

SCHOOL DISTRICT OF SOUTH ORANGE AND MAPLEWOOD, NEW JERSEY
525 Academy Street, Maplewood, NJ 07040

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Superintendent

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MEMORANDUM

TO: Board of Education Members

FM: Peter P. Horoschak

DT: 6 February 2006

RE: Budget Analysis #10 – Alternative Delivery of Various Elementary Special Programs (World Language, Project Ahead (in non-Title I schools), Instrumental Music and Enrichment

This analysis, along with other analyses produced in response to the Board's request for information, build on similar budget analyses produced in prior years. All analyses may be found on the district's website: <http://www.somds.k12.nj.us/finance/AllYearsRpts.htm>.

Budget analyses have been completed in order to explore the possibilities for budget savings related to various elementary special programs.

Identification of Need

Maintaining the specials at the elementary level (art, library, vocal music, instrumental music, Project Ahead, Enrichment, physical education, and Spanish) is important both educationally and contractually. Educationally, all of these specials fulfill the State mandated *Core Curriculum Content Standards* for their particular area. Although the State does not mandate how to schedule/deliver these specials (except for the 150 minutes per week of physical education/health/safety), the manner in which some of these specials are presently scheduled provides the contractual preparation time necessary for elementary classroom teachers.¹

As part of the budget process for the 2005-06 SY, efficiencies were realized in the delivery of elementary art, physical education and music. This resulted, for the first time, in several buildings sharing staff in these areas.

Presently, all of the instructional time allocated for art, vocal music, and physical education in grades K-5 and library in grades K-2, as well as 30 minutes of the 45-minute Spanish class in grades 3, 4, and 5 provide contractual preparation time for elementary classroom teachers. Project Ahead, Enrichment, and instrumental music are pullout programs and, therefore, do not provide preparation time for classroom teachers.

What follows are analyses of the elementary Spanish, Project Ahead, instrumental music, and Enrichment programs. Presently, the number of FTEs for Spanish in grades 3, 4, and 5, is determined by the number of sections in each elementary school that need to be served at those grade levels. The

¹ Elementary school teachers will have a preparation period each time their entire class is covered by a special teacher, and special teachers will continue to be scheduled so as to permit elementary teachers to receive no less than three (3) such preparation periods weekly. Elementary teachers are to receive not less than one-hundred-sixty (160) minutes per week based upon a five (5) day workweek. Any non-teaching time beyond the one-hundred-sixty (160) minutes may be assigned by the principals for CST meetings, parent conferences, grade level meetings and administrative meetings.

number of FTEs for Project Ahead in grades 1-5, for instrumental music in grade 5, and for Enrichment in grades 4 and 5 is determined by the number of students in each building that need to be served. The scheduling of these specials is impacted by the individual scheduling needs of each elementary school, the availability of district staff to serve the schools at specific times of day, and the need to provide lunch time, travel time, and preparation time for the specialists.

Resources Provided by the District

Presently there are 3 world language FTEs serving all students (1,404) in grades 3, 4, and 5 in five elementary schools, 8.6 Project Ahead FTEs (some of whom are funded from State and federal aid) serving 493 students that represent 913 units of service in grades 1-5 in six elementary schools, 2 instrumental music FTEs serving 372 students in grade 5 in five elementary schools, and 3 Enrichment FTEs serving 310 students in grades 4 and 5 in five elementary schools.

ANALYSES

WORLD LANGUAGE (SPANISH)

Possible Net Savings from Alternative Delivery of World Language in Grades 3, 4, 5

- **Is elementary world language instruction required by State mandate?**
Presently, the *New Jersey Core Curriculum Content Standards for World Languages* express an unfunded mandate that a world language experience be offered to students in grades K-12. Recently, the State Board of Education adopted a high school graduation requirement for world languages of 5 credits (one year). Most college bound students, however, continue to take at least two/three years of a language in order to fulfill college admission requirements.
- **What is the scope of our present District elementary world language program?**
Three certified world language teachers teach Spanish in grades 3, 4, and 5 to all students (1,404) for 45 minutes once a week. When the elementary program was first implemented in our District, the weekly time allotted for instruction was 60 minutes (two 30 minute sessions) per week, and the ultimate goal was to expand the program to grades 1 and 2. Because of financial constraints, this expansion has not taken place and the time allotted to instruction has been decreased from 60 minutes to 45 minutes in grades 3, 4, and 5. Spanish teachers are teaching between 24 and 25 45-minute classes per week.
- **Are there alternative ways to offer an elementary Spanish program?**
Yes, there are two alternatives:
 - ✓ *Alternative #1: Implement a video-based program as the Spanish curriculum, which is presented by a classroom teacher who learns the language along with the students.*
In this model, the video-based program is used as a stand-alone curriculum, and the teacher, who doesn't speak Spanish, serves as a facilitator. Because they are learning the language together, the students typically progress in the language only as far as the teacher does. Teachers in this type of program report students' interactive language skills are very limited, but they gain some comprehensible input, which is necessary, especially at the beginning levels. Teachers also report that students show some understanding of syntax and basic grammar, reading ability, and vocabulary development in the target language and increased confidence and motivation to continue studying languages.
 - ✓ *Alternative #2: Implement a video-based program as the Spanish curriculum which is presented by a classroom teacher who learns the language along with the students and have it reinforced on a weekly basis by a certified Spanish language teacher.*
This alternative differs from alternative #1 previously described only in that it provides important additional Spanish reinforcement from a certified Spanish teacher. For example, in the primary grades in the Toms River School System, a foreign language specialist regularly reinforces the

videos that the classroom teachers have already shown or expands on the video lesson. Classroom teachers are present during the Spanish teacher's lesson and learn Spanish along with their students.

