U.S. Department of Education

Washington, D.C. 20202-5335

APPLICATION FOR GRANTS UNDER THE

Professional Development for Arts Educators

CFDA # 84.351C

PR/Award # U351C140006

Gramts.gov Tracking#: GRANT11649212

OMB No. , Expiration Date:

Closing Date: May 19, 2014

Table of Contents

Form	Page
1. Application for Federal Assistance SF-424	e3
2. Assurances Non-Construction Programs (SF 424B)	e6
3. Disclosure Of Lobbying Activities (SF-LLL)	e8
4. ED GEPA427 Form	e9
Attachment - 1 (1236-Milwaukee Public Schools GEPA)	e10
5. Grants.gov Lobbying Form	e12
6. ED Abstract Narrative Form	e13
Attachment - 1 (1235-Milwaukee Public Schools Abstract)	e14
7. Project Narrative Form	e15
Attachment - 1 (1238-Milwaukee Public Schools Project Narrative)	e16
8. Other Narrative Form	e65
Attachment - 1 (1237-Milwaukee Public Schools Other Attachment Form)	e66
9. Budget Narrative Form	e132
Attachment - 1 (1234-Milwaukee Public Schools Budget Narrative)	e133
10. Form ED_524_Budget_1_2-V1.2.pdf	e137
11. Form ED_SF424_Supplement_1_2-V1.2.pdf	e139

This application was generated using the PDF functionality. The PDF functionality automatically numbers the pages in this application. Some pages/sections of this application may contain 2 sets of page numbers, one set created by the applicant and the other set created by e-Application's PDF functionality. Page numbers created by the e-Application PDF functionality will be preceded by the letter e (for example, e1, e2, e3, etc.).

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 05/14/2014

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Milwaukee Public Schools

* b. Employer/Taxpayer Identification Number (EIN/TIN): 396003457

* c. Organizational DUNS: 0761378920000

d. Address:

* Street1: 5225 W. Vliet St.
Street2:
* City: Milwaukee
County/Parish: Milwaukee County
* State: WI: Wisconsin
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 53208-2627

e. Organizational Unit:

Department Name: Office of Academics

Division Name: Curriculum and Instruction

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Ms.
* First Name: Kimberly
Middle Name:
* Last Name: Abler
Suffix:

Title: Curriculum specialist

Organizational Affiliation: Milwaukee Public Schools

* Telephone Number: (414) 475-8051
Fax Number: (414)475-8277

* Email: ablerka@milwaukee.k12.wi.us

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

G: Independent School District

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

U.S. Department of Education

11. Catalog of Federal Domestic Assistance Number:

84.351

CFDA Title:

Arts in Education

*** 12. Funding Opportunity Number:**

ED-GRANTS-031814-001

* Title:

Office of Innovation and Improvement (OII): Professional Development for Arts Educators (PDAE) Program CFDA Number 84.351C

13. Competition Identification Number:

84-351C2014-1

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

DREAM -- Design, Research, Exhibit, Analyze, Museum

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: 4th-WI
* b. Program/Project: 4th-WI

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 10/01/2014
* b. End Date: 09/30/2018

18. Estimated Funding ($):

* a. Federal	1,340,375.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	1,340,375.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on _____.

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Dr.
* First Name: Gregory
Middle Name: E.
* Last Name: Thornton
Suffix:

* Title: Superintendent of Schools

* Telephone Number: (414)475-8001
Fax Number: 414-475-8585

* Email: gthornton@milwaukee.k12.wi.us

* Signature of Authorized Representative: Gregory Thornton
* Date Signed: 05/14/2014

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

OMB Number: 4040-0007
Expiration Date: 06/30/2014

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
Gregory Thornton	Superintendent of Schools
APPLICANT ORGANIZATION	**DATE SUBMITTED**
Milwaukee Public Schools	05/14/2014

Standard Form 424B (Rev. 7-97) Back

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

Approved by OMB
0348-0046

1. * Type of Federal Action:
- [ ] a. contract
- [x] b. grant
- [ ] c. cooperative agreement
- [ ] d. loan
- [ ] e. loan guarantee
- [ ] f. loan insurance

2. * Status of Federal Action:
- [ ] a. bid/offer/application
- [x] b. initial award
- [ ] c. post-award

3. * Report Type:
- [x] a. initial filing
- [ ] b. material change

4. Name and Address of Reporting Entity:

[x] Prime [ ] SubAwardee

** Name* Milwaukee Public Schools

** Street 1* 5225 W. Vliet St. *Street 2*

** City* Milwaukee *State* WI: Wisconsin *Zip* 53208-2627

Congressional District, if known: 4th-WI

5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:

6. * Federal Department/Agency:
U.S. Department of Education

7. * Federal Program Name/Description:
Arts in Education

CFDA Number, *if applicable:* 84.351

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*
$

10. a. Name and Address of Lobbying Registrant:

Prefix Mr. ** First Name* Christopher *Middle Name*

** Last Name* Thiel *Suffix*

** Street 1* 5225 W. Vliet St. *Street 2*

** City* Milwaukee *State* WI: Wisconsin *Zip* 53208-2627

b. Individual Performing Services (including address if different from No. 10a)

Prefix Mr. ** First Name* Christopher *Middle Name*

** Last Name* Thiel *Suffix*

** Street 1* 5225 W. Vliet St. *Street 2*

** City* Milwaukee *State* WI: Wisconsin *Zip* 53208-2627

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

*** Signature:** Gregory Thornton

***Name:** *Prefix* ** First Name* Christopher *Middle Name*

** Last Name* Thiel *Suffix*

Title: Legislative Policy Specialist **Telephone No.:** 414-475-8190 **Date:** 05/14/2014

Federal Use Only:

Authorized for Local Reproduction
Standard Form - LLL (Rev. 7-97)

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

NOTICE TO ALL APPLICANTS

The purpose of this enclosure is to inform you about a new provision in the Department of Education's General Education Provisions Act (GEPA) that applies to applicants for new grant awards under Department programs. This provision is Section 427 of GEPA, enacted as part of the Improving America's Schools Act of 1994 (Public Law (P.L.) 103-382).

To Whom Does This Provision Apply?

Section 427 of GEPA affects applicants for new grant awards under this program. **ALL APPLICANTS FOR NEW AWARDS MUST INCLUDE INFORMATION IN THEIR APPLICATIONS TO ADDRESS THIS NEW PROVISION IN ORDER TO RECEIVE FUNDING UNDER THIS PROGRAM.**

(If this program is a State-formula grant program, a State needs to provide this description only for projects or activities that it carries out with funds reserved for State-level uses. In addition, local school districts or other eligible applicants that apply to the State for funding need to provide this description in their applications to the State for funding. The State would be responsible for ensuring that the school district or other local entity has submitted a sufficient section 427 statement as described below.)

