question to be very relevant and interesting, I decided to set it aside and did not pursue it in the context of this study.

Analysis

As a result of this study, I expected to find that departmentalization of curricular areas would reduce stress on teachers as they prepared their lessons. Essentially, departmentalization would allow teachers to spend time planning and assessing fewer subject areas. This reduction in overall workload would allow teachers to spend more time on planning and assessing the subject matter they did teach, resulting in more meaningful and engaging lessons for students.

At the outset of this school year, my instructional team already did a degree of departmentalization within the portion of our curriculum referred to as “Unit Studies.” This curricular area includes Social Studies (American History), Science, and Health/Social Skills. Each of the three teachers at the 5th grade level taught Reading, Writing, and Math, and then one portion of the Unit

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Departmentalization in the 5th Grade Classroom

Studies curriculum. Students followed a 3-week rotation for the 60-minute Unit Studies period of our day.

As I was working to establish a solid Action Research idea, I became intrigued with the idea of extending this departmentalization to the rest of our curriculum. My colleagues and I frequently spoke of how much better we felt we were doing with our Unit Studies instruction because of our ability to focus on a single topic. Without needing to worry about the other subjects, we could devote our time to enhancing the lessons we taught. We often commented that students seemed more engaged and also seemed to perform better as a result of this model.

Near the end of our 1st quarter, I approached my teammates with my idea. I suggested we try a more comprehensive departmentalization. We could still divide the Unit Studies curriculum, and then each of us could take a core curricular area as well. Specifically, I would teach all Math and Social Studies, another teacher would teach all Reading and Health/Social Skills, and the other would teach all Writing and Science. Once we determined that this arrangement met all district guidelines for instructional minutes and content, we were all excited about trying it out. After meeting with our administrator, we were given approval and made the switch in schedules at the beginning of the 2nd academic quarter.

The overarching theme of the conversations my team had, with regard to departmentalization, was that we each felt like we did a much better job of teaching the subjects we were responsible for. The schedule also provided us with an unexpected flexibility of instructional minutes. We had minutes allotted each day for two subjects, but we were able to be creative with how we used them. For example, I might teach 90-minute math lessons for three days a week and then compile my Social Studies minutes into two days. Those two days would include a 60-minute math lesson and 30 minutes of Social Studies. With our former schedule, stretching a math lesson beyond the allotted 70 minutes was simply impossible.
This first of my three assertions was addressed in the teacher survey. Each descriptor was rated on a 4-point scale, with 4 being the most positive response and 1 the most negative. The following responses related to the former more traditional schedule

**Time for Lesson Planning:** Two of the three surveys rated this descriptor at “2,” while one teacher rated it “1.” In general, teachers felt somewhat to very uncomfortable with the amount of time required for lesson planning. Teachers also felt often or always frustrated by the workload associated with the “old,” more traditional 5th grade schedule. The teacher who marked this area at “1” added comments indicating that weekend work was routinely necessary, and collaboration was not happening due to time constraints – despite the teachers’ intent and desire to collaborate.

**Time for Assessment of Student Work:** Marks in this area ranged from 1/2 (one mark in “1” and one in “2”) to 2/3 (one mark in “2” and one in “3”). Teachers felt somewhat to very uncomfortable with the amount of time required for assessing student work, and two of the respondents indicated that they were usually unable to assess student work in a timely manner so as to use results to guide instruction. The third teacher was usually able to assess work in a timely manner.

**Quality of Lessons Planned:** Two teachers gave this descriptor a score of “3,” indicating they were sometimes able to find and incorporate available resources and make lessons as meaningful and engaging as they would like them to be. One teacher gave this descriptor a score of “2,” indicating that there was usually not enough time to locate resources and create meaningful lessons.

**General Feelings:** Only two teachers completed this descriptor. Both gave it a score of “2,” saying they would probably not recommend this schedule to other 5th grade teams. One teacher added the following comment – “And ours is better than most. We departmentalize Unit Studies.”

I also expected this study to show that departmentalization of curricular areas would increase student performance in Mathematics. With higher quality, more carefully prepared lessons, I believed that students would find lessons to be more relevant and meaningful. As a result, I felt that students
would be more attentive and engaged during lesson and thereby have greater understanding and retention of subject matter.

Prior to the MAT test, I was unable to collect or evaluate specific data regarding student performance in mathematics with regard to my research. I did, of course, have chapter tests for students, but tests are not really an effective measure of the success of this program, since I cannot compare them to tests (with the same concepts) that the students have taken without me as their teacher. Once I had IRB approval, I planned to look at Metropolitan Achievement Test scores for my last year’s 5th grade class. These scores were also compared with 5th grade MAT scores taken by my students this April. I hoped to see an overall improvement in both Math Concepts and Problem Solving and Math Computation subtests, resulting in improved Total Math stanines.

As a teacher, I did find myself observing my students and evaluating their success in general. I can say that my students this year seemed to be more aware of mathematical language and how to “think like a mathematician.” I do not know whether this was a result of departmentalization or just changes in my teaching that have come about as a result of my current studies.

