

MEMORANDUM

Date:

To: Mary F. Santonastasso, Director
Division of Institution and Award Support and Interim
Director of the Division of Grants and Agreements

From: Deborah H. Cureton
Associate Inspector General for Audit

Subject: Audit Report No. OIG 06-1-007
Detroit City School District

Attached is the final report prepared by Cotton & Company, an independent public accounting firm, on the audit of NSF Award No. ESR-9908234 awarded to the Detroit City School District (DCSD). The audit covered NSF-funded costs claimed from September 1, 1999 to June 30, 2004 consisting of \$10.9 million of NSF direct funded costs and \$27.1 million of cost sharing.

Overall, we questioned approximately \$1.4 million of the \$10.9 million in direct costs claimed to NSF. Specifically, \$1.2 million of unallowable and unbudgeted salaries and wages and related fringe benefit costs were charged to the NSF award for nine teachers who were conducting routine math and science courses during the regular school day, the costs of which should have been allocated to DCSD's general education expenses and not to its NSF award. DCSD also claimed a total of \$178,053 of unrelated program costs, including costs for subcontracts, materials and supplies, participant support, and travel to award ESR-9908234 that should have been charged to another NSF award (ESR-9453665). Finally, we questioned \$10,000 of stipends paid to undergraduate students participating in internships at Detroit Community Centers because DCSDS was unable to explain how these costs supported the NSF award.

DCSD also had a number of material control deficiencies. In general, DCSD's systems of internal controls were not adequate to properly administer, account for, and monitor its NSF award in compliance with NSF and federal requirements in the areas of payroll, cost sharing, indirect costs, participant support, and allocability of costs between separate NSF awards. Specifically, DCSD lacked the required employee certifications and personnel

activity reports to support any of the \$2.8 million of salary and fringe benefit costs it claimed on its NSF award through June 2004. The auditors performed extensive alternative procedures to assess the reasonableness and propriety of the claimed labor costs and to satisfy their concerns that these costs were related to the NSF award. The auditors were able to verify that \$1.6 million of these costs were valid and benefited NSF's award. However, as mentioned above, the remaining \$1.2 million of these costs were questioned.

DCSD also lacked an efficient system to properly identify and account for the cost sharing it attributed to its NSF award, raising questions as to the reliability and integrity of the \$27,094,087 that it claimed on its certified cost sharing reports to NSF. While DCSD's automated accounting system did capture all cost sharing expenses, it did not specifically identify these expenses as benefiting NSF's awards. DCSD also lacked written policies for reporting of cost share. As such, DCSD was unable to readily or easily determine the status of its cost sharing contributions on its NSF award or ensure the same contributions were not also claimed on other federal awards. DCSD also claimed \$20.2 million as cost share (75% of total cost share claimed) for general math and science textbook expenses, which are typically not allowed by NSF as cost share. The approved budget for this award did not specify any costs for textbooks. Instead, DCSD's approved \$20.9 million cost share budget primarily consisted of costs associated with salary and wages (20%), participant support (40%), computer technology (12%) and materials and supplies (14%). However, we did not question the use of such textbooks as cost share because NSF program officers indicated to us that they would accept the textbooks as cost share.

Moreover, DCSD did not have adequate policies and procedures for determining allowable indirect costs for its NSF grant. The award provided for a predetermined, fixed 2.29-percent indirect cost rate. However, two amounts totaling \$25,466 were charged to NSF's award as indirect costs during the first two years of the award. Rather than calculating its indirect costs utilizing its official accounting records, DCSD instead claimed as indirect costs the difference between its expenditures as of June 30, 2003 and the award's authorized funding amount.

Finally, DCSD's accounting system did not separately track participant support costs incurred under the award in accordance with NSF requirements. Therefore, DCSD was unable to identify whether it had improperly spent participant support funds for other purposes without NSF approval. DCSD also used participant support costs of \$10,000 to pay stipends for university undergraduate students participating in internships at Detroit community centers. These costs were not in the NSF budget approved for this project or related to the USP award.

Accordingly, we recommend that your offices direct DCSD to continue to ensure that employees maintain semi-annual certifications and monthly personnel activity reports to support salaries and wages charged to NSF awards. Additionally, we recommend that your offices direct DCSD to establish a system to identify, account for, monitor, and report cost-sharing expenses; explain the variances in the cost share proposed and the cost share incurred; and, verify that the amount of cost share incurred actually benefited the NSF program. We further recommend that your office require DCSD to develop and implement written policies and procedures that: 1) provide a financial management system and control processes that effectively administer and monitor participant support costs, indirect costs, and allocation of expenditures for each NSF award; 2) require supervisory review and approvals of expenditures and other actions under NSF awards as costs incurred; 3) ensure reasonableness, allocability, and allowability of all costs claimed in accordance with NSF and federal requirements as costs incurred; and, 4) ensure that DCSD personnel are adequately trained and understand how to comply with federal and NSF award requirements.

DCSD concurred that it did not have: 1) employee certifications to support salaries and fringe benefits charged to the NSF award; 2) an appropriate system to identify, account for, monitor, and report cost-sharing expenses; and 3) procedures in place to prevent unallowable indirect costs from being charged to the NSF program or to properly segregate expenditures between multiple NSF awards. DCSD reported that it implemented several actions to address these findings. However, DCSD disagreed with the finding that labor costs for nine teachers conducting routine teaching assignments was unallowable, and that the participant support costs used to support the former Detroit Public Schools students in the Michigan State University program to tutor students in community-based centers was not related to the USP award. However, DCSD did not address the variances in the cost share proposed and the cost share incurred; nor did they verify that the amount of cost share incurred actually benefited the NSF program.

We consider the issues in the audit report to be significant. Accordingly, to help ensure the findings are resolved within six months of issuance of the audit report, please coordinate with our office during the resolution period to develop a mutually agreeable resolution of the audit recommendations. The findings should not be closed nor should additional awards be made to DCSD until NSF determines that all recommendations have been adequately addressed and proposed corrective actions have been satisfactorily implemented. In addition, NSF should recognize DCSD as a high risk grantee under its Risk Management Program and take immediate steps to ensure that DCSD institutes internal controls that ensure that all costs are claimed in accordance with federal and NSF requirements.

We are providing a copy of this memorandum to the Acting Division Director of Elementary and Secondary Informal Education. The responsibility for audit resolution rests with the Division of Institution and Award Support, Cost Analysis and Audit Resolution Branch (CAAR). Accordingly, we ask that no action be taken concerning the report's findings without first consulting CAAR at 703-292-8244.

Evaluation of Cotton & Company's Audit Performance

To fulfill our responsibilities under Government Auditing Standards, the Office of Inspector General:

- Reviewed Cotton & Company's approach and planning of the audit;
- Evaluated the qualifications and independence of the auditors;
- Monitored the progress of the audit at key points;
- Coordinated periodic meetings with Cotton & Company and NSF officials, as necessary, to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by Cotton & Company to ensure compliance with Government Auditing Standards and the NSF Audit Guide; and
- Coordinated issuance of the audit report.

Cotton & Company is responsible for the attached auditor's report on the Detroit City School District and the conclusions expressed in the report. We do not express any opinion on the Schedules of Award Costs, internal control, or conclusions on compliance with laws and regulations.

We thank your staff for the assistance that was extended to our auditors during this audit. If you have any questions regarding this report, please contact me at 703-292-4985 or Jannifer Jenkins at 703-292-4996.

Attachment

cc: Barbara Olds, Acting Division Director, EHR/ESIE

**DETROIT CITY SCHOOL DISTRICT
3011 WEST GRAND BOULEVARD, 14TH FLOOR
DETROIT, MICHIGAN 48202**

**NATIONAL SCIENCE FOUNDATION AWARD NUMBER
ESR-9908234**

**FINANCIAL AUDIT OF
FINANCIAL SCHEDULES AND
INDEPENDENT AUDITORS' REPORTS FOR THE PERIOD
SEPTEMBER 1, 1999, TO JUNE 30, 2004**

This audit was performed by:

**Cotton & Company LLP
635 Slaters Lane, 4th Floor
Alexandria, Virginia 22314**

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EXECUTIVE SUMMARY

BACKGROUND

We audited funds awarded by the National Science Foundation (NSF) to the Detroit City School District (DCSD) under Cooperative Agreement No. ESR-9908234 for the period September 1, 1999, to June 30, 2004. DCSD, as a federal awardee, is required to follow cost principles specified in Office of Management and Budget (OMB) Circular A-87, *Cost Principles for State, Local, and Indian Tribal Governments*, and federal administrative requirements contained in OMB Circular A-102, *Grants and Cooperative Agreements with State and Local Governments*. In addition, as an NSF awardee, DCSD is required to follow provisions for financial management systems and cost sharing in OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations*.

DCSD oversees all 268 public schools in the City of Detroit. These schools provide services to nearly 160,000 K-12 students. DCSD received more than \$235 million in federal funds in Fiscal Year (FY) 2003.

