



## REPORT OF REVIEW

### NEW YORK STATE DEPARTMENT OF EDUCATION ALBANY, NEW YORK

New York State Summer Institutes  
Grant CO-10947F-92-I-302-0115  
(Contract 92-45)

and

Kopernick Space Education Center  
Math Science Institute  
Grant CO-10972-92-I-302-0121  
(Contract 92-59)

OIG Report 95-10(H)  
July 11, 1995

#### I. INTRODUCTION

##### A. PURPOSE

The purposes of our review were (1) to determine the allowability of the costs claimed under the ARC grants, (2) to determine if the grant objectives were met, and (3) to determine the current status of the projects.

##### B. SCOPE

Our survey included procedures to review costs incurred and claimed for reimbursement under the grants as well as costs claimed as matching funds. The initial period of performance for Grant CO-10947F-92-I-302-0115 (Contract 92-45) was February 4, 1992, through February 3, 1993. A subsequent verbal agreement with ARC allowed the grantee until March 31, 1994, to submit final expenditure and progress reports. The period of performance for Grant CO-10972-92-I-302-0121 (Contract 92-59) was March 16, 1992, through December 31, 1992; however, it was extended to December 31, 1993.

We reviewed the grantee's reports, examined records, and held discussions with grantee officials in Albany, New York, September 12-14, 1994. As a basis for determining allowable costs and compliance requirements, we used the provisions of the grant agreement, Office of Management and Budget (OMB) Circulars A-87 and A-102, and the ARC Code. We also relied on the grantee's annual independent audits, as much as possible, to avoid duplication of effort.

### C. BACKGROUND

Grant CO-10947F-92, totaling \$100,000, was awarded to the New York State Department of Education to develop a new science and mathematics summer institute within the Appalachian Region of New York to remedy the underrepresentation of youth from such areas in the existing statewide competitive summer institutes. The new institute was to have a special emphasis on recruiting and serving the students from Appalachian area schools. The following tasks were to be performed:

1. A new institute will be developed at Cornell University. This program will be a 3-week residential enrichment program focusing on computational science for high school age students who show promise in the science and mathematics field but have not had this level of exposure or opportunity for advanced study. As with the existing Summer Institutes program, the ARC Science and Mathematics Summer Institute will be open to all students in the State but will have at least 50 percent of the spaces reserved for Appalachian Region students.
2. A special recruitment program will be initiated to solicit applications from students in Appalachian Region counties. Strategies will include the development of a network of teachers, administrators, community representatives, and Bureau of Cooperative Education personnel to publicize the program and aid students in applying; a series of presentations to schools and community groups on the program; and the development of additional print materials on the program to be distributed throughout the 14 Appalachian Region counties.
3. A tuition assistance program tailored to the needs of the students in the Appalachian Region counties and based upon the families' financial needs will be implemented.

The grant agreement also required the grantee to provide \$30,000 in State Department of Education in-kind support and \$38,350 in tuition revenue. At the time of our review, the grantee had received advance and progress payments from ARC totaling \$90,000; and \$10,000 remained undisbursed. A Financial Status Report submitted to ARC April 24, 1994, indicated the total project cost was \$169,193.68 and the Federal share was \$81,830.65.

Grant CO-10972-92 (Contract 92-59), totaling \$20,000, was awarded to the New York State Education Department to provide funding for increased participation of Appalachian Region students in the Science and Mathematics Summer Institutes. The grantee was to provide or cause to be provided \$12,800 in cash, contributed services, or in-kind as approved by ARC. Initially, 8 Appalachian Region students were to participate in a summer enrichment program at Syracuse University and 4 were to take part in a 6-week research program at SUNY-Buffalo in 1992. The grant also included funding to allow the grantee to publicize the summer institutes within the region to aid in their recruitment efforts.

When the anticipated numbers of Appalachian Region students did not materialize, this grant was amended to allow the grantee to recruit approximately 20 high school students from New York's Appalachian Region to participate in a summer math/science institute in 1993 in cooperation with IBM and Kopernick Space Education Center, a part of the Kopernick Observatory near Binghamton, New York. ARC funds were to be used to cover recruitment, room, board, and facilities costs for the Appalachian students. Ultimately, IBM did not participate in the program due to unrelated business problems.