What Does This Provision Require?

Section 427 requires each applicant for funds (other than an individual person) to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its Federally-assisted program for students, teachers, and other program beneficiaries with special needs. This provision allows applicants discretion in developing the required description. The statute highlights six types of barriers that can impede equitable access or participation: gender, race, national origin, color, disability, or age. Based on local circumstances, you should determine whether these or other barriers may prevent your students, teachers, etc. from such access or participation in, the Federally-funded project or activity. The description in your application of steps to be taken to overcome these barriers need not be lengthy; you may provide a clear and succinct description of how you plan to address those barriers that are applicable to your circumstances. In addition, the information may be provided in a single narrative, or, if appropriate, may be discussed in connection with related topics in the application.

Section 427 is not intended to duplicate the requirements of civil rights statutes, but rather to ensure that, in designing their projects, applicants for Federal funds address equity concerns that may affect the ability of certain potential beneficiaries to fully participate in the project and to achieve to high standards. Consistent with program requirements and its approved application, an applicant may use the Federal funds awarded to it to eliminate barriers it identifies.

What are Examples of How an Applicant Might Satisfy the Requirement of This Provision?

The following examples may help illustrate how an applicant may comply with Section 427.

(1) An applicant that proposes to carry out an adult literacy project serving, among others, adults with limited English proficiency, might describe in its application how it intends to distribute a brochure about the proposed project to such potential participants in their native language.

(2) An applicant that proposes to develop instructional materials for classroom use might describe how it will make the materials available on audio tape or in braille for students who are blind.

(3) An applicant that proposes to carry out a model science program for secondary students and is concerned that girls may be less likely than boys to enroll in the course, might indicate how it intends to conduct "outreach" efforts to girls, to encourage their enrollment.

We recognize that many applicants may already be implementing effective steps to ensure equity of access and participation in their grant programs, and we appreciate your cooperation in responding to the requirements of this provision.

Estimated Burden Statement for GEPA Requirements

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit (Public Law 103-382). Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20210-4537 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1894-0005.

Optional - You may attach 1 file to this page.

Milwaukee Public Schools GEPA.pdf | Add Attachment | Delete Attachment | View Attachment

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

General Education Provisions Act (GEPA)

To ensure equal access to teachers, students and families from diverse cultural and social backgrounds including members of groups that have traditionally been under represented based on race, color, national origins, gender, age and disability, Project *DREAM : Design, Research, Exhibit, Analyze Museums* will employ specific strategies. Project *DREAM* will develop and implement culturally competent curriculum and professional development that reflect the multicultural richness of the Milwaukee community. The cultural competency of staff in curriculum is viewed as a process in which deliberate actions are taken by the staff and program providers to develop an understanding of cultural differences and similarities in the school population and to systematically integrate these differences into program design, activities, and learning outcomes. The culturally competent programs will draw upon the diverse resources of children, community and families. Practical examples are:

- Schools will develop cultural arts programs to facilitate the sharing of expressions of ethnic pride.
- Information and communication will be provided in the languages of school participants.
- Intergenerational programs will be developed to increase access for teachers of all age groups and artistic disciplines.
- Participating schools will host family workshops that provide hands-on art experiences that parallel the professional development programming provided for the teachers. In this way the learning community embraces the entire school community beginning with the teachers and then moving to students and families

The *DREAM* team will work closely with teachers and other support staff to create an effective referral and follow-up strategy that ensures that all students and teachers have the opportunity to participate in the project. All teachers in the qualifying 162 K-12 schools across our entire district will be invited to participate. The museums that will be supporting this project were selected to represent the

diverse cultures of our city and they include Latino Arts, America's Black Holocaust Museum, Milwaukee Jewish Museum, Milwaukee Public Museum, John Michael Kohler Art Center, South Side Settlement House, Wisconsin Black Historical Society and Museum and Milwaukee Art Museum. Each school will work with the neighborhood-based organizations and their network of residents, block leader, and strategic planning committees to encourage neighborhood youth and residents to attend arts programs. Each site will offer an array of cultural and artistic programs and activities that reflect the cultural, racial, gender, age and disability of the school membership and surrounding neighborhood. Many schools in our district offer after school and summer programming to maximize student and community participation and the staff of these extended day programs will also be served in the professional development plans.

Finally, the schools will ensure access to their programs by: a) making the entire facility a safe place for children, family and teachers to gather; b) working with local cultural and other arts organizations, to create cultural programs for the neighborhood; and c) coordinating program professional development activities with neighborhood organizations that engage local residents in community activities like storytelling programs, ethnic arts festivals, cultural exchange programs and similar activities.

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,00 0 and not more than $100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subjec t to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

* APPLICANT'S ORGANIZATION

Milwaukee Public Schools

* PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Prefix: Dr. * First Name: Gregory Middle Name: E.

* Last Name: Thornton Suffix:

* Title: Superintendent of Schools

* SIGNATURE: Gregory Thornton * DATE: 05/14/2014

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

Abstract

The abstract narrative must not exceed one page and should use language that will be understood by a range of audiences. For all projects, include the project title (if applicable), goals, expected outcomes and contributions for research, policy, practice, etc. Include population to be served, as appropriate. For research applications, also include the following:

- Theoretical and conceptual background of the study (i.e., prior research that this investigation builds upon and that provides a compelling rationale for this study)
- Research issues, hypotheses and questions being addressed
- Study design including a brief description of the sample including sample size, methods, principals dependent, independent, and control variables, and the approach to data analysis.

[Note: For a non-electronic submission, include the name and address of your organization and the name, phone number and e-mail address of the contact person for this project.]

You may now Close the Form

You have attached 1 file to this page, no more files may be added. To add a different file, you must first delete the existing file.

* Attachment: Milwaukee Public Schools Abstract.pdf | Add Attachment | Delete Attachment | View Attachment

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

ABSTRACT

Organization: Milwaukee Public Schools, 5225 West Vliet Street, Milwaukee, WI 53208

Contact Person: Kimberly Abler, Project Director: (414) 475-8051; ablerka@milwaukee.k12.wi.us

The proposed *Design, Research, Exhibit, Analyze Museums (DREAM)* project will improve the knowledge and skills of arts and non-arts educators to support high quality arts education and integration in 70 kindergarten-12th grade classrooms in high-poverty, low achieving schools. Milwaukee Public Schools is the 39th largest urban school district in the nation, the largest in Wisconsin, in the nation's tenth poorest U.S. city. About 79% of the 78,502 largely minority student body qualifies for free/reduced-price lunch. The district is challenged by persistent achievement gaps and overall under-performance.