NSF awarded Cooperative Agreement No. ESR-9908234 to DCSD on September 1, 1999, for \$11.5 million and included a \$20.9 million cost-share requirement. The agreement expired on August 31, 2004. DCSD claimed \$10.9 million of NSF funding and \$27.1 million in cost sharing. The agreement was awarded under NSF Program Announcement No. 99-52, Urban Systemic Program in Science, Mathematics and Technology Education (USP). USP is a K-12 based program that promotes systemic reform of science and mathematics education for all students. USP also includes programmatic components that seek to foster partnerships between urban school districts and 2- and 4-year colleges and universities and embed research on educational practice and learning. The specific purpose of the DCSD USP award was to stimulate dramatic improvements in (a) teaching and learning, enabling significantly more students to pursue careers in science, mathematics, and technology, (b) establishing and expanding a unified system of coalitions that link students, teachers, families, and community members in DCSD with the city's vast and diverse resources, and (c) establishing an infrastructure that aligns DCSD's efforts to sustain the highest quality of student learning.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of our audit engagement were to:

1. Determine if DCSD's Schedule of Award Costs presents fairly, in all material respects, costs claimed on the Federal Cash Transaction Reports (FCTR), and if costs claimed, including cost sharing, are in conformity with NSF award terms and conditions.
2. Identify matters concerning instances of noncompliance with laws, regulations, and provisions of the award agreement pertaining to NSF awards and weaknesses in DCSD's

internal control over financial reporting that could have a direct and material effect on the Schedule of Award Costs and DCSD's ability to properly administer, account for, and monitor its NSF awards.

We audited costs claimed under Cooperative Agreement No. ESR-9908234 for the period September 1, 1999, to June 30, 2004. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; *Government Auditing Standards (2003 Revision)*, issued by the Comptroller General of the United States; and the *National Science Foundation Audit Guide* (September 1996), as applicable. These standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether amounts claimed to NSF as presented in the Schedule of Award Costs (Schedule A) are free of material misstatements. An audit includes examining, on a test basis, evidence supporting amounts and disclosures in the Schedule of Award Costs. An audit also includes assessing the accounting principles used and the significant estimates made by DCSD, as well as evaluating the overall financial schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

SUMMARY OF AUDIT RESULTS

An audit was performed on the costs claimed on the financial reports submitted to NSF as well as cost sharing provided by DCSD on Cooperative Agreement No. ESR-9980234. These costs and the costs questioned by our audit are shown in the Schedule of Award Costs (Schedule A) and are summarized as follows:

Funding Source	Budget	Claimed Costs	Questioned Costs
NSF Funding	\$11,500,000	\$10,906,223	\$1,422,089
Cost Sharing	<u>20,979,622</u>	<u>27,094,087</u>	<u>0</u>
Total Project	<u>\$32,479,622</u>	<u>\$38,000,310</u>	<u>\$1,422,089</u>

Except for the \$1,422,089 in questioned salary, wages, fringe benefit, participant support, and other unrelated program costs, described below, we determined that the costs claimed by DCSD appear fairly stated and are allowable, allocable, and reasonable under Federal and NSF requirements.

We questioned \$1.2 million of the total \$10.9 million claimed (11 percent) of NSF funded costs because DCSD claimed unallowable and unbudgeted salaries and fringe benefit costs for nine teachers who were conducting routine math and science courses during the regular school day. DCSD should have allocated these costs to its general education expenses and not to the NSF award. DCSD also claimed another \$178,000 of unrelated program costs, including costs for subcontracts, materials and supplies, participant support and travel, which should have been charged to another NSF award. Finally, we questioned \$10,000 of stipends paid to undergraduate students participating in internships at Detroit Community Centers because DCSDS was unable to explain how these costs supported the NSF award.

DCSD also had a number of control deficiencies which we consider to be material. In general, DCSD's systems of internal controls were not adequate to properly administer, account for, and

monitor its NSF award in compliance with NSF and federal requirements in the areas of payroll, cost sharing, indirect costs, participant support, and allocability of costs between separate NSF awards. Specifically;

- DCSD lacked employee certifications and personnel activity reports to support any of the \$2.8 million of salary and fringe benefit costs it claimed through June 2004. DCSD did not realize that NSF awards were subject to timesheet requirements under OMB Circular A-87 until the final year of the award. Only through extensive alternative procedures were we able to verify that \$1.6 million of these costs were valid and benefited NSF's award. However, the remaining \$1.2 of labor costs for unallowable teacher salary and fringe benefit costs are questioned.
- DCSD lacked an efficient system to properly identify and account for the cost sharing it attributed to the NSF award, raising questions as to the reliability and integrity of the \$27,094,087 that it claimed on its certified cost sharing reports to NSF. While DCSD's automated accounting system did capture all cost sharing expenses, it did not specifically identify these expenses as benefiting NSF's awards. Instead, DCSD relied on a separate manual system to track the cost sharing amounts it used to support its NSF award. However, the manual system was not reconciled to the automated system in a timely manner. DCSD also lacked written policies for reporting of cost share. As such, DCSD was unable to readily or easily determine the status of its cost sharing contributions on its NSF award or ensure the same contributions were not also claimed on other federal awards. DCSD also utilized \$24.9 million in materials and supplies as cost share, of which \$20.2 million was spent on general math and science textbook expenses, expenses typically not allowed by NSF as cost share. Moreover, DCSD's proposed cost share budget designated only \$3 million for materials and supplies, with the remainder of the budget to include salaries, wages, fringe benefits, equipment, participant support costs and computer technology expenses. In addition, the NSF program announcement specifically indicated that "the use of school buildings, equipment, and materials during normal hours of operation is not considered cost sharing." Thus, it appears the use of general math and science textbooks as cost share did not benefit the purpose of the NSF award. However, we did not question the use of such textbooks as cost share because NSF program officers indicated to us that they would accept the textbooks as cost share if they were used to teach students math and science.
- DCSD did not have adequate policies and procedures for determining allowable indirect costs for its NSF grant. The award provided for a predetermined, fixed 2.29-percent indirect cost rate. This rate should have been applied to total direct costs less subaward costs and participant support costs. However, two unexplained amounts totaling \$25,466 were charged to NSF's award as indirect costs during the first two years of the award. Rather than calculating its indirect

costs utilizing its official accounting records, DCSD instead claimed as indirect costs the difference between its expenditures as of June 30, 2003 and the award's authorized funding amount.

- DCSD's accounting system did not separately track participant support costs incurred under the award in accordance with NSF requirements. Therefore, DCSD was unable to identify whether it had improperly spent participant support funds for other purposes, without NSF approval. To support \$5.2 million of participant support costs (47% of total costs claimed), DCSD had to manually review invoices in its financial records and prepare summary schedules, in order to accommodate the audit. DCSD also used participant support costs of \$10,000 to pay stipends for university undergraduate students participating in internships at Detroit community centers. These costs were not in the NSF budget approved for this project or related to the USP award.

Accordingly, we recommend that the NSF Directors of the Division of Institution and Award Support (DIAS) and the Division of Grants and Agreements (DGA) direct DCSD to ensure that employees maintain semi-annual certifications and monthly personnel activity reports to support salaries and wages charged to its NSF awards and direct DCSD to develop and implement written policies and procedures that ensure the reasonableness, allocability, and allowability of costs charged to its NSF grants. We also recommend that DCSD be directed to establish an efficient system to identify, account for, monitor, and report cost sharing expenses and that NSF require DCSD to explain the variances in the cost share proposed and the cost share incurred and explain how the cost share incurred actually benefited the NSF program. We also recommend that DCSD formulate and implement policies and procedures that effectively administer and monitor participant support costs, indirect costs, and the allocation of expenses for each NSF award.

The awardee responded to the draft report on March 20, 2006. In its response, the awardee stated that it concurred with the findings that it did not have 1) employee certifications to support salaries and fringe benefits charged to the NSF award; 2) an appropriate system to identify, account for, monitor, and report cost-sharing expenses; and, 3) procedures in place to prevent unallowable indirect costs from being charged to the NSF program and to properly segregate expenditures for multiple NSF awards. The awardee reported that it has implemented several actions to address the findings. The awardee did not specifically explain the variances in the cost share proposed and the cost share incurred. The awardee disagreed with the finding of unallowable labor costs for the nine teachers who appeared to be conducting routine teaching assignments for which the associated costs were not included in the NSF grant budget. The awardee also disagreed that the participant support costs used to support former Detroit Public Schools students in a Michigan State University program to tutor students in community-based centers were not related to the USP award. DCSD did not respond as to whether or not it agreed to formulate and implement policies and procedures to effectively administer and monitor participant support costs.

The findings in this report should not be closed nor should additional awards be made to DCSD until NSF has determined that all the recommendations have been adequately addressed and the

proposed corrective actions have been satisfactorily implemented. DCSD's response has been included in its entirety in Appendix A.

For a complete discussion of the audit findings, refer to the accompanying Independent Auditors' Report on Compliance with Laws and Regulations and Internal Control over Financial Reporting.