At the time of our review, ARC had denied a request from the grantee to borrow \$8,169.35 in unexpended funds received under the Cornell project to use on the Kopernick project.

## II. SURVEY RESULTS

Our review disclosed limited documentation of direct expenses, matching contributions, or program income. Consequently, we are noting a substantial amount of the reported costs and program income as questionable or unsupported. Primary issues affecting cost eligibility also include the expenditure of ARC and matching contributions for expenses not related to participants from the Appalachian Region, including a lack of proration of instructors' costs, and use of program income. We attributed these conditions primarily to inadequate accounting system and controls and lack of timely contact with ARC program officials to address problems with respect to the recruitment of participants from the Appalachian Region of New York State.

The initial grant agreement for Contract 92-59 (\$20,000) and ARC approval recommendation specifies that funding is provided to increase participation of Appalachian Region youth in the math science summer institutes. The funding will expand access for Appalachian Region students to these programs by adding openings designated for Appalachian students and by designing strategies to publicize the summer institutes within the region.

The amended grant agreement notes that approximately 20 high school students from New York's Appalachian Region shall participate in a summer math/science institute and that ARC funds will be used to cover recruitment, room, board, and facilities for the Appalachian students.

The ARC letter of December 3, 1992, recommending the amended agreement, notes it is anticipated that 20 high school students from New York's Appalachian Region would participate along with students from other New York counties and that ARC funds would be used to cover recruitment, room, board, and facilities costs for students from ARC counties as well as a portion of the teaching and counseling staff.

This letter also notes that the contractor reported having students from the New York Appalachian Region to participate in the initial program, but the number was well below expectations. As a result, the number of participants fell within the range of the normal recruitment for the region, the expenses were covered under the state's funding earmarked for summer institute programs, and the contractor did not need to use the ARC funds that had been approved.

A November 20, 1992 letter from the Administrator, New York State Summer Institutes to the ARC Contract Coordinator includes the statement, "ARC funds would be used to cover recruitment and the room, board and facilities costs for students from the ARC counties as well as a portion of the teaching and counseling staff."

The grant agreement for Contract 92-45 (\$100,000) is less specific about the proration of funds between Appalachian Region students and others--e.g., "As with the existing Summer Institutes program, the institute will be open to all students in the state but will have at least 50% of the spaces reserved for Appalachian Region students." However, the narrative grant application clearly notes the state's intention to use the ARC funds (\$100,000) to increase the number of participating Appalachian Region students. One section of the narrative application states: "There are presently no new monies available from current funding sources to support an effort to increase involvement from the Appalachian Region. Severe budget cuts have forced the program to consolidate its program sites and to decrease the number of student openings. Appalachian Regional Commission (ARC) monies will be needed to open new spaces for these students and to initiate a new program site in the region."

The agreement language and other documentation clearly reflect that ARC funds were to be used for expenses of ARC students and that a proration of teaching and counseling staff based on Appalachian Region and other student ratios was intended.

A. NEW YORK STATE SUMMER INSTITUTES (CORNELL)--Contract 92-45

A 3-week residential program focusing on the use of computer graphics to explore mathematics, science, and engineering was held at Cornell University, Ithaca, New York, from July 20 to August 7, 1992. Forty-three high school students participated, including 20 (46.5 percent) from New York's Appalachian counties. The grantee's Final Itemized Expenditure Report indicated that project expenses totaled \$169,193.68, as follows:

	<u>Budget</u>	<u>Claimed Costs</u>	<u>Questioned/ Unsupported</u>
ARC	\$100,000.00	\$ 81,830.65	\$36,125.61
State/Tuition	68,350.00	62,173.03	38,820.71
Cornell	<u>0.00</u>	<u>25,190.00</u>	<u>25,190.00</u>
Total	\$168,350.00	\$169,193.68	\$100,136.32

We are questioning direct costs of \$38,861.02 and matching costs of \$64,010.71 based on the unallowability of certain costs, the absence of supporting documentation, or the absence of adequate state or other support for the students who do not reside in Appalachian counties. The exceptions are noted below:

