

**Agenda Item:** I.C.

**DATE:** April 20, 2006

**SUBJECT:** East Tennessee State University, Center of Excellence in Mathematics and Science Education

**ACTION RECOMMENDED:** Approval

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**BACKGROUND INFORMATION:** In accordance with THEC policies regarding establishing new units, East Tennessee State University has requested approval to establish a new Center of Excellence in Math and Science Education. Designed in the spirit of the Centers of Excellence, created in the 1980's, the proposed Center differs in that it will not be established by legislation or sustained with state appropriated funds.

The premise of the proposed Center is to support ETSU's initiative to enhance math and science education in P-16. Envisioned as a think tank, there is no similar Center in the state that is focused on bringing educators, researchers, and service providers together to develop and strengthen undergraduate and graduate programs and research while addressing the critical shortage of teachers in science and mathematics.

As proposed, plans are to jointly house the Center in the College of Arts and Science and College of Education with a director appointed to oversee the management, budget, records, evaluation, research and service. Concerns in our state regarding teacher shortages, low ACT scores in mathematics and science, high drop out rates among high school students, and low higher education attainment emphasize the need to focus energy and expertise on these issues.

**START-UP DATE:** Upon approval

**MISSION:** Built on a strong institutional commitment to mathematics and science education, the mission of the proposed Center of Excellence is designed to support a distinctive focus on instruction, research, service and outreach to develop leadership and create a strong national model implemented in Tennessee to improve the level of performance of elementary and secondary school students in math and science.

**GOAL:** The primary goal of the proposed Center of Excellence is to increase the number of qualified math and science educators and to boost student performance in these subject areas.

**NEED AND BENEFITS:** The proposed center also will provide a venue for faculty in the Colleges of Arts and Sciences and Education to channel their interests in improving K-16 math and science education. The need for quality and quantity of mathematics and science educators is a well known fact in

Tennessee. The state does not rank well when compared to performance at the national level. The shortage of math and science teachers in Tennessee mirrors regional and national trends. Nationwide, approximately 20 percent of all secondary school science teachers are teaching out-of-field.

**ADMINISTRATIVE STRUCTURE:** The proposed Center of Excellence will be housed and administered jointly by the Deans for the College of Arts and Sciences and the College of Education who report to the Provost and Vice President for Academic Affairs. The Director will oversee the management of the Center's research and service, budget, records, and evaluation. Mathematics and Science faculty have strong records of scholarship and teaching, as evidenced by their positions of leadership in professional organizations, publications, grant activity, and course development. Two faculty members, prolific with respect to securing extramural funding, will be instrumental in the development of the Center.

**EVALUATION:** The evaluation plan will assess the progress, achievement and impact of the activities of the Center as well as the overall goal of producing both pre-service and in-service math and science teachers with expertise in content, pedagogy, and the use of technology in teaching and learning.

**ESTIMATED COSTS:** The estimated new costs will involve a Director, one staff member, and the operating budget. Dedicated funds will be provided to cover salaries and the operating costs. Other costs will be covered through external grants, contracts, and gifts.

THEC Financial Estimate Form  
 East Tennessee State University  
 Center of Excellence in Mathematics and Science Education

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<b>I. Expenditures</b>					
<b>A. One-time Expenditures</b>					
New/Renovated Space	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment	-	-	-	-	-
Library	-	-	-	-	-
Consultants	-	-	-	-	-
Travel	-	-	-	-	-
Other	-	-	-	-	-
Sub-Total One-time	<u>\$ -</u>				
<b>B. Recurring Expenditures</b>					
<b>Personnel</b>					
<b>Administration</b>					
Salary	\$ 74,250	\$ 76,478	\$ 78,772	\$ 81,135	\$ 83,569
Benefits	23,270	23,968	24,687	25,428	26,191
Sub-Total Administration	<u>97,520</u>	<u>100,446</u>	<u>103,459</u>	<u>106,563</u>	<u>109,760</u>
<b>Faculty</b>					
Salary	\$ -	\$ -	\$ -	\$ -	\$ -
Benefits	-	-	-	-	-
Sub-Total Faculty	<u>\$ -</u>				
<b>Support Staff</b>					
Salary	\$ 20,720	\$ 21,342	\$ 21,982	\$ 22,641	\$ 23,321
Benefits	14,490	14,925	15,372	15,834	16,309
Sub-Total Support Staff	<u>\$ 35,210</u>	<u>\$ 36,266</u>	<u>\$ 37,354</u>	<u>\$ 38,475</u>	<u>\$ 39,629</u>
<b>Operating</b>					
Travel	\$ 3,000	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500
Printing	500	750	750	750	750
Equipment	1,500	-	-	-	-
Other	5,000	5,750	5,750	5,750	5,750

Sub-Total Operating	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Total Recurring	<u>\$ 142,730</u>	<u>\$ 146,712</u>	<u>\$ 150,813</u>	<u>\$ 155,038</u>	<u>\$ 159,389</u>
<b>TOTAL EXPENDITURES (A+B)</b>	<u><b>\$ 142,730</b></u>	<u><b>\$ 146,712</b></u>	<u><b>\$ 150,813</b></u>	<u><b>\$ 155,038</b></u>	<u><b>\$ 159,389</b></u>

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<b>II. Revenue</b>					
Tuition and Fees <sup>1</sup>	-	-	-	-	-
Institutional Reallocations <sup>2</sup>	142,730	146,712	150,813	155,038	159,389
Federal Grant <sup>3</sup>	-	-	-	-	-
Private Grants or Gifts <sup>4</sup>	-	-	-	-	-
Other <sup>5</sup>	-	-	-	-	-
<b>TOTAL REVENUES</b>	<u><b>\$ 142,730</b></u>	<u><b>\$ 146,712</b></u>	<u><b>\$ 150,813</b></u>	<u><b>\$ 155,038</b></u>	<u><b>\$ 159,389</b></u>

**Notes:**

1. In what year is tuition and fee revenue expected to be generated and explain any differential fees. Tuition and fees include maintenance fees, out-of-state tuition, and any applicable earmarked fees for the program.

NA- This is not an academic program, it is a proposed center of excellence. Some grants received by the center may generate tuition and fee revenue in future years. These are not projected in this base budget for the Center of Excellence.

2. Please identify the sources of the institutional reallocations, and grant matching requirements if applicable.

The source will be from pooled unallocated institutional funds.

3. Please provide the source of the Federal Grant including the granting department and

CFDA number.

Various

4. Please provide the name of the organization or individual providing the grant or gift.

NA- Grants will be reported in separate schedules as has been done with the Center of Excellence Program.

5. Please provide information regarding other sources of the funding.  
The Center will seek a wide variety of external funding to support the Center's mission.  
Center related faculty has been very successful federal grant recipients  
External funding has averaged \$300,000 annually for the last three years.