Although we, as teachers, really liked departmentalization, we were still cognizant of some imperfections in the plan. What frustrated us the most was the servicing of Special Education and ELL students. Because there was only one Resource teacher working with our grade level, we needed to group those kids who receive services together, nearly all day long. ELL students needed to, likewise, be grouped in order to receive services at the prescribed time. Really, this was true with our old organization as well, so it was not a problem created by departmentalization. The frustration was that we had hoped departmentalization would provide us with a way to eliminate the problem. It didn’t.

Another problem we struggled with was our physical arrangement. At the time, our classrooms were located at three separate corners of the building – about as far from one another as was possible. This created some lengthy transitions. We would like to relocate at least one classroom to put us in
closer proximity to one another in order to alleviate this issue. That said, we were happy enough with this model to plan its continuation into next year. As we progressed through the year, our plan was to organize our classes next year with a departmentalized schedule. To me, that was the greatest encouragement that perhaps my assertions would bear out in the course of my research.

Interpretation

In the end, my research seemed somewhat incomplete and left me with more questions than answers. I felt pleased with the outcome of the change in schedule, and some of the data I collected seems to support my assertions, but really there was not time or sufficient data to effectively analyze the results.

Some difficulties arose because of the delay in receiving IRB approval for this project. Although initial approval was given at the first of March, it was some time later before translations of permission slips were completed. I probably should have sent home permission slips to English-speaking parents right away, but I was hesitant to do so. My students had been the subjects of three other research studies this year, so parents had already been asked to sign three similar IRB permission forms. I was reluctant to send home yet another form in shifts. I did not think it would be returned if I could not create a class goal to get them turned in. As a result, I was unable to send permission forms home until well into April. I think some of the students who did not return forms were simply tired of filling out the endless paperwork that really seemed quite the same to them. Some expressed frustration, saying that they wanted to be able to sign just one form to count for all the research projects they would be a part of.

Another problem I had was with my own ability to be in my classroom. My various responsibilities necessitated many out of classroom days – more than 20 in the course of the school year! This meant that the continuity of my instruction was broken on a regular basis. On some occasions, I was able to secure an effective substitute who would carefully read and execute my lesson plans to the best of his or her ability, but even such quality teachers could not know my students as I did. Nor could
they relate learning to previous lessons or understand where, in the big picture, a particular lesson was head. On other occasions, substitute teachers were reported to have sat at my desk the entire day or by their own notes failed or chose not to complete lessons as drawn out in the plans I meticulously prepared. These days were essentially lost to my students, as it was sometimes necessary for me to repeat or, at the very least, review, the intended lesson when I returned.

In the final teacher rubric, however, it was clear that teachers preferred the new schedule.

**Time for Lesson Planning:** Two of the three surveys rated this descriptor at “4,” while one teacher rated it “2.” In general, teachers felt somewhat to very comfortable with the amount of time required for lesson planning. Teachers also rarely felt frustrated by the workload associated with the “new,” departmentalized 5th grade schedule.

**Time for Assessment of Student Work:** Two teachers rated this descriptor as a “3,” while one rated it a “4.” Teachers felt generally to very comfortable with the amount of time required for assessing student work, and all of the respondents indicated that they were usually able to assess student work in a timely manner so as to use results to guide instruction.

**Quality of Lessons Planned:** Two teachers gave this descriptor a score of “4,” indicating they were usually able to find and incorporate available resources and make lessons as meaningful and engaging as they would like them to be. One teacher gave this descriptor a score of “3,” indicating that there was sometimes enough time to locate resources and create meaningful lessons.

**General Feelings:** All three teachers rated this with a score of “4,” with one teacher adding four plusses to the box. Teachers unanimously agreed that they would definitely recommend the new schedule to other 5th grade teams.

The teacher interview also supported this feeling. Teachers commented on how much they appreciated being able to devote their allotted planning time to a more limited number of subjects. One teacher said he felt as though he had become a much better teacher in the subject area he was
responsible for. All enjoyed the fact that they could meet and develop relationships with all of the 5th grade students as opposed to just their homeroom kids. Teachers felt that this was an advantage because each teacher had different relationships with each student. These unique perspectives helped as student behavior and academic issues were problem solved. Additionally, those relationships which were not as strong between teacher and student were limited to only one block each day – giving both teacher and student a break from one another.

The students who were interviewed echoed some of these sentiments. They loved getting to move from teacher to teacher and commented that they knew they would get to have at least part of the day with their “favorite” teacher. They also felt like they were getting instruction from “experts,” commenting that they all got Mathematics from the best Math teacher, Writing from the best Writing teacher, etc. This was interesting since they had seen us all teach each subject prior to the project. Another thing students liked was feeling like middle school students. They said that the schedule set them apart from the other elementary grades and they felt less nervous about going to middle school next year because of the experience.

When interviewed, the principal was supportive but in a more limited way. She felt as though this model was highly effective for this particular team of teachers because of their particular strengths. She has, in the past, both supported and denied requests by teams of teachers to design a similar schedule. In her opinion, the people involved were the crucial factor. She felt departmentalization might be unsuited for some teams of teachers.