**Contract 92-45**  
**Questioned/Unsupported Costs 1/**

	Total Cost	ARC	Match
Tuition Assistance	\$14,025.00	\$14,025.00	2/
Cornell Contract	41,984.02		
Room/Board (students)			\$11,680.12 3/
Room/Board (Counselors)		3,210.00	4/
Travel		1,262.11	5/
Personnel (Institute)	32,800.00	17,548.00	6/
Personnel (NYSED)	50,220.04		26,867.72 7/
Travel	705.21	80.50	8/
Cornell Match	25,190.00	<u>0.00</u>	<u>25,190.00 9/</u>
Total		\$36,125.61	\$63,737.84

**Footnotes:**

- 1/ The above costs were prorated based on a student population of 43 persons with 20 (46.5 percent) from the Appalachian Region and 23 (53.5 percent) from outside the Appalachian Region. Some of the grantee's claims had been based on a population of 42, including 19 from the Appalachian Region, resulting in slightly different breakouts.
- 2/ The grantee charged \$14,025 to the grant for tuition assistance for students from the Appalachian Region. However, this represented a waiver of tuition costs for the Appalachian area students rather than a direct expense. We determined this expense to be questionable since ARC was already paying the expenses associated with the institute. The grantee agreed with our recommendation to reduce the Federal share of grant expenditures by \$14,025.
- 3/ Cornell University billed \$21,831.95 for room and board expenses for all participating students. The grantee charged \$9,878.96 of the costs as direct grant expenses for students from the ARC counties and \$11,952.99 as matching costs for students who reside outside of the ARC counties. The grantee indicated they were not aware that costs for non-ARC students were not allowable matching costs. We determined that \$11,680.09 was questionable based on 53.5 percent of total costs being attributable to students outside the Appalachian Region.
- 4/ Room and board costs totaling \$6,000 for counselors were billed by Cornell and charged as direct grant expenses. We determined that \$3,210 (53.5 percent of \$6,000) was questionable.

- 5/ We reviewed the contract billing totaling \$41,984 from Cornell University and determined that expenses associated with a trip to Toronto were outside the scope of the ARC grant. The grantee indicated they had some concerns about some of Cornell's charges and agreed with our recommendation to reduce the Federal share of grant expenditures by \$1,262.11. Additional costs associated with the Cornell contract are questioned under footnote 9 below.
- 6/ Personnel costs totaling \$32,800 for the program director, assistant program director, project assistant, counselors, guest lecturers, teaching assistants, and instructors were charged as direct expenses to the ARC grant. We are questioning \$17,548 (53.5 percent of \$32,800) since these costs were not prorated between the students from the Appalachian Region and others.
- 7/ Salary and fringe benefits costs for five state Education Department employees totaling \$50,220.04 were charged to match. In addition, the costs were not adequately documented. The grantee did not realize that time distribution records are required to support personnel costs for individuals charged to more than one grant program or cost objective. Available records indicated the percentage of time each of five employees was charged to ARC match but not how the percentage was determined or other distribution. We are questioning \$28,867.72 (53.5 percent of \$50,220).
- 8/ A travel voucher for \$80.50 for an education aide represented travel outside the scope of the ARC grant. The grantee indicated that it should not have been charged to the grant and agreed with our recommendation to reduce the Federal share of expenditures by \$80.50.
- 9/ Cornell University's matching contribution totaling \$25,190, which included staff and student consultant costs, computer access, and supplies, was not adequately documented. OMB Circular A-102 requires that such costs be verifiable from the grantee's or subgrantee's records and that records show how the value of contributions was derived. The grantee indicated that it might be possible to get additional documentation from Cornell. Match from Cornell was not included as a requirement of the ARC grant, but the grantee requested it because they thought Cornell should also contribute to the project.

#### Program Income

The grant agreement indicated that the grantee would use the tuition revenue of \$38,350 to support the project. Tuition for the program was established at \$1,100 per student; but the grantee waived tuition for some students based on need. Nineteen Appalachian area students received tuition waivers totaling \$15,895 and \$14,025 of that amount was charged to the ARC grant as a direct expense. Ten of the 23 students from the rest of the state received tuition waivers totaling \$7,865.