DREAM will serve over 6,300 K-12 students and 70 teachers. Participating schools have 50% or more low income students who low qualify for free or reduced-priced lunch.

The project leverages local and national resources, including a community-based arts education advocacy organization, museums, institutes of higher education, artists, and related experts to strategically support improved instruction in high-poverty schools. It will provide professional development to support teachers in learning how to organize instruction to facilitate project-based student learning. Schools will be linked with arts partners providing direct services to students and teacher support in standards based integrated arts instruction. Each teacher will receive a total of 95 hours of professional development over the course of the two years including training focused on Visual Thinking Strategies, training to facilitate the learning of student created museums and training in arts integration through technology. *DREAM* will support development and implementation of a strategic professional development model for sustainable, standards-based arts integration in high-poverty, urban schools. *DREAM* will: 1) Improve the content knowledge of participating art and K-12 teachers through professional development that is supported by technology; 2) Increase students' participation in high-quality arts education activities and programs; and 3) Increase frequency of collaboration among stakeholders to foster a sustainable arts model.

Close Form

Project Narrative File(s)

*** Mandatory Project Narrative File Filename:** Milwaukee Public Schools Project Narrative.pdf

Add Mandatory Project Narrative File | Delete Mandatory Project Narrative File | View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File | Delete Optional Project Narrative File | View Optional Project Narrative File

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

Professional Development for Arts Educators Program

Design, Research, Exhibit, Analyze Museums (DREAM)

Table of Contents

Abstract…….i

Project Narrative

Significance…...…….1

Quality of Project Design…….……..5

Quality of Project Services……..….12

Quality of the Project Personnel...……...…….22

Quality of the Management Plan...……...…....31

Quality of Project Evaluation…....……...…....40

Budget Narrative and Detail…….49

Other Attachments

Appendix A: Alignment to Standards…….……..53

Appendix B: "Learning on Display" ……..……..63

Appendix C: Resumes of Key Project Personnel…….…….....…75

Appendix D: Organizational Management Plan……...……94

Appendix E: Evaluation Technical Methodology…….……...…..102

Appendix F: Evaluation Timeline…...……..……...…..107

Appendix G: Logic Model……...…….…...……111

Appendix G: References……..……...…….…...……116

1) Significance

Milwaukee Public Schools (MPS), despite improvements in its graduation and college-going rates, is challenged to improve achievement in reading, language arts and mathematics. This project is designed to enhance student achievement in those areas by infusing arts into subject area lessons. Research shows that arts integration increases student engagement and student performance and is most effective for at-risk students. Reinvesting in Arts Education: Winning America's Future through Creative Schools (May 2011) shows that when students participate in the arts they are four times more likely to be recognized for academic achievement, have higher grade point averages and SAT scores, and demonstrate a 56 percent improvement in spatial-temporal IQ scores. Those students show significantly higher levels of mathematics proficiency by grade 12, are more engaged and cooperative with teachers and peers, and are more self-confident and better able to express their ideas. These benefits are particularly pronounced in high-poverty, low-performing schools, and work in tandem with other pedagogical approaches. Arts education works best as a part of overall school and education reform strategy.

Poverty is negatively associated with achievement for MPS students. Only 15.3% of economically disadvantaged district students were proficient in math, and 11% were proficient in reading, as measured by the 2013-14 Wisconsin Knowledge and Concepts Examinations or Wisconsin Alternative Assessments for Students With Disabilities. Overall, in MPS, 19% of all students were proficient or better in math. Statewide, 48.6% of students were proficient or better in math. In reading, 14.7% of MPS were proficient or better in reading, compared to 36.6% of students statewide.

In 2013, the district hired 48 new art teachers and will hire an additional 25 for the 2014-15 school year. In addition, more than 400 non-arts teachers were hired for the 2013-14 school year. All of these teachers are new to MPS; many are new to the teaching profession. This project will provide much needed support to new educators who are entering the district and, by creating school teams, will directly connect the new teachers to other teaching professionals in their schools. The project includes specific efforts to team new teachers with experienced teachers, thus providing the former with job-embedded coaching. The project will also help assimilate the new teachers into the cultures of their schools and the district and reinforce the arts program across their schools.

The *Design, Research, Exhibit, Analyze Museums (DREAM*) project will help MPS leverage and expand the expertise and effectiveness of both art and non-art teachers in participating K-12 sites to improve student achievement and develop the professional practice of teachers across schools.

The Information and Technology Plan of MPS is a systemic framework designed to maximize current resources and build upon past accomplishments in order to continue the momentum towards a 21st century learning environment that will serve the needs of its students and community. This plan will help guide the creation of effective digital dissemination of all the *DREAM* products for the wider community of educators to access and use to enhance their own classroom instruction. (Competitive Preference Priority) The *DREAM* digitization project will include video, audio, images, reading lists, resources, and links to pertinent websites, research, agendas, and itineraries. The project will link to websites of partners, such as Arts @ Large, Inc. (www.artsatlargeinc.org) and Kid Curators (http://kidcurators.com), significantly expanding *DREAM*'s potential influence and audience. MPS' Moodle-based electronic collaboration

environment is called The Learning Community (TLC). *DREAM* will provide a Moodle TLC room dedicated to the project for use by participating and interested educators across the district. It will be comprised of a calendar of project activities, forums and resources to allow the participants to discuss, share, and post lessons. This will be an open community for all MPS teachers and will allow them to access resources, browse through the project activities, post video, and conduct real-time chats. (Competitive Preference Priority)

Mediasite is a video-based tool that allows for the taping and viewing of presentations, including professional development, teaching lessons, student presentations, and informational messages. Documents used in these situations, such as PowerPoints, student work, primary source documents, and images, can be integrated at appropriate times into Mediasite presentations. *DREAM* professional development, when appropriate, will be taped for others to access through Mediasite. Exemplars of arts-integrated lessons developed during the *DREAM* project will be taped at different grade levels to be accessed by other teachers in the district and the wider community. Samples of student work will also be posted to the Vimeo website along with explanations of the work, allowing the broader community and educators anywhere to understand the lessons, the goals, and the products. When appropriate and with the permission of the presenters, the professional development sessions will be taped and distributed as podcasts. All project podcasts will be accessible through a variety of web sites related to the *DREAM* project and its partners. The project director and professional development coordinator will take responsibility for maintaining the *DREAM* digital content, but other participants will also be taught to use the tools. This will allow the site to be fluid, flexible, and more robust.