EXIT CONFERENCE

We conducted an exit conference on November 11, 2004, at DCSD. We discussed findings and recommendations as well as other observations contained in this report with those attending. Representing DCSD were:

Name	Title
[REDACTED]	[REDACTED]

Representing Cotton & Company LLP was:

Name	Title
[REDACTED]	[REDACTED]

FINDINGS AND RECOMMENDATIONS



Cotton & Company LLP
 635 Slaters Lane
 4th Floor
 Alexandria, VA 22314

P: 703.836.6701
 F: 703.836.0941
 www.cottoncpa.com

National Science Foundation
 Office of Inspector General
 4201 Wilson Boulevard
 Arlington, Virginia 22230

INDEPENDENT AUDITORS’ REPORT ON FINANCIAL SCHEDULE

We have audited costs claimed by Detroit City School District (DCSD) to the National Science Foundation (NSF) on the Federal Cash Transaction Reports (FCTR), for the NSF award listed below. In addition, we audited the amount of cost sharing claimed on the award. The FCTRs, as presented in the Schedule of Award Costs (Schedule A), are the responsibility of DCSD’s management. Our responsibility is to express an opinion on the Schedule of Award Costs (Schedule A) based on our audit.

Award Number	Award Period	Audit Period
ESR-9908234	09/01/99 to 8/31/04	09/01/99 to 6/30/04

Except as discussed in the following paragraph, we conducted our audit in accordance with auditing standards generally accepted in the United States of America; *Government Auditing Standards* (2003 revision), issued by the Comptroller General of the United States; and the *National Science Foundation Audit Guide*, September 1996, as applicable. These standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance that amounts claimed to NSF as presented in the Schedule of Award Costs (Schedule A) are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and the disclosures in the Schedule of Award Costs (Schedule A). An audit also includes assessing the accounting principles used and significant estimates made by DCSD management, as well as evaluating overall financial schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

The Schedule of Questioned Costs (Schedule B) explains the \$1,422,089 (13%) of total claimed NSF funded costs that we have questioned for allowability. These questioned costs include unallowable salaries and fringe benefits, incorrectly calculated indirect costs, and unrelated program costs. The Schedule of Cost Sharing (Schedule C) explains that DCSD provided \$27.1 million of cost share, \$20.2 million of which resulted from the purchase of general math and science textbooks which were not identified in the approved NSF cost share budget.

Questioned costs are (1) costs for which documentation exists to show that recorded costs were expended in violation of laws, regulations, or specific award conditions, (2) costs requiring additional support by the awardee, or (3) costs that require interpretation of allowability by NSF's Division of Institution and Award Support (DIAS). NSF will make the final determination of cost allowability. The ultimate outcome of this determination cannot presently be determined. Accordingly, no adjustment has been made to costs claimed for any potential disallowance by NSF.

In our opinion, except for \$1,422,089 of questioned NSF-funded costs, the Schedule of Award Costs (Schedule A) referred to above presents fairly, in all material respects, the costs claimed on FCTRs for the period September 1, 1999, to June 30, 2004, in conformity with the *National Science Foundation Audit Guide*, *NSF Grant Policy Manual*, terms and conditions of the NSF award and on the basis of accounting policies described in the Notes to the Financial Schedules. This schedule is not intended to be a complete presentation of financial position in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards* and provisions of the *National Science Foundation Audit Guide*, we have also issued a report dated November 11, 2004, on our tests of DCSD's compliance with certain provisions of laws, regulations, and NSF award terms and conditions and our consideration of DCSD's internal control over financial reporting. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

This report is intended solely for the information and use of DCSD management, NSF, DCSD's federal cognizant agency, the Office of Management and Budget, and the Congress of the United States of America and is not intended to be, and should not be used by anyone other than these specified parties.

COTTON & COMPANY LLP



Partner

November 11, 2004



Cotton & Company LLP
 635 Slaters Lane
 4th Floor
 Alexandria, VA 22314

P: 703.836.6701
 F: 703.836.0941
 www.cottoncpa.com

National Science Foundation
 Office of Inspector General
 4201 Wilson Boulevard
 Arlington, Virginia 22230

**INDEPENDENT AUDITORS’ REPORT ON
 COMPLIANCE WITH LAWS AND REGULATIONS AND
 INTERNAL CONTROL OVER FINANCIAL REPORTING**

We audited costs claimed as presented in the Schedule of Award Costs (Schedule A), which summarizes financial reports submitted by the Detroit City School District (DCSD) to the National Science Foundation (NSF) and claimed cost sharing for the award listed below and have issued our report thereon dated November 11, 2004:

Award Number	Award Period	Audit Period
ESR-9908234	09/01/99 to 8/31/04	09/01/99 to 6/30/04

We conducted our audit of the Schedule of Award Costs as presented in Schedule A in accordance with auditing standards generally accepted in the United States of America; *Government Auditing Standards (2003 revision)*, issued by the Comptroller General of the United States; and the *National Science Foundation Audit Guide*, September 1996, as applicable. These standards and the *National Science Foundation Audit Guide* require that we plan and perform the audit to obtain reasonable assurance that the financial schedule is free of material misstatement.

COMPLIANCE WITH LAWS AND REGULATIONS

Compliance with applicable federal laws, regulations, and NSF award terms and conditions is the responsibility of DCSD management. As part of obtaining reasonable assurance about whether DCSD’s financial schedule is free of material misstatement, we performed tests of DCSD’s compliance with certain provisions of applicable laws, regulations, and NSF award terms and conditions, noncompliance with which could have a direct and material effect on the determination of financial schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests of compliance disclosed instances of noncompliance that are required to be reported under *Government Auditing Standards* and *the National Science*

Foundation Audit Guide; see Findings 1 through 3, below.

INTERNAL CONTROL OVER FINANCIAL REPORTING

DCSD management is responsible for establishing and maintaining internal control. In fulfilling this responsibility, estimates and judgments made by management are required to assess expected benefits and related costs of internal control policies and procedures. The objectives of internal control are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial schedules in accordance with accounting principles prescribed by NSF. Because of inherent limitations in any internal control, misstatements due to errors or fraud may nevertheless occur and not be detected. Also, projection of any evaluation of internal controls to future periods is subject to the risk that procedures may become inadequate because of changes in conditions, or that the effectiveness of the design and operation of policies and procedures may deteriorate.

In planning and performing our audit of the Schedule of Award Costs for the period September 1, 1999, to June 30, 2004, we considered DCSD's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial schedule and not to provide an opinion on internal control over financial reporting. Accordingly, we do not express such an opinion.

We noted, however, certain matters involving the internal control over financial reporting and its operation that we consider to be reportable conditions under standards established by the American Institute of Certified Public Accountants. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect DCSD's ability to record, process, summarize, and report financial data consistent with management's assertions in the financial schedule. Reportable conditions we found are described in Findings 1 through 3, below.

A material weaknesses is a reportable condition in which the design or operation of one or more of the internal control elements does not reduce, to a relatively low level, the risk that misstatements in amounts that would be material in relation to the financial schedule being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of internal control over financial reporting would not necessarily disclose all matters related to internal control over financial reporting that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions also considered to be material weaknesses. We consider all of the reportable conditions described below to also be material weaknesses.

FINDINGS

Finding 1. Lack of Adequate Supporting Documentation for Salary and Fringe Benefit Costs Resulted in Unallowable Labor Costs

DCSD lacked the required employee certifications and personnel activity reports required by federal regulations and NSF to support all \$2.8 million of total salary and fringe benefit costs it charged to the NSF award. As such, DCSD was unable to provide support showing that labor costs charged to its NSF awards were actually incurred and benefited its NSF program.

DCSD employees assigned to the NSF award did not prepare personnel activity reports or certify their accuracy, nor did they maintain other supporting labor effort records such as personal calendars. DCSD personnel indicated they were unaware that the NSF award was subject to these time reporting requirements stipulated in OMB Circular A-87 until the USP program manager attended an NSF conference during the spring of 2003, prompted by problems found in other school district audits.

DCSD's accounting system uses an "Exception Time Reporting" process. This process only requires an employee to record his or her absences. Each employee's salary is charged to a funding source (grants or other cost objectives, such as administration) at the time an employee is initially entered into the accounting system. Thus, salary and wages are charged to funding sources based on pre-determined estimated costs and not on actual labor efforts. DCSD did not have after-the-fact certifications to verify actual time spent on the award. Because DCSD did not obtain employee certifications until the final year of the award, it was unable to ensure the validity and accuracy of estimated salary and benefit costs that its accounting system had automatically charged to the NSF award.

OMB Circular A-87, Attachment B, Section 11h, states that, to be allowable, charges to federal awards for salaries and wages, whether treated as direct or indirect costs, must be based on documented payroll. When employees are expected to work solely on a single federal award or cost objective, charges for their salaries and wages must be supported by periodic (at least semi-annually) certifications indicating that the employees worked only on that program. The certification should be signed by the employee or supervisory official having direct knowledge of the work performed by the employee. When employees work on multiple activities or cost objectives, a distribution of salaries or wages must be supported by personnel activity reports that reflect an after-the-fact distribution of actual activity of each employee; account for the total activity for which each employee is compensated; be prepared at least monthly; and, be signed by the employee.