Program income to be collected from the students or from other sources on behalf of the students was recorded in the grantee's records as \$21,340; however, at the time of our visit we were

unable to verify the amount actually collected. Since ARC requires that program income be used to offset program expenses unless otherwise approved, the amount of tuition actually collected should be deducted from total program expenses prior to determining the amount of project expenses attributable to ARC.

**Recommendation:** We recommend that the grantee provide evidence to ARC of the amount of tuition collected from or on behalf of all students who attended the Cornell Summer Institutes program and work with ARC to determine the extent of necessary offsets against expenses.

The grantee noted that the project would not have been undertaken if the ARC funds had not been available and that non-ARC participants did not increase most program costs.

We did not attempt to determine the impact on program costs if only ARC area participants were involved. However, we believe it is a reasonable conclusion that ARC should not be responsible for the predominance of expenses when ARC area participants totaled 46.5 percent of the students. Thus, we believe eligible expenses should be in proportion to the student universe.

Thus, we recommend that the grantee work with ARC program officials to resolve the noted questioned costs and disposition of tuition fees. Of particular importance is the resolution of the charging of a disproportionate share of project expenses to the ARC grant in relation to student attendance.

### *Auditee Comments*

#### Footnotes

- 1/ We are in agreement that the final student population included 19 students from the Appalachian Region and 23 students from the rest of the state for a total of 42 students.
- 2/ We are in agreement with the recommendation to reduce the Federal share of grant expenditures to eliminate the tuition assistance to ARC students since this was a waiver of costs.
- 3/ The allocation of costs for non-ARC students as part of the matching funds from the state was an integral part of the original proposal made to the ARC for funding for this project. As we explained in our grant application and in a meeting with ARC representatives at the New York State Department of State prior to the application, we were proposing a program based upon other successful programs we had already administered in the state over the past 20 years. One of the critical elements in the success of these programs is the intensive residential experience of students who are drawn from a diverse, statewide population. If only students from the ARC region were put into the program, it would not have been the proven successful model we intended to operate. In addition, while we had suggested building upon one of our existing math and science institutes in order to cut direct student costs and administrative costs, ARC representatives requested that we operate the program at a site within the 14 ARC counties. This necessitated development

of a new program site, with all of the accompanying planning and development costs. In order to operate the program successfully, we felt that it was necessary to pull together a statewide student population as an integral part of the program; therefore, costs for these students constituted a reasonable assignment of matching funds.

- 4/ Commitments for counseling staff, according to project staff at Cornell University, had to be made well in advance of the date when we had final numbers of students for the project. In addition, there were four counselors and a head counselor who worked with all of the students. Therefore, ARC students were served by the entire staff; and as in *footnote 3*, we felt that this was a reasonable expense of the project.
- 5/ While we agree that some of the Cornell University expenses might be questioned, it was well over a year before we could get an itemized billing from them; and we had been assured that all expenses were correct and related to approved program expenses.
- 6/ Personnel costs for the program were negotiated with these individuals before the student population was selected. Salaries, honorariums, etc. would have been the same no matter how many students attended the program. It was our understanding that the program was targeted for ARC students, that students selected from the rest of the state would provide the diversity and peer learning that the program was based upon, and that the personnel costs would be covered by the ARC monies because they were established without regard to the rest of the population.
- 7/ Salary and fringe benefits costs for State Education Department employees working on the planning, development, and implementation of the project were identified according to workloads and records of these employees. In the development of a new program, all of these efforts were directly targeted to ARC area students since this was the focus of the project. For instance, much effort was expended in the recruitment process, including phone calls, letters, and meetings with school personnel, parents, and community members in the ARC counties. Therefore, we maintain that all of the time charged to match should be allocated to ARC efforts.
- 8/ The travel voucher for \$80.50 for an employee was questioned at the time of the audit. Since the employee was not available at that time for further information, I assumed that it had been a mistake. Since then, however, we have talked to the employee; and she verifies that she traveled from Cornell, where she was working with the project, to Saratoga to meet with our staff to review a number of curriculum changes and program modifications during the program which we were insisting that the Cornell staff put into effect. The meeting was necessary because there was considerable resistance on the part of the project director at Cornell to modify the program, and we were insistent that the changes be made because we felt that the students were not getting the best use of the facility at that point in the program. Therefore, we would like to see this expense charged to the grant.