Professional development (PD) sessions will be videotaped and posted electronically to be accessed beyond the actual PD events that are identified in the project. *DREAM* information

and progress reports will be disseminated to the broader Milwaukee community through the Milwaukee Education Partnership, a PK-16 council of education, labor, business, government, university, foundation, parent and community groups whose purpose is to enhance the quality of teaching and learning in Milwaukee schools. The Arts@Large website and the Milwaukee Artist Educator Directory, created through the Cultural Alliance, will feature individual school progress, lesson plans and program results. The MPS portal, now undergoing a redesign, will feature information, lesson plans and project progress reports. In addition, news about this project will be widely distributed across the mathematics, reading and English language arts teaching community and will be featured in their content areas of the portal. Arts@Large also has a monthly newsletter that is published, weekly e-blasts, and an annual report distributed throughout the district and to all of the arts partners and higher education partners and business partners throughout the state. School support teachers at each participating school will attend monthly meetings at the district level and communicate the progress of this project to their counterparts across the district. MPS, partnering with two higher education institutions (University of Wisconsin –Milwaukee and Cardinal Stritch University), is part of a recent statewide comprehensive art education initiative that focuses on teacher preparation supported through arts integration. This project will be shared with all stakeholders as a part of that collaborative. The *DREAM* project director, project coordinator, project professional development coordinator and evaluator, as well as the school teams, will pursue opportunities to present at educational or arts conferences, such as the state and national art and music conferences, and museum conferences, as a way of sharing the results of the project. The district is a member of the Council of Great City Schools and will be hosting its national conference in 2014, where the project director and professional development coordinator will present this

model of professional development. In addition, the project director and coordinator will submit articles to art, music, museum and educational journals to help disseminate this model for professional development in arts integration and the results of the project. Linda D'Acquisto, as the lead program professional developer and PD provider, will serve as the project professional development coordinator and will also help to disseminate the results of this project and write articles to communicate the successes of the work. She is a published author (Learning on Display: Student-Created Museums that Build Understanding) and has successfully written numerous articles for educational journals.

2) Quality of Project Design

The *DREAM* project serves as a pilot, strategic professional development model for sustainable, standards-based arts integration in high-poverty urban schools and classrooms. It builds teacher teams connecting classroom and art teachers, many of whom are entering the education system or have five or less years of teaching experience. These teams will create hubs of arts integration teaching and learning in their schools, which will serve as demonstrations sites for other teachers and pre-service teachers in the community. The project engages a variety of arts, K-12, higher education, parents and community stakeholders in planning and implementing a cross-content area K-12 curriculum that leverages a research-based model, Visual Thinking Strategies (VTS), with student-created museums to simultaneously improve student learning in literacy, mathematics and the arts. Teacher knowledge and successful implementation of technology into instruction will be emphasized to support increased student engagement and achievement. (Competitive Preference Priority). The goals of the *DREAM* project include: 1) provide high quality, research-based professional development of sufficient rigor and duration to prepare arts and other core content teachers to design and deliver standards-based integrated

curriculum; 2) promote model strategies for strengthening community arts partnerships; 3) improve collaborative planning among core subject and art teachers and implementation of an aligned, sequential, cross-content area K-12 curriculum; 4) increase student engagement in high quality arts education; and 5) promote students' visual thinking and simultaneously increase student learning in literacy, mathematics and the arts.

Serving a total of 70 K-12 teachers and 6,300 – 7,350 students over the four years, the project is designed to directly support the key components of the MPS Comprehensive Literacy Plan and the MPS Comprehensive Math and Science Plan. These components are high-quality, curricular and instructional resources and materials; instructional technology for every classroom; high-quality professional development; and implementation supports for participating teachers, school support teachers and community partners, including artists. The project also will foster and promote as additional supports broad community and constituency support, a variety of enrichment opportunities for students and staff, and meaningful parent and family engagement.

Comprehensive district plans: MPS began implementing its Comprehensive Math and Science Plan in 2011-12 and that plan continues to focus on science, technology, engineering and math (STEM). STEM efforts include programs bringing STEM education into early grades, a large number of schools using the rigorous Project Lead the Way program, an expansion of aquaponics efforts and alignment of science instruction to rigorous college- and career-readiness standards (Invitational Priority).

The district's Comprehensive Literacy Plan, adopted in 2010, focuses on reading, language arts and literacy in the core content areas and is aligned to the Common Core State Standards.

The *DREAM* project, the Comprehensive Literacy Plan and the Comprehensive Mathematics and Science Plan all focus on literacy. To be literate in math, not only should students know the mechanics of specific skills, they should be able to know in what situations these skills may be appropriate. The district's Math and Science Plan recognizes that the true "math literate" is not someone who has lots of math knowledge; it is someone who correctly applies the skills they do have to given situations. Mathematical literacy is an individual's capacity to use mathematics as a fully functioning member of a society. A mathematically literate person can estimate; interpret data; solve day-to-day problems; reason in numerical, graphical, and geometric situations; and communicate using mathematics.

Scientific literacy is the knowledge and understanding of scientific concepts and processes required for personal decision making, participation in civic and cultural affairs, and economic productivity. A scientifically literate person can ask, find, or determine answers to questions derived from curiosity about everyday experiences. It means that a person has the ability to describe, explain, and predict natural phenomena. Scientific literacy entails being able to read with understanding articles about science in the popular press and to engage in social conversation about the validity of the conclusions. A scientific literate person should be able to identify scientific issues underlying national and local decisions and express positions that are scientifically and technologically informed. A literate citizen should be able to evaluate the quality of scientific information on the basis of its sources and the methods used to generate it. Scientific literacy also implies the ability to pose and evaluate arguments based on evidence and apply conclusions appropriately from these arguments.

The *DREAM* project is designed to broaden participants' understanding of literacy across math, science, reading and the arts through research-based professional development that

demonstrates evidence of promise. Effective professional development, according to Darling – Hammond and Richardson (2009): deepens teacher's knowledge of content and how to teach it to students; helps teachers understand how students learn specific content; provides opportunities for active hands-on learning; enables teachers to acquire new knowledge, apply it to practice, and reflect on the results with colleagues; is part of a school reform effort that links curriculum, assessment, and standards to professional learning; is collaborative and collegial; and is intensive and sustained over time.

By combining the proven methodology of the Visual Thinking Strategies and the techniques of student-created museums, teachers will gain deeper content knowledge in visual art and work with students to demonstrate their learning by creating museums. Cooper-Solomon's (2005) research suggests that if a school would devote more time (25%) to teaching the arts, students would have superior academic abilities. Aprill (2004) supports this in his research as well and says, "the arts do indeed increase student achievement when achievement is conceived in rich and complex ways-authentic connections between the arts and the rest of learning." Pianta and Blesky (2007) found that American fifth graders were spending 91% of their school day listening to their teachers talk or working alone; the findings for first and third graders were similar.

