Problem Set #3

A Policy Analysis Exercise Evaluating Intergovernmental Grants for Primary Education

A medium-sized developing country is composed of 300 local governments which have principal legal responsibility for primary education. Over the years the central government's Ministry of Education has developed an intergovernmental aid program to provide financial assistance to local governments for this important public function.

Recent reports indicate that major inequalities in expenditures for primary education persist across local governments. Concerned about the implications of these reports, the Ministry of Education is considering the consequences of trying to reform the present intergovernmental grant program to achieve either of the following objectives:

> 1) equal expenditures per student in all towns; or

> 2) a minimum expenditure per student equal to the current average.

The Ministry has hired you to evaluate alternative intergovernmental aid programs that meet each of these objectives under two possible budget constraints:

> 1) total amount of educational aid remains the same as it is now; and

> 2) the total amount of the aid may change, but each local government must be given some amount of positive assistance.

Thus, you are requested to consider four options:
> a) objective 1 under constraint 1
> b) objective 1 under constraint 2
> c) objective 2 under constraint 1
> d) objective 2 under constraint 2

Analyze the four options and make a recommendation to the Minister.

Summary information regarding the local governments in this country is provided in Table 1: their income levels, the numbers of primary school students, current primary school expenditure levels, and intergovernmental transfers for primary education. In addition, the Ministry has estimated a primary school expenditure function, presented in Table 2, with which to calculate educational expenditures per student. For ease of analysis, you may assume that the town within each income category are identical and that all the households have the mean income of that category. You may also assume that each household has one student that goes to public school.

Your response should contain:
a) a spreadsheet for each of the four scenarios with all your assumptions and restrictions clearly indicated (no more than 2-4 pages). You should create some indicators to help assess the options.
b) a 2-3 page (double-spaced) write-up of your analysis and policy recommendations. Consider the four options in terms of fiscal impact, equity, feasibility, etc. Remember to discuss your indicators in the memo and to qualify what further information is needed or assumed.

Problem Set DUE: Session 18, after class.

Table 1:
Income, Primary School Expenditures, and Intergovernmental Aid in Local Governments

Income Range	Average hh Income	No. Local Govts.	No. Students	Expenditure/ Student	Aid/ Student
less than 8,000	7,100	50	200,000	880.5	375
8,000-9,999	9,300	100	350,000	1,049	350
10,000-11,999	11,200	100	350,000	1,186	300
12,000 or more	14,500	50	100,000	1,435	250
National Totals	-	300	1,000,000	-	-
National Averages	10,000	-	-	1,101.85	327.5

Table 2:
Estimated Primary School Expenditure Function

Total educational expenditures consist of a family's own contribution plus government aid in the following function:

expenditures/student = 200.00 + 0.08 Income + (0.30 * aid per student)

Note, this formula is based on:
200, a constant sunk cost from local government budget
Portion paid by household income is either through local taxes or fees
Aid is the intergovernmental transfer