In looking at test scores, I was disappointed to see that the class’s composite score for Total Math and all Math subtests were generally maintained. While there was modest improvement in the percentiles, the stanines remained the same. There is not enough information to determine if the improvement resulted from the change in schedule. After closer inspection, though, I did find something to celebrate. Students are grouped into four quartiles according to how their scores relate to
national data. It would be our desire to see every student fitted into the top two quartiles – indicating that they were all at or above the National 50th percentile. We would of course like to see much lower numbers of our students falling into the bottom quartile – at or below the National 25th percentile. In the previous year’s MAT test, Clinton 5th graders were pretty evenly distributed across the quartiles, with 30% in the top quartile (National 76-99 PR), 32% in the second quartile (National 51-75 PR), 14% in the third quartile (National 26-50 PR), and 24% in the bottom quartile (National 01-25 PR). This year, however, only 9% of 5th graders fell in the bottom quartile! Though the top two quartiles were generally maintained, with 30% of the students in each, we were still thrilled to see that a large percentage had moved out of the lowest quartile.

Next year, my job will change again and I will be working as a Math Intervention teacher with the 5th grade at Clinton as well as supporting 3rd-5th grade teachers across the district with math instruction. As a result, we needed to hire a 5th grade classroom teacher to fill my position. Because of our appreciation for this new schedule, we looked specifically for a teacher who would be strong in the subject matter I was teaching (Mathematics and Social Studies). It is our plan to continue and further enhance this model in the coming years. We hope to further increase collaboration and connections across the disciplines. We also hope to more deeply evaluate the implications of the model for teachers and students alike.
References


Ma, L (1999), *Knowing and Teaching Elementary Mathematics*, Mahwah, New Jersey

Mattox, K, Hancock, D R, and Queen, J A (2005), The Effect of Block Scheduling on Middle School Students’ Mathematics Achievement; *NASSP Bulletin* 89 pp. 3-13

McGrath, C J and Rust, J O (2002), *Academic Achievement and Between-Class Transition Time for Self-Contained and Departmental Upper-Elementary Classes*. Journal of Instructional Psychology 29 no 1 Mr. Retrieved October 27, 2005

### Appendix A

#### Teacher Rubric

<table>
<thead>
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<th>Descriptors</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time for lesson planning</strong></td>
<td>I feel very comfortable with the amount of time required for lesson planning.</td>
<td>I am generally comfortable with the amount of time required for lesson planning.</td>
<td>I am somewhat uncomfortable with the amount of time required for lesson planning.</td>
<td>I am very uncomfortable with the amount of time required for lesson planning.</td>
</tr>
<tr>
<td>Time for assessment of student work (including homework, quizzes, and tests)</td>
<td>I am able to assess student work in a timely manner so as to use results to guide instruction.</td>
<td>Occasionally I feel frustrated by my workload.</td>
<td>I often feel frustrated by my workload.</td>
<td>I almost always feel frustrated by my workload.</td>
</tr>
<tr>
<td><strong>Quality of lessons planned</strong></td>
<td>I usually have time to make lessons as meaningful and engaging as I would like them to be.</td>
<td>I sometimes have time to make lessons as meaningful and engaging as I would like them to be.</td>
<td>I usually don’t have time to make lessons as meaningful and engaging as I would like them to be.</td>
<td>I almost never have time to make lessons as meaningful and engaging as I would like them to be.</td>
</tr>
<tr>
<td>General feelings about the schedule and format of classes</td>
<td>I would definitely recommend this schedule to other 5th grade teams.</td>
<td>I might recommend this schedule to other 5th grade teams.</td>
<td>I don’t think I would recommend this schedule to other 5th grade teams.</td>
<td>I would definitely not recommend this schedule to other 5th grade teams.</td>
</tr>
</tbody>
</table>
Appendix B

Interview and Focus Group Questions

Teacher Interview Questions

➢ Is there a difference in the way you plan lessons now?
➢ In general, what are your feelings about this scheduling change?
➢ What are some reactions or interactions you have noticed in your classroom following this scheduling change? Would classify them as generally positive, negative, or ambivalent?
➢ Would you want to departmentalize again next year?
   o If so, what changes would you make to how fifth grade is departmentalized?
   o If not, why not?
➢ Is there anything you want to know?
➢ Is there anything else I should ask you to find out about your experience with departmentalization?

Principal Interview Questions

➢ Have you permitted departmentalization at the elementary level prior to this year?
   o Why or why not?
➢ What made you comfortable with this change for this year and this clientele?
➢ Do you think district policy should encourage departmentalization at the 5th grade level?
   o What are some benefits you expect from this change?
   o What are some drawbacks you see from this change?
➢ Is there anything else you want me to know?
Appendix B, cont.
Interview and Focus Group Questions

**Student Focus Group Questions**

- Do you find lessons to be interesting?
- Do you feel like your teachers know you and care about you?
- Do you feel better prepared for middle school as a result of this new schedule?
- What do you like about departmentalization?
- What do you dislike about departmentalization?
- Do you think we should have departmentalization next year for the next fifth grade class?
- What advice would you give fourth graders to help them be successful in a departmentalized schedule?
- Is there anything you want to know?
- Is there anything else I should ask you to find out about your experience with departmentalization?