Because DCSD was unable to provide employee certifications or personnel activity reports supporting the estimated effort amounts charged to the NSF award, it was necessary for us to interview all of the DCSD employees and supervisors charged to the NSF award to verify that employees whose salaries were charged to the award actually performed work on the award. While we were ultimately able to satisfy ourselves that \$1,560,971 of labor effort for administrative personnel was valid, the lack of an effective labor effort reporting process is a

serious control weakness. Further, we were not able to determine whether \$1,249,242 of costs for nine DCSD teachers was related to and therefore benefited the NSF award. Accordingly, we questioned these costs.

Unallowable Labor Costs

Our interviews with nine DCSD teachers and their supervisors revealed that these teachers were merely conducting their usual general math and science classes. As such, these routine teaching costs should have been charged to DCSD's general education expenses as opposed to NSF's award. Instead, DCSD charged the entire cost of these teachers' salaries and fringe benefits to the NSF grant. Moreover, these costs were not mentioned in either the grant proposal or the program budget, and were not previously approved by NSF as an award expense.

DCSD representatives referred us to a section of its NSF program budget as support for these costs. However, the referenced program budget section does not refer to teachers teaching general math and science classes. Instead, the referenced program budget section refers to "core curriculum implementation of standards based curriculum innovations" and states that "teachers will be provided opportunities to develop skills in core curriculum implementation that are research based and include ... Connected Mathematics, Exit Skills, materials development and attendant professional development, CEPUB, PASCAL, Probes, Core Plus, Bio/Com."

Further, DCSD representatives explained that these teachers were used as "model teachers" because other District teachers were allowed to observe them in their classroom. However, "model teachers" were not included in DCSD's project proposal or in its program budget. Model teachers, according to DCSD, were demonstrating how to implement the standards-based curriculum as part of the USP strategy. The co-principal investigator added that the model teachers assisted in implementing innovative strategies, could visit other teacher classrooms, provide professional development, and could implement project-based science. According to DCSD, the benefit of model teaching was to assess implementation of the total initiative in the District and to understand the impact of various programs to determine if large districts could scale-up mathematics and technology integration in their curriculum. Despite these explanations, the employee interviews revealed that the nine teachers were conducting their usual general math and science courses rather than activities related to accomplishing the goals of the NSF award.

OMB Circular A-87, Subpart C, identifies factors affecting allowability of costs. To be allowable under federal awards, costs must meet the criteria for allocable costs. A cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received. Because the \$1,249,242 of labor costs for nine of DCSD's teachers was not included in the NSF grant budget, and because it appeared these teachers were conducting routine teaching assignments, we questioned these costs as unallowable to the NSF award.

Recommendation 1: We recommend that the NSF Directors for the Division of Institution and Award Support (DIAS) and the Division of Grants and Agreements (DGA) direct DCSD to

continue to ensure that employees maintain semi-annual certifications and monthly personnel activity reports to support salaries and wages charged to NSF awards, as required by OMB Circular A-87, Attachment B, Section 11h.

DCSD Comments: DCSD stated they will ensure that employees maintain semi-annual certifications and monthly personnel activity reports to support salaries and wages charged to NSF awards. DCSD also stated it does not consider any of its curricula as “regular mathematics and science” and that the cost for the teachers was consistent with the award.

Auditors’ Additional Comments: DCSD’s corrective actions, as described in its comments appear to be responsive to our recommendation except that they did not address why the labor costs for the nine teachers were not included in the NSF budget. Accordingly, we continue to question these costs. This report finding should not be closed until this recommendation has been adequately addressed and NSF determines that the corrective actions have been satisfactorily implemented.

Finding 2. Lack of an Efficient System to Identify, Account for, Monitor and Report Cost Sharing and Claiming General Math and Science Textbooks as Cost Share

Lack of an Efficient System to Identify, Account for, Monitor, and Report Cost Share

DCSD lacked an efficient system to properly identify, account for, monitor and report cost sharing it attributed to the NSF award, raising questions as to the reliability and integrity of the \$27,094,087 that DCSD claimed on its certified cost sharing reports submitted to NSF.

NSF’s *Grant Policy Manual* (GPM) Section 333.6, *Cost Sharing Records and Reports*, and OMB Circular A-110, Subpart C, Section 23, require grantees to maintain records of all costs claimed as cost sharing, and states that those records are subject to audit. These regulations also state that cost-sharing expenses must be verifiable from the recipient’s records and must not be included as contributions to any other federal award or funded by any other federal award. OMB Circular A-110 Section .23, also states that, to be accepted as part of the recipient's cost sharing, expenditures must be necessary and reasonable for proper and efficient accomplishment of project or program objectives and allowable under applicable cost principles.

While DCSD’s accounting system did capture all cost sharing expenses, it did not separately identify and track those expenses incurred on behalf of the NSF award as opposed to other federal awards. Instead, DCSD used an alternative manual system consisting of a collection of receipts, invoices, and other hard copy documents to identify and account for cost sharing specific to the NSF award. However, DCSD did not reconcile these manual records to its accounting records on a regular basis. As such, DCSD was unable to know the status of its cost share contributions in comparison to its commitment. Also, without this reconciliation DCSD could not ensure that these contributions were not also used on other federal awards or that the funds for certain cost-share amounts did not come from other federal sources.

DCSD utilized a Grant Compliance Officer to prepare its cost sharing certifications based on the manual system. These cost share certifications based on the manual records were also reviewed by the co-principal investigator, who forwarded them to the Chief Financial Officer (CFO). The CFO then required accounting system transaction detail reports to support the cost-share certifications. However, the reconciliation of accounting system detail to the manual system records used to prepare the cost share certifications was not performed until after the CFO submitted the cost share reports to NSF. Thus, because the cost share expenditures in DCSD's accounting system were not identified as NSF grant-related expenditures at the time of occurrence, and because the reconciliation of the manual system to the accounting system did not occur in a timely manner, DCSD could not be sure that the same costs were not also claimed on other federal awards.

Additionally, DCSD did not have written procedures for documenting and reporting its cost-sharing requirements. Instead, DCSD relied on NSF's "Cost Share Frequently Asked Questions" to provide written cost-sharing procedures rather than prepare its own written policies of how to account for, document, and report its cost share for NSF awards.

The lack of a timely reconciliation between the manual records and the accounting system records, coupled with the lack of written cost share procedures raises concerns as to the reliability and accuracy of the cost share amounts DCSD claimed to NSF. It also raises concerns as to whether or not DCSD double-counted its cost share and claimed those same amounts as cost share on other federal programs.

General Math and Science Textbooks Claimed as NSF Program Cost Share

DCSD claimed \$20.2 million of its general math and science textbook expenses (75% of total cost share) as cost share under its NSF award. This type of cost share expense was not included in the budget DCSD submitted to and approved by NSF for this award. Also, the NSF program announcement specifically indicated that "the use of school buildings, equipment, and **materials** during normal hours of operation **is not considered cost sharing.**"

NSF's USP Program Announcement 99-52 stated that awardees should adhere to their cost-share budgets as proposed and that the proposed cost-sharing budget would be considered in evaluating the proposal. The announcement also stated that the amount of cost sharing proposed by the grantee would become a condition of the award and that "the use of school buildings, equipment, and materials during normal hours of operation is not considered cost sharing."

However, the types of costs that DCSD claimed as cost share varied significantly from the NSF approved cost share budget and the program announcement. For example, \$24,975,833, (92 percent), of the cost share claimed by DCSD consisted of materials and supplies, even though the original budget DCSD proposed and NSF approved for this award showed only \$3,005,000 (14 percent) for materials and supplies. Additionally, the approved budget for this award did not specify any costs for textbooks, but DCSD claimed \$20.2 million of general math and science textbooks as cost share, materials that were precluded in the NSF program announcement.

DCSD indicated to us that it interpreted its grant as a core curriculum development and improvement grant for math, science, and technology. Consequently, it considered any type of non-federal funding that related to its general math, science, and technology programs as cost share for its NSF grant. On this basis, DCSD claimed \$20.2 million in cost share for general math and science textbooks. By taking such a broad interpretation, DCSD was able to claim \$6.1 million (29%) more cost share than was required under the award. However, this additional cost share was accomplished through the purchase of general math and science textbooks, materials that do not appear to have benefited the NSF award, rather than through the purchase of items approved by NSF for this program. Nevertheless, we did not question the general math and science textbook cost share because NSF program officers indicated to us they would accept the textbooks as cost share if they were used to teach students math and science.

