

1. statement of need

Engineering, Project Management



1. Statement of Need It may surprise educators to find that in a class that has a range of abilities, it is the most able, rather than the least able, who will learn less new material than any other group. How does this happen? Mostly because the meaning of the two words teach and learn are accidentally confused. With gifted students, the reality is that they already know a significant amount of the curriculum a teacher is planning to teach, and they can learn new material in much less time than their age peers. When gifted students discover that they already know a lot of what the teacher or book will be covering, they have little choice but to dutifully go through the assigned curriculum, waiting and hoping for the rare times when there will be something new or challenging for them to learn. In one study, gifted elementary, middle and secondary students were asked if they were being challenged by their current coursework. " More than half of the gifted students reported that they were not challenged by their course work in language arts, math, and science" (Gallagher, 1998, p. 740). One way teachers can help gifted students is to differentiate the curriculum. Since many gifted students already have competency in many lessons, activities, or subjects, and could pass a test before the concept is discussed in class, it makes sense to give them a variety of material they could work on instead of covering things they already know. This project would provide students with higher level learning activities through software and material resources to increase the depth and breadth of their lessons.

2. Project Goals and Objectives: Goals A. To create a challenging learning environment in the classroom and the enrichment program. B. To define objectives and guarantee proficiency in basic curriculum. C. To allow gifted students to work

at their highest potential. Objectives A. Students will be pre-tested over content before actual lessons are taught. B. Students who pass the pre-test with a 90% will not be required to complete “ regular” lesson activities but instead will complete a higher level thinking activity based on the content being presented to the class. C. Students will develop project ideas that they are interested in or have the freedom to choose a project from a variety of activities the teacher offers. This project will relate to the curriculum’s main idea being taught. D. The gifted educator and classroom teachers will work collaboratively to assess students’ progress and evaluate students’ projects throughout the year. 3. Description of the Project Curriculum differentiation is a project that will allow 4th through 6th grade teachers to identify gifted students’ needs, develop and gain access to appropriate programs and curricula that correspond to those needs, and monitor student progress throughout the course of study. The teachers will pre-test students to find out what curricular modifications need to be made. Next, large group activities will be created that will reflect what all students need to learn, then small group activities will be created to allow a variety of instruction based on student’s individual needs. In small group activities, teachers will allow for individual options, open ended activities, and higher level thinking tailored for gifted students. The math and language arts teachers will work collaboratively with the gifted educator to create activities that are appropriate for gifted learners. The money from this grant would be utilized to buy materials to help teachers implement higher level activities. Some items that will be needed are books with math activities for higher grade levels, small groups of novels for students that would be more appropriate

for their reading level, and computer software for independent study. Some items can not be determined at this time, because this program is based on individual learning needs and the needs can not be determined until the time of implementation. The school will assume responsibility for the continuation and costs of the program for additional years. These costs will be primarily due to individual needs and implementation in first, second and third grades the following year.

4. Implementation Timetable

May 1999 — Fifth and Sixth grade Math and Language Arts teachers will observe 4th grade Language Arts teacher who has been exploring this idea with the gifted educator this year. We will all sit down and discuss the pros and cons of this year. Things that have worked and things we feel need to be changed.

August 1999 — Order Materials

September 1999 - Start with compacting the spelling curriculum in Language Arts and begin pre-testing in Math the first month of school. Create higher level activities through tic-tac-toe menus, which will enrich the Math and Language Arts curriculum for the first, half of the school year.

October-December 1999 — Implement pre-testing in Language Arts and Math (continue to include spelling). Allow students who pass pre-test to choose activities from tic-tac-toe menus or create project ideas for themselves. Evaluate students' progress and projects collaboratively.

December 1999 — Begin creating project ideas for the second, half of the school year. Collaboratively evaluate pros and cons of the program. Continue with pros and change cons to improve our program.

January — June 2000 — Continue differentiating gifted students' curriculum in Math and Language Arts using new project ideas and students' project ideas.

May 2000 — Discuss curriculum differentiation in other subject areas in grades fourth

through sixth. Work with first, second, and third grade teachers for implementation the following school year. 5. Plan for Evaluation of Project