- **What does the research say about the advantages and disadvantages of video-based Spanish programs?**

{Resources: *Curriculum/Technology Quarterly*, fall 2003, volume 13, number 1 *Elementary Schools Turn to Video-Based Foreign Language Instruction* by Nancy Rhodes and Ingrid Pufahl
Center for Applied Linguistics Digest, December 2003, *Teaching Foreign Languages to Children Through Video* by Nancy Rhodes and Ingrid Pufahl}

While educators agree that having a fluent speaker as the teacher is the best way to teach a foreign language to children in a classroom setting, a video-based program could still be used. However, the disadvantages of such programs seem to outweigh the advantages:

Advantages

Video-based programs:

- ✓ Are a familiar medium that appeal to children
- ✓ Can be used effectively as a motivational tool
- ✓ Appeal to different learning styles
- ✓ Develop listening comprehension skills by exposing children to native speakers with a variety of accents
- ✓ Use visual imagery, which may enhance student learning
- ✓ Provide access to aspects of the culture not usually available to teachers

Disadvantages

Video-based programs:

- ✓ Do not foster interaction among students and between students and the teacher, an important component of foreign language instruction
- ✓ Do not produce the desired results to generate proficient speaking skills which open-ended questions produce
- ✓ May be boring and cause passive learning
- ✓ Lack the ability to provide feedback and reinforcement if the teacher does not speak the language
- ✓ Do not allow teacher control over content and vocabulary
- ✓ May give a false sense of how much language students are learning
- ✓ Do not comprehensively address the *Core Curriculum Content Standards*
- ✓ Do not articulate with long-sequence programs (middle and high school)
- ✓ Cannot assess student performance or reinforce correct pronunciation, semantics, and syntax
- ✓ Require elementary classroom teachers to be responsible for preparing to teach an additional subject area and receive training to teach it

- **What other issues must be considered in implementing a video-based Spanish program in our District?**

- ✓ Since our present third and fourth grade students have had instruction provided by a certified Spanish teacher, would we continue with our present model in grades 4 and 5 next year and introduce a video program in grade 1, or grade 2, or grades 1 and 2?
- ✓ Presently, 30 minutes of Spanish instruction is used to help to meet the contractual prep time for regular classroom teachers in grades 3, 4, and 5. Another means of providing prep time, such as using 30 minutes of library time in grades 3, 4, and 5 would need to be considered or there would be a considerable cost to paying for loss of prep time.
- ✓ Presently we know of no other school district in Essex County using a video-based foreign language program at the elementary level as the sole means of instruction in grades 2-5. What follows is a description of the elementary world language programs in neighboring districts:
 - ❑ Livingston offers Spanish language instruction in grades K-5 for 40 minutes per week. Five full time and one part time certified Spanish teachers teach all classes. In K-2 the

Spanish teacher uses a video series to supplement the instruction. No video programs are used in grades 3-5.

- ❑ West Orange offers Spanish language instruction in grades K-5 for 30-40 minutes per week. In grades K and 1 the regular classroom teacher provides instruction with the use of a video program and the support of the certified Spanish teacher assigned to the building. In grades 2-5 certified Spanish teachers teach all classes for two sessions per week for a total of 75 minutes.
- ❑ Montclair offers Spanish and French language instruction in grades K-5. The program varies by elementary school. Ten certified world language teachers teach all classes and no video programs are used.
- ❑ Summit offers Spanish language instruction in grades 1-5. Certified Spanish teachers teach all classes and no video programs are used.
- ❑ Millburn offers Spanish language instruction in grades 2-5: 60 minutes per week (three 20 minute sessions) in grades 2 and 3 and 90 minutes per week (three 30 minutes sessions) in grades 4 and 5. Certified Spanish teachers teach all classes and no video programs are used. A video program originally used in grades 1 and 2 has been eliminated because it was not found to be valuable in advancing the communicative skills of students. There are five certified world language teachers, one assigned to each elementary school.

It is important to note that the published video programs presently on the market are geared toward primary age children and are intended to be implemented in kindergarten or in grade 1. Therefore, if a video program were to be implemented in our District it would be best to implement it beginning in grade 1. Since our District offers only a half-day kindergarten program, it would not be advisable to offer it as part of our half-day kindergarten program.

- **How much does it cost to implement our present elementary Spanish program and how much would a video-based Spanish program cost?**

Using the average teacher salary including benefits (\$84,000) as a cost basis, our present program costs approximately \$252,000 plus \$2,500 in materials. The video-based Spanish programs that would be considered for implementation in our District would cost approximately \$1,500 for initial implementation in each grade 1 and grade 2 classroom in each school. It would be advisable to have copies of the program for each teacher so that teachers could have the flexibility of offering this instruction at the most appropriate time in their instructional week. There would also be a cost associated with teacher training. After the initial start up cost, in subsequent years there would be a cost for consumable materials for each grade level in each school of approximately \$500 per grade level.

Total cost for initial implementation in grades 1-2 is \$72,000.

• Clinton	9 video sets	\$13,500
• Marshall	13 video sets	\$19,500
• Seth Boyden	8 video sets	\$12,000
• So. Mountain	8 video sets	\$12,000
• Tuscan	9 video sets	\$15,000

The \$72,000 initial cost could be reduced if teachers were asked to share video sets, and/or if the program were phased in the first year in grade 1 and the second year in grade 2. However, once again we need to consider if our present program will be phased out by grade level or completely eliminated.

What would be the impact if the decision were made to eliminate the three elementary World Language teachers?