Cost categories for budgeted and claimed cost sharing and their respective percentages of total cost sharing are as follows:

Cost Category	Budgeted Amounts	% of Total	Claimed Expenses 1999-2004	% of Total
Salaries and Wages			\$1,275,066	
Fringe Benefits			123,243	
Permanent Equipment			47	
Travel			1,601	
Participant Support Costs:				
Stipends			285,380	
Travel			123,624	
Other			0	
Other Direct Costs:				
Materials and Supplies			24,975,833	
Publication Costs			332	
Consultant Services			187,854	
Computer Technology			0	
Other			<u>121,107</u>	
Total Direct Costs	\$20,726,192		\$27,094,087	
Indirect Costs	<u>253,430</u>		<u>0</u>	
Total	<u>\$20,979,622</u>		<u>\$27,094,087</u>	
Exceeded Amount			<u>\$6,114,465</u>	29

Recommendation 2:

- a. We recommend that the NSF Directors of DIAS and DGA direct DCSD to establish a system to identify, account for, monitor, and report cost-sharing expenses and, at a minimum, ensure that:
- Cost sharing for NSF awards is separately tracked, accounted for, and verifiable in DCSD's accounting records; is not included as a contribution for any other federally-assisted project or program; is necessary and reasonable for proper and efficient accomplishment of project and program objectives; is allowable under applicable cost principles; and, is not paid by the federal government under another award.
 - All NSF awards with cost-sharing requirements are immediately identified and reported to the Accounting Department so that cost sharing expenditures can be tracked, associated with the NSF award, and reported as they are incurred.
 - Costs-sharing costs incurred and claimed on NSF awards are appropriately designated as such as they occur to establish that they are reasonable, allocable, and allowable to NSF awards.
 - Cost-sharing policies and procedures are developed and documented, are consistent with NSF requirements, and are communicated to appropriate DCSD staff.
- b. We recommend that the NSF require DCSD to explain the variances in the cost share proposed and the cost share incurred and verify that the amount of cost share incurred actually benefited the NSF program.

DCSD Comments: DCSD stated that it will establish a system to identify, account for, monitor, and report cost-sharing expenses through a designated program code. DCSD also stated it converged its resources to ensure that the cost share materials benefited the NSF program.

Auditors' Additional Comments: DCSD's corrective actions, as described in its comments, appear responsive to our recommendation, except that they did not explain the variances in the amounts of cost share proposed and those incurred to verify that the amount of cost share incurred actually benefited the NSF program. The system established should ensure that written policies and procedures are in place and are effective to demonstrate that DCSD has actually provided cost sharing in the amounts claimed which benefited the NSF award as opposed to other federal awards. This report finding should not be closed until this recommendation has been adequately addressed and NSF determines that the corrective action has been satisfactorily implemented.

Finding 3. Lack of an Effective Financial Management System and Internal Control

Process for Participant Support, for Indirect Costs, and for Segregation of Expenditures for Multiple NSF Awards

DCSD did not have adequate financial management systems and internal control processes to properly administer its NSF award in the areas of participant support and indirect costs. It also did not maintain proper segregation of expenditures for its multiple NSF Awards.

As stated in NSF's GPM Section 301, DCSD is responsible for prudent management of all expenditures and actions affecting the grant. GPM Section 301 also states that documentation for each expenditure or action affecting the award must reflect appropriate organizational reviews or approvals, which should be made in advance of the action. Moreover, GPM Section 410 states that NSF grantees are required to have financial management systems that meet requirements of Section 21 of OMB Circular A-110. That circular requires awardee financial management systems to provide:

- Accurate, current, and complete disclosure of the financial results of each award.
- Records that adequately identify the source and application of funds.
- Effective control over accountability for all funds, assuring that all funds are used solely for authorized purpose.
- Comparison of outlays with budget amounts for each in accordance with provisions of applicable federal and award requirements.
- Accounting records, including cost accounting records, supported by source documentation.

Participant Support Costs

DCSD did not have an adequate system to track, document, and monitor the use of participant support funds to ensure the allowability of the participant support expenditures that it charged to its NSF grant. DCSD did not separately identify participant support costs in its accounting system. Instead, the expenditure categories of "participant support costs-other," "subcontract," and "other costs" were all recorded under a single account code entitled "6838 other purchased services." To support \$5.2 million (47%) of claimed participant support costs, DCSD representatives had to manually review invoices during the audit, identify those costs that were for participant support activities, and manually prepare a summary schedule of participant support costs.

DCSD's failure to separately record and account for participant support costs at the time such costs were incurred, made it difficult for DCSD to monitor participant support expenditures for allowability. Additionally, we found that DCSD used \$10,000 of participant support funds to pay stipends for university undergraduate students participating in internships at Detroit community centers, costs not in the approved NSF budget or related to the USP award. The

inefficiencies and lack of timeliness in the recordation of participant support costs in DCSD's accounting records resulted in DCSD spending \$10,000 of funds designated for participant support on costs which were not participant support. Therefore we questioned the \$10,000.

Indirect Costs

DCSD did not have adequate policies and procedures for determining allowable indirect costs for NSF award No. ESR-9908234. The award provided for a predetermined, fixed 2.29-percent indirect cost rate. This rate should have been applied to total direct costs less subaward costs and participant support costs. Two unexplained charges totaling \$25,466 were recorded as indirect costs in the books of account during the first two years of the award. Rather than calculate its indirect costs utilizing its official accounting records, DCSD instead claimed as indirect costs the difference between its expenditures as of June 30, 2003, and the award's authorized funding amount.

According to DCSD representatives, its accounting personnel prepared an estimate of indirect costs on its June 30, 2003, FCTR. The use of a plug amount was to allow DCSD to claim the total of the award's authorized funding level available at the time the FCTR was submitted to NSF. Thus, estimated amounts were used to claim indirect costs rather than actual accounting records.

DCSD accounting personnel did not follow special award provisions or NSF regulations when it charged indirect costs to its NSF award. Indeed, DCSD should have provided NSF award terms for indirect cost calculations to the staff assigned to calculate such costs for its NSF award. Although DCSD utilized plug numbers to report its indirect costs on its NSF grant, we nonetheless identified \$15,206 in underclaimed indirect costs in its accounting records. Therefore we are not questioning indirect costs but nevertheless believe DCSD has weaknesses in its indirect cost accounting processes that need to be corrected. Further explanation of how the underclaimed amount was calculated is provided in Schedule B, Note 4.

Lack of Segregation of Expenditures for Multiple NSF Awards

DCSD claimed \$178,053 of unrelated program costs to Cooperative Agreement ESR-9908234 during fiscal year 2000. These costs were related to NSF Cooperative Agreement No. ESR-9453665 but were erroneously charged to Cooperative Agreement ESR-9908234 due to an inadequate grant numbering system. Although the time period of Cooperative Agreement No. ESR-9453665 overlapped with Cooperative Agreement No. ESR-9908234 for 5 months, DCSD did not establish a new grant number in its accounting system to distinctly track expenditures incurred for its two NSF awards.

According to DCSD representatives, DCSD inadvertently processed charges to ESR-9908234 (USP) which had not been claimed under ESR-9453665 (USI award). In the spring of 1999, DCSD posted in its accounting system a preliminary budget for Cooperative Agreement ESR-9908234 (USP) to begin on July 1, 1999. Thus, USI program activities which occurred during the USI/USP overlap period of September 1999 to February 2000 were inadvertently posted to

the USP program. Erroneous USI charges posted to the USP award included \$178,053 of costs that should have been charged to NSF Award No. ESR-9453665 for subcontracts, materials and supplies, participant support and travel. We questioned the \$178,053 of overcharged costs.

Recommendation 3: We recommend that the NSF Directors of DACS and DGA require DCSD to develop and implement written policies and procedures that:

- a. Provide a financial management system and control processes that effectively administer and monitor participant support costs, indirect costs, and allocation of expenditures for each NSF award.
- b. Require supervisory reviews and approvals of expenditures and other actions under NSF awards as costs are incurred.
- c. Ensure reasonableness, allocability, and allowability of all costs claimed in accordance with NSF and federal requirements as costs are incurred.
- d. Ensure that DCSD personnel are adequately trained and understand how to comply with federal and NSF award requirements.

DCSD Comments: DCSD concurs with this finding and stated it will not again engage in the practice of using funds to support former DCSD students in the Michigan State program to tutor students in community-based centers. Beginning in fiscal year 2005, DCSD has created a restricted line item for indirect costs as one of the control measures to prevent unallowable costs from being charged. Additionally, DCSD stated that all purchase requests using Federal funds are reviewed for allowability prior to becoming a purchase order or contract. The District's Grant Compliance Office publishes a weekly newsletter that communicates grant requirements as well as District policies and procedures on an on-going basis.

Auditors' Additional Comments: DCSD's corrective actions, as described in its comments, appear to respond to our recommendations except DCSD did not respond to whether it agreed to formulate and implement policies and procedures that effectively administer and monitor participant support costs. This report finding should not be closed until NSF determines that the corrective action has been satisfactorily implemented.

We considered these instances of noncompliance and internal control weaknesses in forming our opinion on whether the Schedule of Award Costs (Schedule A) presents fairly, in all material respects, costs claimed by DCSD on the FCTR and cost sharing claimed for the period September 1, 1999, to June 30, 2004, in conformity with federal and NSF award terms and conditions, and determined that this report does not affect our report dated November 11, 2004, on the financial schedule.

This report is intended solely for the information and use of DCSD management, NSF, the

cognizant federal audit agency, OMB, and the Congress of the United States and is not intended to be and should not be used by anyone other than these specified parties.