This project is designed to deeply engage students in their own learning process using inquiry and project-based methods. Both of these instructional practices are essential to STEM education. International comparisons of math and science achievement show that students taught through inquiry do significantly better on standardized tests than those experiencing the conventional topic coverage (lecture and worksheet) model (Weglinsky 2004, McTighe, Seif, and Wiggins 2004; Wilhelm 2007).

Visual Thinking Strategies: Visual Thinking Strategies (VTS) is a successful and recognized research-based educational curriculum and teaching method that enables students to develop aesthetic and language literacy and critical thinking skills while giving teachers a powerful new technique they can use throughout their careers. VTS is an educational protocol that encourages deep inquiry into art works and their meanings. The educational theory behind VTS comes from extensive empirical research done by Abigail Housen, a cognitive psychologist in the Harvard Graduate School of Education. She formulated a theory of Aesthetic Stages and VTS applies specific methodologies to encourage development through these stages. Students learn to make meaning from the world around them, to gain confidence in their own ideas while respecting those of others, and to contribute to a thoughtful debate amongst a group of peers. VTS' purpose is to foster cognitive growth through interaction with art and to boost academic achievement in every school in which VTS is implemented, facilitating systemic change in how students learn and how teachers teach.

Interaction with art promotes creativity and critical thinking skills, improves language and writing and boosts academic achievement. Philip Yenawine, who has directed education programs at many well-known museums, such as the Metropolitan Museum of Art, the Museum of Modern Art in New York City, and the Museum of Contemporary Art in Chicago, was one of Abigail Housen's co-developers of VTS. His influence – along with the vested interest of museums in developing an aesthetically educated populace – led to the integration by many educational programs of VTS theory into the curriculum.

VTS curriculum is designed to enable beginning viewers to develop a personal connection to art from diverse cultures, times, and places; develop confidence in their ability to construct meaning from that art it; examine, describe, discuss and interpret what they see in a

work of art; and draw grounded conclusions about the intentions of the artists who make the works and the cultures from which they come (Visual Understanding in Education, 2004).

To achieve these goals, teachers employ methods that require students to observe and discuss works of art. For example, in a common curriculum format, students may be asked to look at as many aspects of a picture as they can find; describe what they see as accurately as possible; participate in a class discussion; draw conclusions based on identifying the evidence they have gathered from a picture; make distinctions between what they see and what they think about what they see; expand and develop their own points of view; and become aware of the questions they might ask themselves in everyday life as they encounter unfamiliar objects, gleaning as much information from these objects as possible (Visual Understanding in Education, 2004).

A hallmark of the VTS curriculum is the emphasis on the students' learning processes, both individually and in conjunction with one another, rather than on the instructor's dissemination of knowledge. "All along, teachers are facilitators of the students' process, never the expert (Visual Understanding in Education, 2004)." Self direction and self-discovery signify development through aesthetic stages.

In a study that worked with 162 children ages 9 and 10, the students were trained to look closely at works of art and reason about what they saw. The results showed that the students' ability to draw inferences about artwork transferred to their reasoning in science. In both cases, the critical skill of observing and reasoning were improved (D. Wilhelm 2002). These same skills are essential for learning in STEM education.

Student created museums: Student created museums will serve as catalysts for student learning and the intersection for inquiry, project- based learning and the application of visual

thinking strategies. Museum projects provide teachers with a structured process that offers a complete cycle for learning that integrate the arts and academic content into a cohesive and focused whole. Museum projects are designed to motivate students (and teachers) to learn new knowledge and use that knowledge creatively to share and communicate this information for a real audience. Students become "knowledge builders" rather than mere consumers.

The *DREAM* project will increase collaboration for teachers, students, parents and the community. The project will draw from a rich variety of community resources/partnerships (Charles Allis Museum, Harley Davidson Museum, Jewish Museum- Milwaukee, Milwaukee Art Museum, Milwaukee Public Museums and Villa Terrace Museum) including local artists who will provide residencies to support museum projects and increase quality arts integration. The artists will provide direct services to students to increase their artistic skills and work collaboratively with classroom teachers to plan arts integration lessons that will support the museum projects. The arts integration lessons will be team taught by the artists and the classroom teachers to strengthen the teachers' skills and confidence in delivering arts integrated instruction.

Sustainable partnerships: This project builds upon sustainable partnerships that will remain beyond the life of the project. All of the partner organizations and individuals have regularly worked with MPS and will continue to do so. These partnerships are designed to meet the needs of all stakeholders. Teachers, artists and students who participate in the project will gain skills and knowledge that will not go away when the projects end. They can be used again and again, in a wide variety of settings and under a wide variety of circumstances. The project is designed to encourage collaboration and sharing – lesson and project plans will be easily accessible to interested teachers in MPS and beyond. Because the project so clearly supports

district, state and national standards, it is likely to be embraced by teachers looking for ways to engage their students in plan- and standards-aligned lessons.

Providing two years of support to the participating teachers and designing the project around school teams will more deeply embed arts integration and technology into teachers' skill sets, enhancing their value as practical educational tools and making it more likely to be a first-choice educational option for teachers well beyond the life of the grant. The school teams will also increase the impact that this project has on the entire school community and provide strong, sustainable demonstration sites for arts integration.

3) Quality of Project Services

The *DREAM* project is designed to solicit participation from all K-12 school teachers across the 162 eligible Milwaukee Public Schools. The project will serve a cohort of 35 teachers the first year, add 35 teachers the second year, and provide ongoing support in the third and fourth years to increase the likelihood of sustainability, successfully serving a total of 70 teachers and 6,300 to 7,350 students and providing 55 hours of professional development during the first year of participation and an additional 40 hours in the second year for a total of 95 hours of professional development over the entire project for each cohort. The professional development will provide a total of 40 hours of Visual Thinking Strategies training, 30 hours of training to facilitate student-created museums and 25 hours of training in arts integration through technology.