- A video program could be implemented in grades 1 and 2 and there would be no program in grades 3-5;
- An opportunity would be lost to offer Spanish instruction at a time when children can most easily and naturally acquire a second language and appreciate cultural differences;
- Our school district would be at risk in becoming less attractive than other districts since we know of not other neighboring district not offering elementary world language instruction;
- Our school district may run the risk of begin reprimanded by the State for not complying with the *Core Curriculum Content Standards* which express a mandate to offer world language at the K-5 level; and
- If the three world language positions were to be reinstated at a later date, it might be difficult to find suitable replacements given the status of today's job market.

CONCLUDING SUMMARY

Based on the impact the elimination of the elementary Spanish program would have on the District, it is not recommended that any cuts be made to this program. However, if the financial situation results in considering cuts to this program, it is the professional opinion of the present supervisor of World Languages, the Interim Supervisor of World Languages, and the Assistant Superintendent for Curriculum and Instruction that a video program would only offer marginal benefits to students educationally. These programs are only suitable for grades 1 and 2, would not accelerate our program in any way, and may be detrimental to students in their pronunciation and understanding of Spanish in the absence of a certified world language teacher. It would be more advisable to have no program at all rather than introduce a video program and require the general education primary classroom teachers to prepare more and add more to their instructional day. If the present elementary Spanish program were eliminated and not replaced by a video program, there would be a savings to the District of \$254,500.

PROJECT AHEAD

Possible Net Savings from Alternative Delivery of Project Ahead in grades 1-5

- **Is elementary Project Ahead required by State mandate?**
Title 18A:35-4.9, Promotion and remediation policies and procedures, states that districts must adopt policies and procedures for remediation and notify parents where appropriate. Additionally, *Title 6A:8-4.3, Accountability*, states that district boards of education shall provide appropriate instruction to improve skills and knowledge for students performing below the established levels of student proficiency in any content area either on the Statewide or local assessments.
- **What is the scope of our present District elementary Project Ahead program?**
8.6 FTEs are presently devoted to Project Ahead instruction in grades 1-5 in our elementary schools and are assigned as follows:

School	FTE Allocation
Clinton	2.0
Jefferson	1.0
Marshall	.7
South Mountain	.7
Seth Boyden	2.7
Tuscan	1.5
Total	8.6 FTE

The unduplicated (493) and duplicated (914.5) count of students being served in each school as of this date can be found on **Attachment A**. Students who meet the criteria for Project Ahead are provided approximately 90 minutes per week of instruction in language arts and 60 minutes per week of instruction in mathematics. A copy of a Project Ahead report recently submitted to you by Dr. Barker and me is **Attachment B**.

- **Are there alternative ways to offer an elementary Project Ahead program?**

Yes, there are three alternatives:

- ✓ *Alternative #1: Replace the pullout program with a push-in program.*

- ✓ *Alternative #2: Replace the pullout program with an extended day program.*

In an extensive report provided to the Board of Education in December 2003, an analysis of the relative cost efficiency of the current pullout model for Project Ahead in the elementary schools versus a push-in or extended day model at the elementary school was analyzed. An update of a portion of that the budget analysis is **Attachment C**. However, the updated version demonstrates the same results as were demonstrated in 2003. The push-in model is more costly than the present pullout model because it requires additional staff to push-in to all classes where Project Ahead students are assigned. The extended day model, although less costly, creates the need for an inordinate number of staff, and presents some serious scheduling and transportation implications. This model could also result in costing a great deal more in Title I schools, since the Title I mandate only allows substituting an after school program for a program offered during the school day when the majority of students are willing to take advantage of it.

- ✓ *Alternative #3: Offer Project Ahead solely in the two Title I elementary schools (Clinton and Seth Boyden).*

This alternative would save \$327,600 by eliminating 3.9 Project Ahead FTEs at non-Title I schools (Jefferson, Marshall, South Mountain, and Tuscan). However, students with remedial needs in the non-Title I schools would need to be served by the general education classroom teacher.

- **How much does it cost to implement our present elementary Project Ahead Program and how much does our present Title I, DEPA and State aid funding cover?**

The cost of 8.6 FTEs for elementary Project Ahead using the average teacher salary including benefits (\$84,000) as a cost basis is \$722,400.

	Total Federal/State Funds Received by the District for Remedial Services	Amount from the Total of Federal/State Funds Used for Elementary Project Ahead
NJ Instructional Supplemental Aid	\$295,059	\$206,780 (various elem. schools)
Demonstrably Effective Program Aid (DEPA)	157,968	157,968 (at Seth Boyden)
Title I monies	168,466	68,590 (at Clinton & Seth Boyden)
TOTAL	\$621,493	\$433,338

Of the total cost for Elementary Project Ahead of \$722,400, 60% (\$433,338) is covered through state and federal funds and 40% (\$289,062) from the local operating budget. Of the total 8.6 FTEs for elementary Project Ahead, 5.2 FTEs are funded from this aid and 3.4 FTEs from local tax dollars.

- **What would be the impact if a decision were made to eliminate Project Ahead teachers from non-Title I schools?**
 - ✓ The general education classroom teacher would be responsible for meeting the needs of these students. This could be accomplished successfully if class size were significantly reduced at the elementary level. However, this would result in increased costs for additional staff and would require additional classroom space, which is not available.
 - ✓ Our schools would be at greater risk of not meeting the AYP requirement of NCLB.