COTTON & COMPANY LLP



Partner

November 11, 2004

**FINANCIAL SCHEDULES
AND SUPPLEMENTAL
INFORMATION**

SCHEDULE A

DETROIT CITY SCHOOL DISTRICT
DETROIT, MICHIGAN

NATIONAL SCIENCE FOUNDATION AWARD NO. ESR-9908234
SCHEDULE OF AWARD COSTS
SEPTEMBER 1, 1999, TO JUNE 30, 2004
INTERIM

Cost Category	Approved Budget	Claimed Costs	Questioned Costs	Schedule Reference
Salaries and Wages				B, Note 1
Fringe Benefits				B, Note 1
Travel				B, Note 2
Participant Support:				
Stipends				B, Note 2
Other				B, Notes 2-3
Other Direct Costs:				
Materials and Supplies				B, Note 2
Publications				
Subcontracts:				
Wayne State University				B, Note 2
University of Michigan				
Total Direct Costs	\$11,290,489	\$10,880,757	\$1,437,295	
Indirect Costs	<u>209,511</u>	<u>25,466</u>	<u>(15,206)</u>	B, Note 4
Total Costs	<u>\$11,500,000</u>	<u>\$10,906,223*</u>	<u>\$1,422,089</u>	
Cost Sharing	<u>\$20,979,622</u>	<u>\$27,094,087</u>	<u>0</u>	

* Total claimed costs agree with total expenditures reported on the FCTR for the quarter ended June 30, 2004. Claimed costs are based on the Summary of Claimed Costs prepared by DCSD from its books of accounts.

SCHEDULE B

DETROIT CITY SCHOOL DISTRICT DETROIT, MICHIGAN

NATIONAL SCIENCE FOUNDATION AWARD NO. ESR-9908234 SCHEDULE OF QUESTIONED COSTS SEPTEMBER 1, 1999, TO JUNE 30, 2004

1. Salaries and Fringe Benefits

DCSD claimed 100 percent (██████████) of salary and related fringe benefit costs for nine teachers that served as “model teachers” in the USP. These employees worked full-time as classroom teachers, but served as models for other teachers to observe in the classroom. DCSD allocated none of the salary and fringe benefit costs for these teachers to the general education expense of teaching students.

OMB Circular A-87, Attachment A, Subsection C.3, states that a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received. DCSD had not allocated these costs in accordance with relative benefits received.

We also noted that these “model teachers” were not mentioned in the grant budget. DCSD’s annual reports submitted to NSF make reference to “modeling” in the context of professional development. DCSD identified two budget line items, Core Curriculum Implementation (under participant support costs) and Teacher Release Substitute Service (under salaries and wages), as support that model teacher costs were included in the grant budget. The budget description for these activities does not match activities performed by these model teachers.

Accordingly, we questioned these costs.

DCSD Comments: DCSD stated that it agreed it did not have employee certifications supporting amounts charged to the NSF award but believes that the “model teachers” did benefit the NSF award.

2. Erroneous Charges

DCSD charged \$178,053 to this award that it should have charged to Cooperative Agreement No. ESR-9453665, as follows:

Item	Amount
Travel	████████
Participant Support	
Stipend	████████
Other	████████
Materials and Supplies	████████
Subcontracts	████████
Total Costs	<u>\$178,053</u>

OMB Circular A-87, Attachment A, Subsection C.3, states that a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received.

We questioned these costs.

3. Participant Support, Other

DCSD claimed \$10,000 contributed to Michigan State University’s Detroit Spartan Program. The program provides stipends to undergraduate students participating in internships at Detroit Community Centers. The students provide tutoring, computer training, field trips, and mentoring of high school student assistants to inspire students to continue in school and enter college. DCSD representatives were unable to explain how the contribution benefited USP.

OMB Circular A-87, Attachment B, Section 13, states that contributions and donations, including cash, property, and services, by governmental units to others, regardless of the recipient, are unallowable. In addition, OMB Circular A-87, Attachment A, Subsection C.3, states that a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received.

We questioned these costs.

DCSD Comments: DCSD stated that it disagrees that the costs for the Detroit Public Schools undergraduate students participating in internships were not related to the USP award.

4. Indirect Costs

DCSD did not claim indirect costs in accordance with award terms. Section III, B11, of the award states that indirect costs will be based on a fixed 2.29-percent indirect rate applied to direct costs, less capital items, participant support costs, and subawards. DCSD claimed \$25,466, resulting in an under claim, as follows:

Total direct costs	\$10,880,757
Less: Questioned Costs	1,437,295
Less: Subawards not questioned (\$2,640,444-\$130,673)	2,509,771
Less: Participant support costs not questioned (\$5,188,660-\$31,051)	<u>5,157,609</u>
Indirect cost base per audit	\$1,776,082
Fixed indirect cost rate	<u>2.29%</u>
Indirect costs per audit	\$40,672
Less: Claimed indirect costs	<u>25,466</u>
Underclaimed indirect costs	<u>\$15,206</u>

SCHEDULE C

DETROIT CITY SCHOOL DISTRICT
DETROIT, MICHIGAN

NATIONAL SCIENCE FOUNDATION AWARD NO. ESR-9908234
SCHEDULE OF COST SHARING
SEPTEMBER 1, 1999 TO JUNE 30, 2004
INTERIM

Cost Category	Budgeted Amounts	Claimed Expense
Salaries and Wages	[REDACTED]	[REDACTED]
Fringe Benefits	[REDACTED]	[REDACTED]
Permanent Equipment	[REDACTED]	[REDACTED]
Travel	[REDACTED]	[REDACTED]
Participant Support Costs:		
Stipends	[REDACTED]	[REDACTED]
Travel	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]
Other Direct Costs:		
Materials and Supplies	[REDACTED]	[REDACTED]
Publication Costs	[REDACTED]	[REDACTED]
Consultant Services	[REDACTED]	[REDACTED]
Computer Technology	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]
Total Direct Costs	\$20,726,192	\$27,094,087
Indirect Costs	<u>253,430</u>	<u> </u>
Total	<u>\$20,979,622</u>	<u>\$27,094,087</u>

SCHEDULE D

**DETROIT CITY SCHOOL DISTRICT
SUMMARY SCHEDULE OF AWARD AUDITED AND AUDIT RESULTS
SEPTEMBER 1, 1999, TO JUNE 30, 2004**

Summary of Award Audited

Award Number	Award Period	Audit Period
ESR-9908234	09/01/99-08/31/04	09/01/99-06/30/04

Type of Award	Award Description
Cooperative Agreement	Urban Systemic Program

Summary of Questioned and Unresolved Costs by Award

Award Number	Award Budget	Claimed Costs	Questioned Costs	Unresolved Costs	Unsupported Costs
ESR-9908234	\$11,500,000	\$10,906,223	\$1,422,089	0	0

Summary of Questioned Cost by Explanation

Category	Questioned Costs	Internal Control Finding	Noncompliance Finding
Salary and Fringe Benefits	[REDACTED]	Yes	Yes
Travel		Yes	Yes
Participant Support		Yes	Yes
Materials & Supplies		Yes	Yes
Subcontracts		Yes	Yes
Negative Questioned Indirect Costs		(15,206)	Yes
Total Questioned Cost	<u>\$1,422,089</u>		

Summary of Noncompliance and Internal Control Findings

Findings	Noncompliance or Internal Control?	Material or Reportable?
Salary and Fringe Benefits	Both	Material
Cost Sharing	Both	Material
Financial Management System	Both	Material

**NOTES TO FINANCIAL SCHEDULES
SEPTEMBER 1, 1999, TO JUNE 30, 2004**

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Accounting Basis

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions. Schedule A has been prepared from the reports submitted to NSF. The basis of accounting utilized in preparation of these reports differs from generally accepted accounting principles. The following information summarizes these differences:

A. Equity

Under award terms, all funds not expended according to the award agreement and budget at the end of the award period are to be returned to NSF. Therefore, an awardee does not maintain any equity in the award, and any excess of cash received from NSF over final expenditures is due back to NSF.

B. Equipment

No equipment was purchased under the NSF award.

C. Inventory

Minor materials and supplies are charged to expense during the period of purchase. As a result, no inventory is recognized for these items in the financial schedule.

2. INCOME TAXES

DCSD is a local governmental entity and is exempt from income taxes under the Internal Revenue Code.

3. NSF COST SHARING AND MATCHING

As set forth in the grant award, the approved cost sharing was as follows:

Cost Sharing	National Science Foundation	Total Project Budget
\$20,979,621	\$11,500,000	\$32,479,621

4. INDIRECT COST RATES

- Type of rate authorized for award: Predetermined fixed rate of 2.29 percent.
- Period of rate: September 1, 1999, to June 30, 2004.
- Indirect cost rate used to claim cost: Based on total direct costs less capital items, subawards, and participant support costs.

APPENDIX A

AWARDEE'S COMMENTS TO REPORT



DETROIT PUBLIC SCHOOLS

FISHER BUILDING, 14TH FLOOR
7329 SECOND AVENUE

DETROIT, MICHIGAN 48207
(313) 873-7480
FAX (313) 873-7443

March 20, 2006

[REDACTED]
Cotton & Company LLP
635 Slaters Lane, 4th Floor
Alexandria, Virginia 22314

Dear [REDACTED]

Listed below, please find a response to the NSF Audit Report.