Project implementation	Number of teachers served	Professional Development Summer	Professional Development school year
Year 1 2014-15	Cohort 1- 35 teachers	Cohort 1- Initial 35 hours (summer 2015) Cohort 2- 0 hours	Cohort 1 and 2- 0 hours
Year 2 2015-16	Continue Cohort 1- 35 teachers Introduce Cohort 2- 35 teachers	Cohort 1- additional 20 hours (summer 2016) Cohort 2- initial 35 hours (summer 2016)	Cohort 1- 20 hours
Year 3 2016-17	Continue Cohort 1- 35 teachers Continue Cohort 2- 35 teachers	Cohort 1- summer PD completed Cohort 2-additional 20 hours (summer 2017)	Cohort 1- 20 hours Cohort 2- 20 hours
Year 4 2017-18	Cohort 1 completed Continue Cohort 2- 35 teachers	All summer PD completed for both Cohort 1 and 2 (summer 2018)	Cohort 1- completed Cohort 2- 20 hours

MPS, with 78,502 students in the 2013-14 school year, is the largest school district in Wisconsin. The district serves a diverse student population of about 85% minority students, 9% English learners and 20.5% students with special needs. MPS is committed to recruit, hire and develop individuals who represent our diverse community—not only because it is legally and morally right, but because it simply makes good education and business sense. In addition to the

district employees that this project will support, it will provide professional development to a diverse body of local artists that will be offered tri-annually. This professional development will focus on aligning their work to Common Core State Standards, district priorities and initiatives, classroom management, and educational terminology. This will be provided at no cost to the artists and will increase the skills and quality of arts integration as artists work in residencies throughout their careers.

Alignment to standards: The Milwaukee Public Schools provides direct support to its teachers at various stages in their teaching lifecycle through professional development. The areas of instructional focus that have been identified by the Department of Curriculum and Instruction include differentiation, inquiry and project-based learning. The *DREAM* project aligns the work of curriculum specialists and specific content area with local art curriculum standards, state Model Academic Standards for Art and Design and the draft national standards developed by the Consortium of National Arts Education Associations, as well as, the Common Core State Standards. (Detailed in Appendix A) The *DREAM* project is designed to specifically support the district's Comprehensive Literacy Plan and Comprehensive Mathematics and Science Plan that sets expectations for improved pre K-12 learning across MPS.

The two areas of professional development – Visual Thinking Strategies and student-created museums -- were selected based on their ability to integrate the arts with other core content areas; specifically, with STEM through the use of technology. Technology will offer increased opportunities for both teachers and students to access information, improve the quality of communication and assist in a broader, more efficient distribution of information. Technology and Visual Thinking Strategies (VTS) are complementary – VTS is a student-centered, research-based education method that uses art to build capacities to observe, think, listen, and

communicate. VTS teaches how to value one's own ideas and to listen to and build on those of others. These skills are essential to STEM education, which often is experiential and team-based. VTS meets the federal requirements for "evidence of promise." The instructional strategy is based on 30 years of empirical research by Harvard-trained educator Abigail Housen and has been field-tested across multiple languages and cultures with students who struggle to learn. This program has a research-based professional development component and curricula consisting of 40 hours of teacher training in the VTS methods. The training includes an overview, hands-on application, best practices for arts integration, and at least 10 hours (provided after school in five two-hour sessions) of follow-up support during the school year. Teachers implement the process using specific works of art. The VTS protocol parallels scientific inquiry – students observe, pose questions, formulate hypothesis, test theories, and synthesize evidence. Teachers will learn how to guide students in analyzing artwork and writing about pieces of art. Teachers will actually go through the processes in which students will eventually engage. Teachers, as their students eventually will, will conduct field research at museums and art institutions to gain deeper understanding of foundational content of both VTS and student-created museum models, as it is essential for teachers to have a clear focus and understand the alignment of the standards and the grade level, content-specific curriculum. In the summer professional development session, the teacher teams will experience the museum process as students as well as teachers. They will participate in an innovation and invention museum project to help them conceptualize the stages of this process and how it can relate to STEM topics. The project will include field research at the Harley-Davidson Museum (the Harley-Davidson Motor Co. is headquartered in Milwaukee). The teachers will have access to designers and will learn about the science and technology behind motorcycle production. They then will deconstruct their own personal

experiential learning to design inquiry- and project-based classroom units teaching strategies that they will employ in the classroom. These strategies will provide a clear structure for both art and non-art teachers and will also support the district's Comprehensive Literacy Plan and Comprehensive Mathematics and Science Plan. (Invitational Priority) The *DREAM* budget provides funding for teacher compensation to pay teacher participants for their work outside of the school day and during the summer; transportation and admission fees for museums; technology; and materials and supplies that will support student-created museum projects created both during professional development sessions and eventually in the classrooms. During intensive summer professional development, teachers will create curriculum plans for their museum projects that students will implement during the school year. Each teacher's plan will include an assessment blueprint, a project timeline, and a detailed implementation guide that includes topics, focus questions, learning expectations and student research questions. The summer PD will expose the teachers – most of whom are relatively novice at effectively using technology to enhance instruction – to using a variety of applications, such as Skype, Facetime, graphic design software, Museum Box, non-linear Powerpoint and Smartboards to connect with artists and content experts and to design and build their museums (Competitive Preference Priority). A key partner in the project, Cardinal Stritch University, will provide access to its computer graphic labs, art studio space, and technology-rich classrooms to teachers during the summer professional development session. Cardinal Stritch also will make available undergraduate art education students to assist teachers in their use of technology and in understanding arts integration techniques and strategies. As each of the two cohorts of 35 teachers move from intensive summer training to classroom application, the project professional development coordinator, project director, project coordinator and project site coordinator will

provide on-going support that will include one-on-one coaching, sharing sessions for teachers at the individual school sites and across the cohort and monthly follow-up PD sessions. Project staff will provide job-embedded coaching by visiting each participating school at least three times per school year – in the fall, winter and spring. The visits allow project staff to ensure that teachers understand and adhere to project plans and schedules and to provide constructive feedback on museum implementation that will support continuous improvement.

The monthly sharing sessions will allow teachers to discuss the student work samples they will bring to the meetings. The work samples will reflect the students' research topics and the teachers will peer evaluate student work using rubrics in order to identify any gaps, potential improvements and next steps. The sharing sessions will sometimes be held at museums so that teachers can discuss and practice skills, such as summarizing key information and analyzing objects and artifacts.

The monthly PD sessions will be aligned to project calendars and focus on skills teachers will be helping their students build. For example, an October PD session may focus on generating meaningful questions and investigating to find answers to questions (formulating a hypothesis, researching, crafting an experiment, observing, interviewing). A February PD session may focus on discussion, including sharing ideas, making observations and relating them to their own experience. A May PD session may focus on reviewing the research path, refining the questions and testing their hypotheses.

The professional development sessions are relevant across the grades and teachers from all levels participate in the same PD sessions, though there are built-in opportunities for grade-band or grade level discussions. Bringing teachers from all grade levels together provides multiple perspectives and a broader range of ideas and experiences that participants can draw

upon as they implement their classroom projects. It also provides unique opportunities to focus on the vertical alignment of curriculum.