CONCLUDING SUMMARY

After a careful examination of the financial and space implications of the alternative models, it does not seem feasible to recommend any alternative delivery models for elementary Project Ahead at this time that would realize savings for the District. The push-in model is more costly than our present model because it requires additional staff. The extended day model is not a feasible option because of the difficulty in finding enough teachers willing to provide after school instruction, the transportation issues, and the scheduling conflicts with other after school activities. Additionally, the Title I mandate does not permit substituting an after school program for a program offered during the regular school day unless the majority of students will take advantage of it. The alternative of eliminating Project Ahead teachers in non-title I schools and garnering a savings of \$327,600 would require a reduction in elementary class size so that teachers could meet the needs of these students successfully in their general education class. This would require more general education classroom space and staff than are available.

INSTRUMENTAL MUSIC

Possible Net Savings from Alternative Delivery of Instrumental Music in grades 5

- **Is elementary instrumental music required by State mandate?**
No, it is an elective program.
- **What is the scope of our present District elementary instrumental music program?**
Two certified music teachers are presently devoted to instrumental music instruction in grade 5 in our elementary schools and are assigned as follows:

School	FTE Allocation
Clinton	.4
Jefferson	.4
South Mountain	.4
Seth Boyden	.4
Tuscan	.4
Total	2.0

77% of the students (372) in grade 5 are receiving instrumental music instruction. The number of students being served in each school is as follows:

School	# of Grade 5 Students Electing Instrumental Music	
	Band	Strings
Clinton	29	24
Jefferson	58	45
Seth Boyden	37	26
South Mountain	43	26
Tuscan	46	38
Total	213	159
Grand Total	372	

Students electing instrumental music are pulled out of their regular classroom instruction for 25 minutes once a week for lessons. On "lesson day" in each building there is also a band/orchestra rehearsal during the lunch period.

- **Are there alternative ways to offer an elementary instrumental music program?**

- ✓ Yes, there is one alternative. An instrumental music program could be offered at the beginning of the day or the end of the day. This alternative carries with it the following issues:
 - ❑ A minimum of three hours each day e.g. 3:30 p.m. – 6:30 p.m., would have to be scheduled at each school to accommodate student lessons, which would result in most students having to go home and come back for a lesson.
 - ❑ It would be unlikely that every student who wants to take lessons could be accommodated.
 - ❑ There will be an additional transportation burden on parents and walkers may not have the assistance of a crossing guard at certain times of the day.
 - ❑ There would be no time for a band/orchestra ensemble rehearsal, which is presently offered, in our existing schedule.
 - ❑ Under this alternative delivery plan there would be little or no cost savings unless each student were assessed a fee to pay for the teacher. This would be in addition to the rental fee of approximately \$150 for the first year and a monthly rental fee thereafter.
 - ❑ It would be difficult to find anyone to teach before or after school, since private teachers command \$25-\$50/half hour for individual private lessons. These teachers would also have to be compensated to handle the rentals and all of the other administrative aspects of the program.
 - ❑ Instrumental music would compete with other after school activities.

- **How much does it cost to implement our present elementary instrumental music program?**

The cost of 2 FTEs for elementary instrumental music using the average teacher salary including benefits (\$84,000) as a cost basis is \$168,000.

- **What would be the impact if a decision were made to eliminate the grade 5 program in its entirety?**

- ✓ The 2.0 FTE savings for 2006-2007 would more than likely not be sustainable because in 2007-2008 there may be a greater number of students electing beginning instrumental music in grade 6 than presently. This would cause major staffing and scheduling problems at the middle school. Presently, continuing grade 6 students are placed in instrumental groups of 12 to 15 students. If all grade 6 students are beginners, the group size would need to be smaller, thus requiring more staff and more frequent pullouts during the school day. Even if larger groups of beginners were scheduled e.g. 20 flutes, this group could only receive enough individual attention if two instructors were assigned to each group.
- ✓ Teaching space would become a problem at the middle schools if there were an increased enrollment in the grade 6 instrumental music program. Each middle school has one large rehearsal room. The rest of the lessons are given in offices and storage rooms. Each school could only accommodate three teachers at one time, but even that would be difficult with an increase in students.
- ✓ Deferring instrumental music until grade 6 will decrease the number of students who begin instrumental music in the middle school and negatively impact the CHS instrumental music program.
- ✓ The elimination of instrumental music in grade 5 would have a greater impact on students of low socioeconomic status who may not be able to pursue private lessons.
- ✓ The South Orange and Maplewood School District would be noticeably different from neighboring school districts that all have elementary instrumental music programs (Millburn starts strings in grade 4 and band in grade 3; West Orange and Livingston start both band and strings in grade 4). Our District would have the distinction of being the only district in the state where instrumental music begins in grade 6.

CONCLUDING SUMMARY

Although the elimination of the grade 5 instrumental music program is not being recommended, if the financial situation in the district requires cuts in this area, a savings of \$168,00 could be realized with the elimination of this program. More than likely, this savings would probably be sustainable for one year only as students seek to begin their instrumental music instruction in grade 6 instead of grade 5, thus requiring additional staff in grade six in 2007-2008. The elimination of grade 5 would also have a negative effect on both the middle and high school instrumental music performance programs.