**Finding 1 Lack of Adequate Supporting /Documentation for Salary and Fringe
Benefit Costs Resulting in Unallowable Labor Cost**

District Vision for Science and Mathematics

A well-articulated vision for science and mathematics in the Detroit Public Schools is grounded in constructivist teaching and learning. This vision is reflected in a document entitled, "*The Constructivist Vision for Teaching and Learning and Staff Development*" developed by the District.

"All students pursue a K-12, sequential, futuristic course of mathematics and science study that develops and requires analytical and other higher order thinking skills; independent inquiry; use of manipulatives; active participation and practical application. All K-12 teachers responsible for mathematics and science have the "attitude, knowledge, techniques and confidence to equip students with the information and skills they need to pursue higher education and/or entry into the workplace." Physical infrastructure must include, "classroom and laboratories that are equipped with state of the art technology and equipment appropriate for grade and content." The community must also be involved, with "teachers, administrators, parents, the community, institutions of higher education, city government, business and industry all expecting and helping students pursue and develop mathematics and scientific literacy."

Goals for DUSP

In order to help realize the vision, goals for the DUSP built on the work of the DUSI were consistent with and integrated into the overall strategic goals of the District. Overall, DUSP goals were:

1. Improve the implementation of standards-based, inquiry-centered curricula for science, mathematics and technology.
2. Increase the competency and diversity of science and mathematics instructional workforce.
3. Promote collaborations with colleges and universities to improve their approaches to teacher education.
4. Increase the number of skilled entrants into the technology-based workforce.
5. Employ research as a tool to improve the teaching and learning of science and mathematics.
6. Achieve reform across the entire district in each building.

The goals of the DUSP were consistent with the National Science Foundation (NSF) goals for its DUSP as reflected in the NSF Drivers—a set of statements that define successful systemic change in science and mathematics.

Driver 1

Implementation of comprehensive standards-based curricula as represented in instructional practice, including student assessment, in every classroom, laboratory, and other learning experiences provided through the system and its partners.

Driver 3

Convergence of the usage of all resources that are designed for or that reasonably could be used to support science and mathematics education—fiscal, intellectual, material, curricular and extra curricular—into a focused and unitary program to constantly upgrade, renew and improve the educational program in mathematics and science for all students.

Through our summative evaluation, the District capacities to sustain and continue the Drives have been assessed and categorized by organizational levels including, Structural, Organizational and Individual.

The District has established policy that all buildings will implement the approved DPS curriculum that is aligned with the Michigan Curriculum Framework and national standards. The mathematics and science curriculum were adopted in 2001. The standards-based curriculum included many programs that are researched-based and developed in the NSF Instructional Materials Division. Subsequent to that development, the programs are sold by commercial publishers.

The District does not consider any of its curricula as “regular mathematics and science.” A great deal of work has been devoted to aligning the curriculum, developing pacing guides, assessments, instructional strategies, and technology. The teachers assisted with the core curriculum implementation and scale up. Professional development in some of the initiatives required off-site training. Schedules required flexibility with teacher service. The technology integration was also important whether in the laboratory setting

or individual classrooms. The cost for the teachers was certainly consistent with the award.

Detroit Public Schools has a long history of supporting district- and school-level mathematics and science specialists. In addition to the teachers, the specialists provide important direct services to teachers and students. It is clear from the work of DUSI and DUSP that specialists are an important component in the improvement effort. They are especially important in such a large district with many new teachers and teachers with limited backgrounds in mathematics and science.

Response

The District will insure that employees maintain semi-annual certifications and monthly personnel activity reports to support salaries and wages charged to NSF awards.

Finding 2 Lack of an Efficient System to Identify, Account for Monitor and Report Cost Sharing and Claiming General Math and Science Textbooks as Cost Share

The District will put in place a system that separately accounts for, and reports cost sharing.

The instructional materials referenced are all research-based innovations, many developed in the Instructional Materials Division in NSF. The materials are consonant with the implementation of NSF Driver 1—the implementation of comprehensive standards-based curricula as represented in instructional practice, including student assessment in every classroom, laboratory, and other learning experiences provided by the system and its partners.

The District converged its resources to insure that the materials benefited the NSF program. By policy, the adoption process allows for only the selection of standards-based materials. DPS was totally committed to the Systemic Reform of Mathematics and Science and adopted only such programs. The programs were reviewed in a documented process and finally selected for use in all classrooms. (TERC Investigations, Connected Mathematics Program, FOSS Kits, Video Discovery, Active Physics, Chem Com, Core Plus Mathematics, Graphing Calculators, etc.)

Response

DPS will establish a system to identify, account for, monitor, and report cost-sharing expenses through a designated program code.

Finding 3 Lack of an Effective Financial Management System and Internal Control Process for Participant Support, for Indirect Costs and for Segregation of Expenditures for Multiple NSF Awards

Response

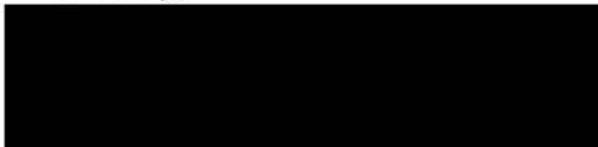
The District did use funds to support former DPS students in the Michigan State program to tutor students in community-based centers. The District viewed the initiative as leveraging the NSF resources in the region. The District will not again engage in this practice. It was our understanding that the funded programs in the region were to leverage resources.

Indirect Cost

The District agrees with the finding as presented. At the time of the award the District did not have procedures in place to prevent unallowable indirect costs to be charged to the NSF program. Beginning with fiscal year 2005, the District has created a restricted line item for indirect costs as one of the control measures to assist with preventing unallowable costs to be charged. In addition, controls have been established so that all purchase requests from departments that are using federal funds are reviewed prior to becoming a purchase order or contract. This review ensures that anticipated costs are allowable at the beginning of the purchasing process.

The District will continue to work with Departments and Divisions in communicating grant requirements. On a weekly basis our Federal, State, and Local Grant Compliance issues a newsletter that communicates grant requirements as well as District policies and procedures on an on-going basis.

Sincerely,

A large black rectangular redaction box covering the signature area.A small black rectangular redaction box covering the initials.

Attachment

Detroit Urban Systemic Program Teacher Component

Teachers are the critical element in making the vision of improved student achievement in mathematics and science a reality in the Detroit Public Schools. From the very beginning, teacher professional development has been a focus of the Urban Systemic Initiative and later the Urban Systemic Program. In fact, one program goal is to increase the competency and diversity of the science and mathematics instructional workforce. Intensive teacher enhancement programs have been conducted each year over the life of the two NSF grants. All professional development activities model constructivist approaches that teachers are expected to use in their classrooms. Teachers are trained to teach for understanding, and to assist students in the relevancy of learning by helping them apply knowledge and skills to their daily lives. Professional development takes the form of study groups, summer institutes, district-wide professional development days and series of workshops presented by national experts, local consultants, university personnel and District staff who are successfully implementing certain strategies. Training is also provided through university courses, and some designed especially for Detroit personnel. The District works with Wayne State University, Eastern Michigan University, University of Detroit, University of Michigan, Madonna University, Oakland University and Marygrove College. The teacher component of the USP utilized certain teachers for the purpose of modeling curriculum implementation strategies. These standards-based strategies used in classrooms included technology infusion, Core Plus mathematics, Carnegie Mathematics, Center for Learning Technologies in Urban Schools (LeTUS) and Inquiry.

As part of the plan, substitute teachers were utilized at Southwestern and Murray Wright High Schools to allow adequate coverage of traditional mathematics and science classes. These substitute teachers were used to implement the curriculum and were selected due to their science and/or mathematics preparation. The substitutes participated in district sponsored professional development and attended university courses. Substitute service was especially important to the mathematics departments at Southwestern and Murray Wright since several staff members pioneered Core Plus for the district. Teachers involved in Core Plus mathematics implementation taught four classes instead of the usual five due to the additional preparation demands. At Southwestern these teachers were given a common preparation period to allow them to work as a team to formulate lesson plans, coordinate activities, resolve common problems, and learn TI-83 graphing calculator routines. Teachers participated in topic specific institutes during the summer and workshops throughout the school year at Western Michigan University with the developers of Core Plus. This standards-based National Science Foundation program integrates technology with algebra and geometry concepts in the context of real world problems.

Howe Elementary School is a science-focused school that has infused a variety technologies and distance learning activities. The key teacher here served as a science specialist in the building teaching students and teaming with teachers in the delivery of science education. The entire Howe staff participated in WyTRIAD, a science

professional development model that fosters conceptual change with a focus on partnerships, collegiality, and constructivism.

Lessenger Middle School is one of twenty-five schools engaged in the Center for Learning Technologies in Urban Schools (LeTUS) through a subaward with the University of Michigan, Ann Arbor. The focus of the Center's activities is the promotion of inquiry and the creation of strategies for embedding and sustaining the use of computing and communications technologies in the middle school science curriculum. The lead science teacher implementing LeTUS at Lessenger supported other science teachers by team teaching with them, teaching the technology parts of units, setting up multiple computers in classrooms, setting up demonstration computers with probes and the LCD panel, and helping teachers use Laser disks and Palms.

Teachers and their duties are listed below.