While the foundational project-related pedagogical knowledge is consistent from kindergarten through grade 12, the application in the classrooms will differ. Teachers in lower grades will be expected to provide much more guidance and facilitation to students, who are more likely to work in small or whole groups. Teachers in upper grades will be expected to encourage greater independent learning among students while still encouraging collaboration on their work. The one-on-one coaching provides each individual teacher with specific feedback with their implementation of the project. Thus, the teachers receive both global and individual assistance.

The one-on-one sessions also build trust between *DREAM* staff and the teachers because the teachers know that any challenges they are experiencing can be discussed privately and that support will be provided. The project director and professional development coordinator have a combined total of forty years of classroom teaching experience and will bring this to support each teacher.

The PD summer / school year schedule allows for offerings that fit the schedule of the teachers, provision for continuing support and for follow-up between each of the professional development sessions. The project design also affords the teachers the opportunity to be reflective and have discussions with their cohort colleagues in the Moodle room between sessions. In order to provide a strong professional learning community, teachers will be able to access MPS' Moodle-based interactive professional development resource, The Learning Community (TLC). TLC provides teachers with a place to discuss content, share lesson plans, and plan for future project activities. As teachers gain experience and confidence in the VTS

model they will receive additional professional development where the school teams will begin to design arts integrated projects with students to create museums around a particular topic of study that takes place in the classroom. This element of the project will focus specifically on student created museums using Linda D'Acquisto book *Learning on Display: Student Created Museums that Build Understanding* as a focused approach to guide professional development for the classroom teachers. The book builds on the practice of Visual Thinking Strategies and moves into a more hands-on arts application for students and also offers opportunities to use increased technology and research skills. Through photographs and classroom examples, D'Acquisto – a former curriculum director, teacher and museum educator – shows how school museums inspire students' curiosity and creativity; encourage responsibility and teamwork; and strengthen writing, communication, research and problem-solving skills. The book bridges theory and practice and includes strategies for:

- incorporating academic content standards;
- assessing learning and understanding;
- guiding research, writing and design;
- promoting partnerships among students, colleagues, parents and the community; and
- using the completed museum as a teaching tool

"Learning on Display" provides a clear road map and structure for arts integration throughout the curriculum. The book includes a total tool set of rubrics, curriculum designs and examples of student-created museums to guide teachers in their own museum projects. The book's table of contents and sample content are included as Appendix B. The teaching approach embraced by *DREAM* lends itself to any topic or age level. Teachers will work as facilitators

and collaborators with their students. *DREAM* will serve as a catalyst for teacher learning by providing an authentic setting in which teachers can collaborate, experimenting with and refining new methods of instruction. Many best practices for improving student achievement are integrated directly into the school museum professional development / implementation process, including research-based instructional strategies, standards-based curriculum design, student-involved assessment, differentiation, and working as a collaborative professional learning community. The academic integrity of the work that the teachers and students do together is clear and the work is characterized by active learning. Peer teaching, small group work, and teamwork are consistent features of classroom activities. There is a real audience beyond the teacher and the learner. New activities extend old lessons and past experiences, building on skills and understandings that can be amplified. Reflection is an essential activity for both teacher and student at key points throughout the process. Connections between the classroom work, the surrounding communities and the world beyond the community are clear. Imagination, creativity and innovation are encouraged in the completion of the learning activities. The work done by the student and the teacher together includes rigorous, ongoing assessment and evaluation (Starnes & Carone, 2002). Formative assessment can be used to build confidence and increase student ownership over learning and growth (Yin et al., 2008).

In total, each of the teacher cohorts will receive at least 40 hours in the Visual Thinking Strategies training with the majority (20 hours) delivered in an intensive summer session. This will be built on by the 15 hours of Learning on Display beginning in the summer and then 15 additional hours for follow-up. The *DREAM* project will provide each teacher in their first year of the project with 35 hours of professional development delivered over the summer and more than 20 hours throughout the school year with support resources, materials and opportunities to

reflect and communicate about his or her work in The Learning Community. Samples of teacher lessons, teaching of lessons (videotaped), teacher reflections and student work samples will be reviewed, collected and posted throughout the project to document and disseminate the impact of the project. The design of the student-created museums encourages the documentation of student work and engages teachers and students in this process.

The MPS district curriculum specialists meet monthly and this project will be shared with other content experts in the district to encourage support and cross-curricular applications. The project partners - IHEs, museum and arts organizations - will be updated quarterly on the results of this project. After the teachers develop their school museum plans, the appropriate curriculum specialists will review the plans to insure maximum alignment to state and common core standards. The project director and the professional development coordinator will review each teacher's project plan using a rubric and provide feedback to improve the quality of the plan.

All staff members participate in professional development to improve and develop their skills; district and school-based professional development is targeted to improve student achievement through effective instructional practices and is supported by effective coaching; the district provides a system of support and accountability for teachers in the content areas; district and school-based professional development offers research-proven instructional strategies delivered face-to-face and online; the district and school-based professional development focuses on how to create and integrate content that bridges the generation gap between teachers and students, using learning experiences that are culturally relevant and build on the background knowledge of students. Specific instructional strategies that are focused on at the district level include differentiation, project based learning and inquiry. This project is aligned and will support each of these district instructional strategies. The teachers in the treatment group will be

identified so that their students' achievement data on the district screener can be analyzed by the project evaluator and director over the course of the project.

4) <u>Quality of Project Personnel</u>

The Milwaukee Public Schools (MPS) operates under an Affirmative Action/Equal Opportunity Policy that encourages and actively seeks to employ qualified persons who are members of groups that have traditionally been underrepresented. MPS is committed to Affirmative Action and Equal Employment Opportunity. An example of how MPS encourages individuals of diverse backgrounds to apply for employment is a practice of targeted recruitment for high-needs areas at colleges/universities where graduates are predominately minority. The district has an enduring obligation to hire and develop individuals who represent our diverse community and student body—not only because it is legally and morally right, but because it simply makes good education and business sense. MPS is committed to non-discrimination of all individuals, regardless of race, color, ancestry, religion, gender, national origin, disability, age, creed, sexual preference, marital status, or status as a veteran. The district does not discriminate in its programs, activities, facilities, employment, or educational opportunities on the basis of a person's sex, race, age, religion, national origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, or disability. MPS will not tolerate discrimination at any level or form and will take all necessary and appropriate actions to eliminate it. MPS implements an effective program of Equal Opportunity and Affirmative Action. In adherence to this principle, MPS has developed results-oriented strategies that address all aspects of the employment process including recruitment, selection, promotion, evaluation, training, termination, compensation, and a harassment-free work environment. MPS recognizes that equal opportunity and an effective affirmative action program must remain one of our foremost goals if we are to ensure the

strengthening and growth of our school district. Milwaukee Public Schools (MPS) actively seeks to attract and retain the most dedicated and talented urban teachers, administrators and classroom support staff. The ideal candidate must be willing to be part of a school-wide effort to improve the achievement of the children of MPS.