ENRICHMENT

Possible Net Savings from Alternative Delivery of Enrichment in grades 4 and 5

- **Is an elementary Enrichment program required by State mandate?**
Title 6A:8-3.1 Curriculum and Instruction states that district boards of education shall be responsible for identifying gifted and talented students and shall provide them with appropriate instruction adaptations and services.
- **What is the scope of our present District elementary Enrichment program?**
 - ✓ Three certified teachers are presently devoted to Enrichment instruction in grades 4 and 5 in five of our elementary schools.
 - ✓ There are 310 students enrolled in the Enrichment Program in grades 4 and 5. Enrichment data for the past five years is attached for your information (**Attachment D**).
- **Are there alternative ways to offer an elementary Enrichment program?**
 - ✓ *Alternative #1: Replace the pullout program with a push in program.*
 - ✓ *Alternative #2: Replace the pullout program with an extended day program.*
In an extensive report provided to the Board of Education in December 2003, an analysis of the relative cost efficiency of the current pullout model for Enrichment in the elementary schools versus a push-in or extended day model at the elementary school was completed. However, the result is the same as in 2003. The push-in model is more costly than the present pullout model because it requires additional staff to push-in to all classes where Enrichment students are assigned. The extended day model carries with it issues such as transportation, finding teachers willing to provide after school instruction, and competition with other after school activities.
- **How much does it cost to implement our present elementary Enrichment program?**
The cost of 3 FTEs for elementary Enrichment using the average teacher salary including benefits (\$84,000) as a cost basis is \$252,000.
- **What would be the impact if a decision were made to eliminate the Enrichment program in its entirety?**
 - ✓ Classroom teachers will have to further differentiate their classroom instruction in order to meet state regulations and professional development on differentiation would have to be expanded.
 - ✓ The general education classroom teacher would be responsible for meeting the needs of these students. This could be accomplished if class size were significantly reduced at the elementary level, which would result in increased costs for additional staff and would require additional classroom space that is presently not available.
 - ✓ Our school district would be at risk in becoming less attractive than other districts.

CONCLUDING SUMMARY

After a careful examination of the financial and space implications of the alternative models, at this time it does not seem feasible to recommend any alternative delivery model for Enrichment that would realize savings for the District. The push-in model is more costly than our present model because it requires additional staff. The feasibility of implementing the extended day model is very limited because this model carries with it issues of transportation, finding teachers willing to provide after school instruction, and competition with other after school activities. The alternative of eliminating Enrichment and garnering a savings of \$252,000 would require a reduction in elementary class size so that teachers could meet the needs of these students successfully in their general education class. This would require more general education classroom space and staff than are available.

ATTACHMENT A

Project Ahead -- Student Count By Area						
As of 01/26/2006						
School	Grade	Math Only (x1.0)	Lang Arts Only (x1.5)	Math & Lang Arts (x2.5)	Total Units of Service	Unduplicated Count
Clinton	01	3	4	10	34.0	17
		3.0	6.0	25.0		
	02	9	13	10	53.5	32
		9.0	19.5	25.0		
	03	10	4	17	58.5	31
		10.0	6.0	42.5		
	04	3	3	8	27.5	14
		3.0	4.5	20.0		
	05	5		4	15.0	9
		5.0	0.0	10.0		
Total		30	24	49	188.5	103
		30.0	36.0	122.5		
Jefferson	03	15	5	10	47.5	30
		15.0	7.5	25.0		
	04	10	1	9	34.0	20
		10.0	1.5	22.5		
	05	3	7	5	26.0	15
		3.0	10.5	12.5		
Total		28	13	24	107.5	65
		28.0	19.5	60.0		
Marshall	01	2	3	7	24.0	12
		2.0	4.5	17.5		
	02	6	15	11	56.0	32
		6.0	22.5	27.5		
Total		8	18	18	80.0	44
		8.0	27.0	45.0		

Seth Boyden	01	1	9	16	54.5	26
		1.0	13.5	40.0		
	02	8	5	20	65.5	33
		8.0	7.5	50.0		
	03	6	4	18	57.0	28
		6.0	6.0	45.0		
	04	4	5	18	56.5	27
		4.0	7.5	45.0		
	05	2	9	18	60.5	29
2.0		13.5	45.0			
Total		21	32	90	294.0	143
		21.0	48.0	225.0		
South Mountain	01	1	6	10	35.0	17
		1.0	9.0	25.0		
	02	3	2	3	13.5	8
		3.0	3.0	7.5		
	03	6	3	4	20.5	13
		6.0	4.5	10.0		
	04	4		2	9.0	6
		4.0	0.0	5.0		
	05	5			5.0	5
5.0		0.0	0.0			
Total		19	11	19	83.0	49
		19.0	16.5	47.5		
Tuscan	01	1	4	10	32.0	15
		1.0	6.0	25.0		
	02	4	4	5	22.5	13
		4.0	6.0	12.5		
	03	8	8	13	52.5	29
		8.0	12.0	32.5		
	04	4	5	6	26.5	15
		4.0	7.5	15.0		
	05	7	4	6	28.0	17
7.0		6.0	15.0			
Total		24	25	40	161.5	89
		24.0	37.5	100.0		

SCHOOL DISTRICT OF SOUTH ORANGE AND MAPLEWOOD, NEW JERSEY
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TO: Peter P. Horoschak
 Members of the Board of Education

FM: Patricia Barker and Jim Memoli

RE: Project Ahead Information

DATE: October 31, 2005

Project Ahead Mathematics/Language Arts is a support program that provides additional instructional opportunities for children in grades 1-8 who fall below the District's minimum level of proficiency in mathematics and language arts. Children are identified for Project Ahead based upon a careful review of their academic progress. In grades one, two and three Project Ahead is provided to students based on a review of multiple measures of performance that include information from the child's progress report and teacher recommendation. Students in grades four through eight receive Project Ahead services based on scores attained on the *Terra Nova*, *NJ ASK3*, *NJ ASK4*, *New Standards* and teacher recommendation. The number of students serviced is a function of the available resources. This analysis examines students who were in Project Ahead in the 2002-2003 academic year for grades 1 through 6.