██████████ – Science Teacher, Lessenger Middle School

Demonstration teacher duties include:

Teacher leader for science at Lessenger Middle School

Coordinated technology efforts (loaded software; maintained local network of 20 Macintosh and 28 Sun Microsystems workstations in a computer laboratory; demonstrated use of probes such as light, pH, motion, dissolved oxygen, force and sound; used Palms; Laser disk players; Flex camera; distance learning equipment; and smart keyboards).

Piloted software and science lessons for LeTUS and DPS

Developed curriculum for LeTUS units (Air, Water, Helmet and How Can I Make New Stuff From Old Stuff)

Presented at conferences

Planned workshops

Served on textbook adoption committees

██████████ – Science Teacher, Detroit Academy of Science, Mathematics and Technology

Demonstration teacher duties include:

Teacher leader for science at Detroit Academy SMT

Piloted software and developed science lessons for LeTUS and DPS

Mentored new LeTUS teachers

Presented at conferences

Served on curriculum committees

Substitute teachers ██████████ (Southwestern HS) and ██████████ (Murray Wright HS) provided support to the Mathematics Departments of schools implementing Core Plus mathematics.

The duties for a Core Plus teacher includes:

Utilized the TI-83 graphing calculator

Participated in workshops on the use of the Core Plus texts and graphing calculator

Used cooperative and collaborative learning strategies

Attended specialized professional development activities focused on the effective use of the model

Convened study groups with other teachers using the program

Served as workshop presenter to model strategies used in the program
Modeled the program for others interested in using all or part of the model
Modeled constructivist teaching strategies

██████████, Mathematics Teacher, Murray Wright High School

The duties for a Carnegie Math teacher include:
Participated in workshops to effectively use the Carnegie Math computer program
Maintained computer laboratory and materials needed to conduct the program
Teamed with other Carnegie teachers in the use of effective teaching strategies
Participated in study groups with other teachers using the model
Modeled constructivist teaching strategies

██████████, Science Teacher, Southwestern High School

██████████, Science Teacher, Murray Wright High School

██████████, Science Teacher, Southwestern High School

The duties of science teachers using inquiry strategies include:
Promoted active learning with hands-on activities that emphasize process
Provided a range of activities, with class discussion designed to elicit competing points of view
Utilized technology to promote student investigation and problem solving
Provided experiences that enable students to test their understandings
Provided connections to previous and present learning experiences
Helped students confront misconceptions by providing experiences to explore a concept in a variety of ways
Developed concepts from real world situations and everyday experiences of students
Integrated problem solving and higher order thinking skills into subject matter units rather than teaching these skills in isolation
Used collaboration and consensus building in the learning process
Encouraged the development of social skills and cooperative group work strategies
Communicated regularly with parents and community
Used open-ended questions and problems
Encourages multiple solutions to problems
Promoted the philosophy that all students can learn
Helped students self-assess their learning
Used performance assessments that reflect and are integrated with classroom discussion

██████████, Science Teacher, Howe Elementary

Demonstration teacher duties include:
Coordinated technology activities for the school
Acted as lead teacher/specialist for science at Howe Elementary
Mentored teachers
Presented at conferences
Teamed with other science teachers
Used constructivist teaching strategies

Finding 1

We agree with the finding that the District did not have employee certifications supporting amounts charged to the NSF award. The District will maintain semiannual certifications and monthly personnel activity reports to support salary and wages charged to NSF awards.

We do believe that the cost of the teachers was related and therefore benefit the NSF awards. Therefore, we disagree with this component of the findings.

Finding 3

Participant Support

We disagree with the finding that the participant support costs for the Detroit Public Schools undergraduate students participating in internships were not related to the USP award.

████████████████████
It is a pleasure to consider our mutual cooperation in the Detroit Spartans Program once again.

With regard specifically to the \$10,000 DUSI gift, it was placed in the gift account of ██████████ ██████████, Director of the National Science Foundation Center for Microbial Ecology at Michigan State University. This account remains as one of a small number of gift accounts, if not the sole account, remaining on the Michigan State University campus for which there is no overhead cost charged by the university. Thus, the entire amount was put toward student stipends: "Gift to Detroit Spartans program as matching funds for stipends for approximately 10 MSU students participating in internships at Detroit Community Centers," Invoice no. 99-002, 4/7/00.

Of 60 DPS graduates who were selected from greater than 300 DPS freshmen-sophomore applicants at MSU, the ten funded under the DUSI/DUSP gift were assigned to two Detroit community centers. They worked with and mentored DPS youth in summer programs as follows: five at the Dexter Elmhurst Community Center in central Detroit and five at the Warren-Conner Development Coalition on the city's east side. At Dexter Elmhurst, approximately 150 neighborhood youth, ages 5-17, attended the USDA-funded summer lunch program over a period of ten weeks in the summer. The DPS-MSU students worked with the youth, 10AM-3PM, assisting with lunch, designing and providing the following supplemental activities: individual and group tutoring, computer training (approximately 12 center computers available), recreational activities (refurbished gym), art and music activities, dancing training, discussions led by outside speakers for older youth, and field trips, e.g., Detroit Zoo and MSU campus.

Similarly, at the Warren-Conner Development Coalition (WCDC), the five MSU

students performed similar instructing and mentoring activities under the Youth on the Edge of Greatness Program (YOE) at WCDC with the following aspects specific to YOE program: approximately 60 8th-9th graders from eleven area middle schools being served per day by MSU students in tutoring, assisting in a yard beautification program, and in a community sponsorship of a Detroit Job Fair at WCDC. OF six MSU students (five sponsored by DPS) at WCDC, mentoring was specifically structured by administrators as follows: four served as youth coordinators; two, exclusively as tutors. An additional level of mentoring included high school student assistants selected by WCDC administrators. According to [REDACTED], YOE Director, the mentoring of the children by the high school students and the high school students by the college students, in turn, was particularly effective.

It is noteworthy that the Detroit Spartans Internship Program was essentially a DPS-MSU student-generated program. It began with one student volunteering to serve at her home community center, with CME-NSF funding to be applied to her MSU tuition. As a Central High School graduate, Dexter-Elmhurst was home to her as her neighborhood community center, and she was both welcomed and accepted by administrators and children alike; in turn, she gained in pride and confidence about her academic accomplishments at MSU, thereby providing further incentive for her own MSU graduation. From this one student, word spread by the grapevine, if you will, and four summers of DPS graduates at MSU, working in their home neighborhoods in positions needed by their communities followed for a total of greater than 100 student interns serving in Metro Detroit. A primary effort was made to "match" student interests/majors with needs in their own home communities.

In turn, as part of example-setting mentoring, MSU-DPS students wore "Detroit Spartans"/"Michigan State University" T-shirts, in order to be easily identified wherever they went and in whatever they did. Students followed every opportunity to stress the importance of education to their youth, to inspire their continuation in school, to learn about job readiness, and perhaps eventually to go to college.

In the course of approximately ten years, NSF funding was provided for Detroit Public Schools work by the MSU Science and Technology (STC) NSF Center as a supplement to the base STC grant. Science in the City, continued now by DPS, was a program for high school students generated by DPS Science Departments in conjunction with CME. LINK, on the MSU campus was initiated by the College of Natural Science (CNS) under MSU's Office of the Provost funding, designed to serve Detroit students at MSU and to facilitate their graduation. The Detroit Spartans was one of twelve activities under the LINK Program backed by NSF and [REDACTED], developed and overseen by CNS Dean [REDACTED], and coordinated with [REDACTED] of the DPS Office of Science. Ten-twenty percent of every source of funding was put toward program evaluation through the MSU Institute for Public Policy and Social Research. In sum, NSF, MSU, [REDACTED] (DPS-MSU professional basketball star), and Detroit community agencies' funding approximated one million dollars.

I will fax a copy of the invoice cited above and a flyer generated by the College describing the internship program specifically, to [REDACTED]

Please feel free to contact either CNS [REDACTED] or CME [REDACTED], for administrative corroboration of the use of this DUSI gift. The CME, as well as the other eleven STCs, underwent an NSF audit in the late 1990s such that all funding for Science in the City and LINK until that time may also be corroborated. [REDACTED] accountant, would be able to provide further financial accounting. The final NSF report would also provide narrative information concerning the overall programming.

Once again, it is a pleasure to think of our years of cooperation and accomplishment. To cite the professional accomplishments of just a couple of DPS and new MSU graduates, [REDACTED], MSU student leader at WCDC, is now an admissions counselor at Detroit Mercy College; [REDACTED], MSU student leader at Dexter Elmhurst, is now overseeing an after school computer training program at three community centers in Lansing.

Sincerely,

[REDACTED]
Department of Microbiology & Molecular Genetics
Michigan State University

HOW TO CONTACT
THE OFFICE OF INSPECTOR GENERAL

Internet

www.oig.nsf.gov

Email Hotline

oig@nsf.gov

Telephone

703-292-9158

Toll-Free Anonymous Hotline

1-800-428-2189

Fax

703-292-9159

Mail

Office of Inspector General
National Science Foundation
4201 Wilson Blvd., Suite 1135
Arlington, VA 22230