9/ We have been unable to get additional documentation from Cornell on the matching contribution of \$25,190 because all personnel related to the project have since left the university. In fact, this was a major problem for the whole audit since it resulted in the extreme lateness of the itemized bill, the confusion surrounding the details of the program evaluation, and documentation. Had we known that the ARC had similar past experiences with this university and that Cornell was so difficult to work with, we would never have planned the program at this site. However, we believe that appropriate documentation and verification was made for the match by the on-site presence of our program aide throughout the course of the project. Since the employee was directly employed by us, she was able to verify that the planned computer access hours were used, that staff were working with our students, and that supplies were available to the project as described in the proposal. In fact, the employee's role was critical to our evaluation and oversight of the program because of the problems we experienced with the Cornell staff. The employee and I insisted on a number of changes before the opening of the program and during the course of the institute. Therefore, we believe that the employee's oversight of the Cornell contribution is appropriate documentation in the absence of Cornell's records.

### **Auditor Response**

We accept the response noted above; however, we continue to recommend that the grantee resolve the issue of the disposition of tuition fees with ARC program personnel.

#### **B. MATH SCIENCE INSTITUTE (KOPERNICK)--Contract 92-59**

The Summer Institute in Science and Mathematics was held at the Kopernick Space Education Center, Vestal, New York, July 11-24, 1993. Eight of the 28 students (28.6 percent) were from ARC counties and 20 students (71.4 percent) were from non-ARC counties. The grantee's letter of August 4, 1994, to ARC indicates that grant funds totaling \$20,000 were used to pay the expenses of the 8 ARC students and state funds and tuition were used for the 20 students from non-ARC counties. However, the grantee's records indicated that the grantee charged expenses for non-ARC students to the ARC grant and to match.

The grantee indicated that the Kopernick Space Education Center required a minimum of 25 students for the program, but the grantee was unable to recruit that many from ARC counties. They admitted students from non-ARC counties to avoid canceling the program. Project representatives said they believed the diversity of students was a benefit to the ARC students.

The grantee's records indicate that total project costs were \$34,903.20. We are questioning direct costs of \$14,279.25 and matching costs of \$11,511.13 based on the unallowability of certain costs, the absence of supporting documentation, or the absence of adequate state or other support for students who do not reside in Appalachian counties. During our on-site visit, the grantee indicated that they did not charge all eligible costs, such as NYSED personnel costs, to the project since they believed they had already overmatched the grant. We noted the following exceptions:

**Contract 92-59**  
**Questioned/Unsupported Costs 1/**

	Total Cost	ARC	Match
Kopernick Invoice	\$18,688.02	\$13,343.25	2/
Room/Board	9,602.18	936.00	\$ 5,920.00 3/
Transportation	1,911.00		1,364.45 4/
Printing	1,662.00		1,186.68 4/
Tuition Assistance	<u>3,040.00</u>	<u>0.00</u>	<u>3,040.00 5/</u>
Total	\$34,903.20	\$14,279.25	\$11,511.13

**Footnotes:**

- 1/ Although some of the noted costs did not have adequate documentation, we have calculated the questioned costs based on 8 of 28 students (28.6 percent) being from the Appalachian Region and 20 (71.4 percent) being from outside the region.
  
- 2/ The grantee provided an invoice and backup documentation from the Link Planetarium/Kopernick Observatory for \$18,688.82 for expenses related to the Math Science Institute. It was charged entirely to the ARC grant and includes costs for personnel (except counselors), facilities, recreation, supplies, and miscellaneous expenses. We are questioning 71.4 percent of these costs (\$13,343.25) as attributable to the non-ARC students.
  
- 3/ Although no documentation was available to support the room and board claims of \$1,311 as a direct expense and \$8,291 as a match, we are prorating the questioned costs based on 71.4 percent non-ARC since room and board expenses were necessary. Thus, we are questioning \$936 in direct claims and \$5,920 as match.
  