The amount of instructional time and structure of the Project Ahead Program varies according to the grade level of the students. In the elementary schools, Project Ahead is a 90 minutes per week pullout program in Language Arts and a 60 minutes per week pullout program in Mathematics. In the middle schools, Project Ahead is a regularly scheduled class, with two organizational options. Students who qualify for both Mathematics and Language Arts Project Ahead split the instructional time, receiving two classes (hours) of mathematics and two classes (hours) of language arts instruction weekly. Students identified in need of mathematics or language arts have four classes (hours) per week of Project Ahead Mathematics or Language Arts.

GRADES 1-6 PROJECT AHEAD DATA

Table 1 shows the Project Ahead mathematics enrollment in 2002-2003 for grades 1-6. Using that same cohort of students, it shows how many of those students exited Project Ahead after one year of service (June 2003), how many exited after two years of service (June 2004), how many students exited in June 2003 and reentered in September 2004 (recidivism), and how many students remained in the program after 3 years (June 2005). The table also displays the total Project Ahead mathematics enrollment by grade for the 2002-2003 school year. For example, in 2002-2003 there were 107 students in Project Ahead in grade 3. Fifty-five of these students exited after one year in June 2003, 18 after two years in June 2004, 13 students exited in June 2002 and reentered in September 2004, and 21 students from 2002-2003 still remained in the program by June 2005. **Table 2** shows the same information by percentages.

Mathematics - Project Ahead

Table 1

Grade	Math Unduplicated Count*	Exit After One Year June '03	Exit After Two Years June '04	Exit After Two Years (non-consecutive) (02-03, 04-05) Recidivism	Remaining After Three Years June '05	Oct 15, 2002 Enrollment**
01	106	44	21	13	28	467
02	118	43	23	7	45	499
03	107	55	18	13	21	477
04	89	41	21	7	20	456
05	82	38	13	12	19	508
06	49	9	11	7	22	500
Total**	551	230	107	59	155	2907

*2002-2003 start of the cohort; it includes grades 1 - 6th (number of bodies).

Table 2

Grade	Percent of Math Project Ahead Enrollment	Exit After One Year June '03	Exit After Two Years June '04	Exit After Two Years (non-consecutive) (02-03, 04-05) Recidivism	Remaining After Three Years June '05	Percent of Oct. 15th Enrollment
01	19.2%	41.5%	19.8%	12.3%	26.4%	22.7%
02	21.4%	36.4%	19.5%	5.9%	38.1%	23.6%
03	19.4%	51.4%	16.8%	12.1%	19.6%	22.4%
04	16.2%	46.1%	23.6%	7.9%	22.5%	19.5%
05	14.9%	46.3%	15.9%	14.6%	23.2%	16.1%
06	8.9%	18.4%	22.4%	14.3%	44.9%	9.8%
Total**	100.0%	41.7%	19.4%	10.7%	28.1%	19.0%

*2002-2003 start of the cohort; it includes grades 1 - 6th (number of bodies).

Discussion: 61% of Project Ahead students exit based on the exit criteria (district assessments, standardized test scores, teacher recommendation) after two years of Project Ahead mathematics. The largest number of student exits (41.7%) from Project Ahead is after one year of Project Ahead services.

As was previously mentioned, Project Ahead is a regularly scheduled class in the middle schools with two organizational options. Students who qualify for both Mathematics and Language Arts Project Ahead split the instructional time, receiving two hours of Project Ahead Mathematics instruction weekly. Students identified in need of mathematics only have four hours of Project Ahead Mathematics weekly.

Table 3 shows the Project Ahead language arts enrollment in 2002-2003 for grades 1-6. Using that some cohort of students, it shows how many of those students exited Project Ahead after one year of service (June 2003), how many exited after two years of service (June 2004), how many students exited in June 2003 and reentered in September 2004, and how many students remained after 3 years (June 2005). The table also displays the total Project Ahead language arts enrollment by grade for the 2002-2003 school year. For example, in 2002-2003 there were 110 students in Project Ahead in grade 3. Seventy-two of these students exited after one year in June 2003, 22 after two years in June 2004, 9 students exited in June 2003 and reentered in September 2004, and 7 students from 2002-2003 still remained in the program in 2004-2005. **Table 4** shows the same information by percentages.

Language Arts – Project Ahead

Table 3

Grade	Language Arts Unduplicated Count*	Exit After One Year June '03	Exit After Two Years June '04	Exit After Two Years (non-consecutive) (02-03, 04-05) Recidivism	Remaining After Three Years June '05	Oct 15, 2002 Enrollment**
01	149	59	34	11	45	467
02	191	107	38	6	40	499
03	110	72	22	9	7	477
04	70	41	17	7	5	456
05	46	24	5	4	13	508
06	25	8	8	2	7	500
Total**	591	311	124	39	117	2907

*2002-2003 start of the cohort; it includes grades 1 - 6th (number of bodies).

Table 4

Grade	Percent of Language Arts Project Ahead Enrollment	Exit After One Year June '03	Exit After Two Years June '04	Exit After Two Years (non-Consecutive) (02-03, 04-05) Recidivism	Remaining Three Years June '05	Percent of Oct. 15 th 2002 Enrollment
01	25.2%	39.6%	22.8%	7.4%	30.2%	31.9%
02	32.3%	56.0%	19.9%	3.1%	20.9%	38.3%
03	18.6%	65.5%	20.0%	8.2%	6.4%	23.1%
04	11.8%	58.6%	24.3%	10.0%	7.1%	15.4%
05	7.8%	52.2%	10.9%	8.7%	28.3%	9.1%
06	4.2%	32.0%	32.0%	8.0%	28.0%	5.0%
Total**	100.0%	52.6%	21.0%	6.6%	19.8%	20.3%

*2002-2003 start of the cohort; it includes grades 1 - 6th (number of bodies).

Discussion: 74% of Project Ahead students exit based on the exit criteria (district assessments, standardized test scores, teacher recommendation) after two years of Project Ahead language arts. The largest number of student exits (52.6%) from Project Ahead is after one year of Project Ahead services.

As was previously mentioned in this report, Project Ahead is a regularly scheduled class in the middle schools with two organizational options. Students who qualify for both Mathematics and Language Arts Project Ahead split the instructional time, receiving two hours of Project Ahead Language Arts instruction weekly. Students identified in need of language arts only have four hours of Project Ahead Language Arts weekly.

Conclusion: Overall, the Project Ahead support program is effective in advancing students to the point where they no longer require remedial assistance in grades 1 through 6. 61% of the students in Mathematics Project Ahead and 74% of the students in Language Arts Project Ahead have progressed far enough in 2 years to no longer require these services. Project Ahead also has a low recidivism rate in these grades as depicted in Figures 1 and 2. Figures 1 and 2 depict the recidivism rates that are low and range from 3% in grade 2 Language Arts to 10% in grade 4 Language Arts. And from 6% in grade 2 Mathematics to 16% in grade 5 Mathematics.

Figure 1.

Recidivism Rate Language Arts Grades 1-6

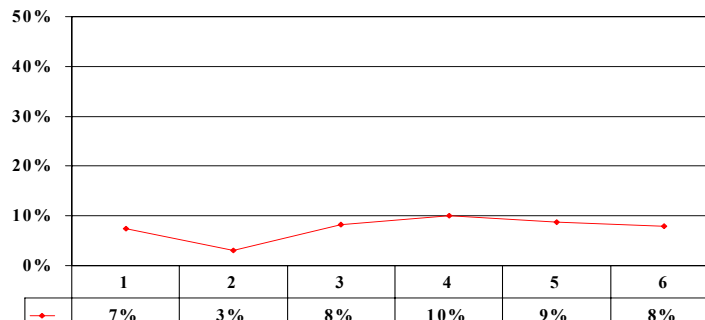
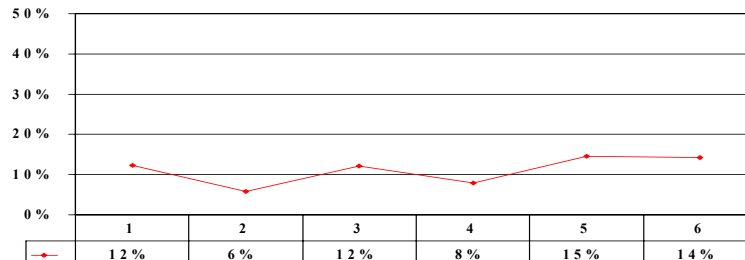


Figure 2.

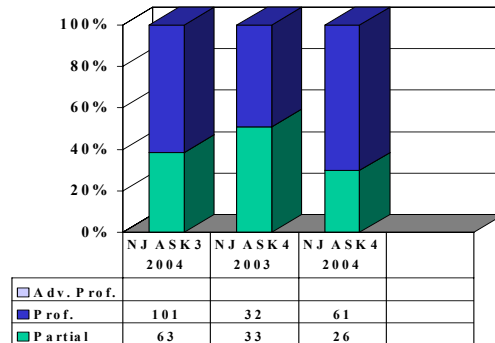
Recidivism Rate Mathematics Grades 1-6



Another measure that can be examined for the 2002-2003 cohort of Project Ahead students is their passing rate on the 3rd and 4th grade state assessments NJASK 3 and NJASK 4. Figures 3 and 4 depict these results in Language Arts and Mathematics.

Figure 3.

NJ ASK 3 & 4 Language Arts

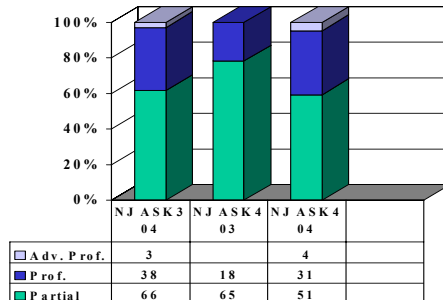


As NJ ASK3 was a new assessment there is data for 2004 only while NJ ASK4 has data for 2003 and 2004. This means that students who were in Project Ahead in grade 2 in 2002-2003 took the grade 3 assessment in 2004 while students in grade 3 and grade 4 in 2002-2003 took the grade 4 assessment in 2003 and 2004 respectively. Each of these groups is unique.

62% of the 2002-2003 grade 2 cohort of Project Ahead Language Arts students were Proficient on NJ ASK3 Language Arts when they took it in grade 3 (2003). 49% of the 2002-2003 grade 4 cohort of Project Ahead Language Arts students were Proficient on NJ ASK4 Language Arts when they took it in grade 4 (2003). 70% of the 2002-2003 grade 3 cohort of Project Ahead Language Arts students were Proficient on NJ ASK4 Language Arts when they took it in grade 4 (2004).

Figure 4.

NJ ASK 3 & 4 Mathematics



38% of the 2002-2003 grade 2 cohort of Project Ahead Mathematics students were Proficient on NJ ASK3 Mathematics when they took it in grade 3 (2003) with 3 of these students scoring in the Advanced range. 22% of the 2002-2003 grade 4 cohort of Project Ahead Mathematics students were Proficient on NJ ASK4 Mathematics when they took it in grade 4 (2003). 41% of the 2002-2003 grade 3 cohort of Project Ahead Language Arts students were Proficient on NJ ASK4 Mathematics when they took it in grade 4 (2004) with 4 of these students falling in the Advanced range.