- 4/ All of the transportation costs of \$1,911 and the printing costs of \$1,662 were charged as match. In addition, documentation to support the printing expenditure was not available at the time of our visit; but the grantee indicated they would attempt to locate it. We are questioning 71.4 percent of the printing and transportation costs as attributable to the non-ARC students, or \$1,186.68 and \$1,364.45.
  
- 5/ The grantee charged \$3,040 to matching costs for tuition assistance for students from the Appalachian Region. However, this represented a waiver of tuition costs for the Appalachian area students rather than an expense. We determined this amount to be questionable since ARC was already paying the expenses associated with the institute. The grantee agreed with our recommendation to reduce matching costs by \$3,040.

### Program Income

Tuition for the program was established at \$950 per student, but the grantee waived tuition for some students based on need. Five of the 8 ARC students received tuition waivers totaling \$3,040; and that amount was charged to the project as a matching contribution.

In addition, the grantee's records indicated tuition fees due from all students totaled \$18,497.50; but at the time of our visit, we were unable to verify that amount had actually been collected. ARC requires program income be used to offset program expenses unless otherwise approved.

**Recommendation:** We recommend that the grantee provide evidence to ARC of the amount of tuition collected from or on behalf of all students who attended the science and mathematics institute and reach agreement with ARC on the application of program income.

We recognize grantee comments about the difficulty of recruiting students from the ARC area, the need for participation of non-ARC area students in order to meet minimum requirements, and the benefits of a diverse student population. However, as noted above, we believe it is a reasonable conclusion that ARC should not be expected to fund the majority of costs for students from non-ARC counties. Also, of particular importance in this case was the need to notify ARC at the time of recruitment difficulties so that ARC decisions/concurrence with respect to continuing with the initiative could have been obtained.

As with Contract 92-45, we recommend that the grantee work with ARC program officials to resolve the noted questioned costs and disposition of tuition fees. Of particular importance is resolution of the charging of a disproportionate share of project expenses to the ARC grant in relation to student attendance.

For future grants, expenses should be supported by accounting records and expense vouchers, prorated where necessary, in relation to student populations and ARC should be timely notified about problems with respect to grant implementation.

### *Auditee Comments*

#### Footnotes

- 1/ While we agree with the calculation of some of the costs based upon 8 students being from the Appalachian region and 20 being from the rest of the state, as in the Cornell program, certain costs were incurred regardless of the student population; and it was our understanding that, since the program was developed for the ARC region and commitments were made before the students were confirmed, some costs were attributable 100 percent to the ARC grant.
- 2/ In fact, all costs from the Kopernik Observatory except for counselors were according to commitments made for the project before the students were identified. The rate and pay

for each of these items would have been the same regardless of the number of students. Therefore, we feel they are appropriately charged to the ARC grant.


- 3/ Again, we feel that room and board costs for non-ARC students are an appropriate expense for the match because the mix of students from the entire state was critical to the successful operation of the program.
- 4/ For the same reason, we are requesting that printing and transportation costs be eligible for use as part of the match.
- 5/ We would like the opportunity to replace the matching costs for tuition assistance with other matching costs incurred by the Education Department, since there were several other costs not detailed in the original match because we felt that we had met our obligation.

### **Auditor Response**

We accept the response noted above; however, we continue to recommend that the grantee resolve the issue of the disposition of tuition fees with ARC program personnel.

### ***Auditee General Comment***

Although there are a number of issues detailed in the audit, we would like to make sure that the ARC knows that most of the problems were the result of our naivete and inexperience in applying for and using Federal funds. Record keeping procedures and documentation were done according to procedures we currently use in the New York State Summer Institutes Office. Since the State Education Department is so large, we have had no contact with other offices that handle Federal grant programs on a regular basis; and we were unaware that there are so many different regulations and procedures. All of this said, we want to ensure the grantor that all monies received from the ARC were indeed spent on the two programs and the students and that our goal of providing top level programs to students from the Appalachian region counties was met. In addition, our goal of initiating an ongoing institute in the ARC region has been successful since, as a result of the Kopernik Institute, we now have a permanent state-sponsored institute in the ARC region.

  
HUBERT N. SPARKS  
INSPECTOR GENERAL