These findings indicate that Project Ahead is more successful in the Language Arts area than in the Mathematics area when looking at the passing rate on state assessments. Following are some recommendations for the program in mathematics:

- Project Ahead Program should be examined to determine if the passing rate in mathematics could be improved;
- The materials used in the mathematics Project Ahead program should be reviewed;
- The instructional strategies used in this program should be analyzed;
- More professional development in the area of improving mathematics skills may be needed for the Project Ahead mathematics teachers and;
- The amount of time devoted to Project Ahead mathematics may need to be adjusted so that it is in line with the time allocated for Language Arts.

This is an important finding as mathematics continues to present challenges to students on the GEPA and the HSPA where the passing rate is lower for all students in mathematics than it is in Language Arts. Improving supplemental instruction at these early grade levels may increase achievement in mathematics in the later grades.

C: COC

Table 1 illustrates our current pullout model of grades 1-5 Project Ahead.

TABLE 1

Current Model	Grade Level	Weekly Time	Number of FTEs (1 FTE = \$84,000)	Number of Classrooms
Pullout	1-5	30 minutes math 90 minutes language arts	8.6 (\$722,400)	6

Total Cost of Staff: \$722,400

Tables 2 and 3 illustrate alternative models for grades 1-5 Project Ahead.

TABLE 2

Alternative Model	Grade Level	Weekly Time	Number of FTEs (1 FTE = \$84,400)	Number of Classrooms
Push-in	1-5	30 minutes math 90 minutes language arts	13 (\$1,092,000)	N/A

Remarks: This is more costly than our current model.

Total Cost of Staff: \$1,092,000

TABLE 3

Alternative Model	Grade Level	Weekly Time	Number of FTEs	Number of Classrooms
Extended Day	1-5	Two one hour sessions	228 hours per week (\$9,120 per week)	N/A

Total Cost of Staff: \$328,320 (\$9,120 x 36 weeks)

Remarks:

- Additional costs will be incurred for a Project Ahead program during the school day since Title I mandates that such a program be available if the majority of students elect not to take advantage of the extended day program.
- This model requires an in ordinate number of after school staff (114 classes of students with 8 per class twice a week) and has major contractual, budget, transportation, and scheduling implications.
- This is more costly than our current model if it is in addition to our in school Title I program.

ENRICHMENT DATA

2001 – 2006

(GRADES 4, 5)

**TOTAL ENROLLMENT IN ENRICHMENT
AS COMPARED TO TOTAL DISTRICT ENROLLMENT
(In grades where program is offered)**

Year	Grade	District	Enrichment	% of District
2001-2002 Enrichment	4	501	184	37%
	5	517	185	36%
	TOTAL	1018	369	36%
2002-2003 Enrichment	4	456	140	30%
	5	508	245	48%
	TOTAL	968	385	40%
2003-2004 Enrichment	4	456	159	35%
	5	459	211	46%
	TOTAL	915	370	40%
2004-2005 Enrichment	4	489	151	31%
	5	463	176	38%
	TOTAL	952	327	34%
2005-2006 Enrichment	4	438	113	26%
	5	484	197	41%
	TOTAL	922	310	34%

TOTAL ENROLLMENT BY GENDER

Year	Female	Male	Total
2001-2002 Enrichment	172 (47%)	197 (53%)	369
2002-2003 Enrichment	180 (47%)	205 (53%)	385
2003-2004 Enrichment	177 (48%)	194 (52%)	371
2004-2005 Enrichment	163 (50%)	164 (50%)	327
2005-2006 Enrichment	155 (50%)	155 (50%)	310

TOTAL ENROLLMENT BY ETHNICITY

Year	Black	White	Other	Total
2001-2002 Enrichment	85 (23%)	263 (71%)	21 (6%)	369
2002-2003 Enrichment	92 (24%)	261 (68%)	32 (8%)	385
2003-2004 Enrichment	90 (24%)	253 (68%)	27 (8%)	370
2004-2005 Enrichment	75 (23%)	222 (68%)	30 (9%)	327
2005-2006 Enrichment	69 (22%)	210 (68%)	31 (10%)	310

TOTAL ENROLLMENT BY SUBJECT AREA

YEAR	# OF STUDENTS IN LA	# OF STUDENTS IN MATH	# OF STUDENTS IN LA AND MATH
2001-2002 Enrichment	52	78	239
2002-2003 Enrichment	56	98	231
2003-2004 Enrichment	78	100	192
2004-2005 Enrichment	75	112	140
2005-2006 Enrichment	48	136	126

GENDER EQUITY

Year	Total Enrollment in Enrichment		Total District Enrollment (In grades where program is offered)	
	Female	Male	Female	Male
2001-2002 Enrichment	172 47%	197 53%	496 49%	522 51%
2002-2003 Enrichment	180 47%	205 53%	453 47%	511 53%
2003-2004 Enrichment	177 48%	194 52%	471 52%	441 48%
2004-2005 Enrichment	163 50%	164 50%	467 79%	488 51%
2005-2006 Enrichment	155 50%	155 50%	451 49%	471 51%

ETHNIC DIVERSITY

Year	Total Enrollment in Enrichment			Total District Enrollment (In grades where program is offered)		
	B	W	N/O	B	W	N/O
2001-2002 Enrichment	85 23%	263 71%	21 6%	507 50%	433 43%	78 7%
2002-2003 Enrichment	92 24%	261 68%	32 8%	469 48%	410 43%	85 9%
2003-2004 Enrichment	90 24%	253 68%	27 8%	437 48%	408 45%	67 7%
2004-2005 Enrichment	75 23%	222 68%	30 9%	476 50%	412 43%	67 7%
2005-2006 Enrichment	69 22%	210 68%	31 10%	449 49%	389 42%	84 9%