Arts@Large, Inc is a key partner in this project. It has worked with the district since 2001. In 2013, Arts@Large, Inc. contracted with over 250 local artists; 72% were artists of color and 18% were bi-lingual. In this project, Arts@Large will assist in identifying and providing qualified artists to work in the classrooms to support quality arts integration. This organization demonstrates a clear commitment to identifying diverse artists and art forms and continually seeks out new artists to meet the needs of the schools and to support the local arts community.

The program director is **Kimberly Abler**, curriculum specialist in the Art Office in MPS. Ms. Abler brings an extensive arts education and administrative background to the project and has successfully implemented large federally funded grant projects in MPS. She will oversee project implementation and coordinate the summative evaluation. She will also serve on the *DREAM* team. Her resume is provided in Appendix C.

Teri Sullivan, executive director of Arts@Large, Inc. will serve as the project coordinator and will provide the leadership for the project. She will lead the *DREAM* team and directly supervise the project professional development coordinator and the project site coordinator. Her bio and complete resume are included in Appendix C. As coordinator, she will:

- organize and plan all phases of the program;
- provide the administrative leadership to accomplish the goals and objectives of the program;

- monitor and direct staff performance and school team project implementation;
- plan and monitor the content and implementation of professional development workshops;
- review on a regular basis the status of project activities;
- perform all duties and responsibilities directly related to compliance with specifications of the grant; and
- prepare progress reports and assist with evaluation report.

Linda D'Acquisto will serve as the project's professional development coordinator and will serve on the *DREAM* team that will provide general oversight of the project (more detail on the *DREAM* team is below). Ms. D'Acquisto has more than 20 years of experience in education working as a professional development specialist, museum educator, curriculum developer, public school administrator, and classroom teacher. Her wide range of experience enriches her work with Kid Curators, a business she founded more than a decade ago.

As a museum educator, Ms. D'Acquisto managed the school and public programs departments of a science and technology museum. She developed educational programs for teachers, families, youth, and museum visitors; trained and supervised program and interpretative staff; and participated in ongoing assessment and redevelopment of museum exhibits.

As a previous K-12 director of instruction, Ms. D'Acquisto provided leadership for curriculum and assessment initiatives, strategic planning, professional development, and program evaluation. She has classroom and special education teaching experience at the elementary and middle school levels. Currently, as an educational consultant, Ms. D'Acquisto works with schools and districts on issues related to school improvement, professional learning communities, classroom-based assessment, and program evaluation.

Ms. D'Acquisto has a bachelor's degree in behavioral disabilities and a master's degree in curriculum and instruction, both from the University of Wisconsin-Madison.

Ryan Hurley, will serve as project site coordinator and has worked as program coordinator for Arts @ Large, Inc. since 2008. He will serve on the project management *DREAM* team and will provide school support for the arts integration implementation within this project. After graduating from the University of Wisconsin's journalism program in 2006, Mr. Hurley became the communications manager for a children's music and literature publishing house in Madison. Mr. Hurley's duties at Arts @ Large span the gamut from program development to new media implementation and focusing on using the arts as a platform for community discussion and social justice.

Project Evaluation will be provided by **American Institutes for Research (AIR)** and will be supporting this project with the following AIR staff members:

Meredith Ludwig, Ed.D., principal research analyst at AIR. Dr. Ludwig has worked at AIR since 1996, focusing on the reform of teacher preparation and on investigations of the impact of professional development on K–12 teachers. Dr. Ludwig currently leads three studies focusing on the impact of professional development on teacher practices: two NSF-funded studies (secondary mathematics and science teachers and physics teachers) and one U.S Department of Education–funded study (performing arts–based professional development for teachers of mathematics at the prekindergarten and kindergarten levels). Each of these studies involves the participation of one or more districts.

As an evaluator, Dr. Ludwig has been a task leader for two randomized control studies of professional development, in which she managed the intervention implementation. These were both national in scope. Dr. Ludwig also has directed two multiyear evaluations of teacher

preparation grant initiatives for the U.S. Department of Education (Title II Partnership Program and the Transition to Teaching Program). She also works closely with school districts implementing school reform initiatives. As a project leader for the National Postsecondary Cooperative from 1996 to 2000, Dr. Ludwig supported teams of institutional researchers and faculty reviewing literature and policy regarding student access, retention, and success in postsecondary education.

Before coming to AIR, Dr. Ludwig worked with public college presidents and chancellors for 14 years as coordinator of research for the American Association of State Colleges and Universities, focusing on such topics as student assessment, institutional research, student access, school/college coordination, technology use, and teacher education. Dr. Ludwig has continued to produce articles, books, and reports on higher education and teacher education issues.

Nicholas Sorensen, Ph.D., is a researcher in the Education Program at AIR. He currently serves as the quantitative analyst for a randomized controlled trial testing the efficacy of online credit recovery in Algebra I for at-risk ninth graders and also served as the quantitative analyst for REL-NEI's Access to Algebra I Study. Additionally, he is currently conducting district recruitment, working closely with superintendents, principals and district-level staff in districts in multiple states, for a national IES-funded randomized trial examining the efficacy of comprehensive evaluation systems for improving student achievement. Dr. Sorensen has extensive experience and training in analyzing complex data, including missing data analysis and imputation, propensity scoring, and multilevel modeling as well as experimental and quasi-experimental study design. He received his doctorate from the University of Michigan in social psychology with specialized training in intervention/policy evaluation.

Gregory Walz-Chojnacki is a researcher at the American Institutes for Research. He will serve as the point person for AIR, providing day to day support for this project, and serve on the *DREAM* team. His work focuses on analysis of administrative and survey data to evaluate implementation and impacts of K-12 education interventions. His experience includes projects using advanced quantitative research designs such as randomized controlled trials to identify interventions' causal impacts as well as descriptive analyses of policy implementation. Current projects include an analysis of observed differences in academic outcomes between Ohio students who receive gifted services and those with similar ability levels who do not; an evaluation of the impact of an interim assessment product on student academic performance and teacher practice; and analysis of survey data to evaluate implementation of Hawaii's federal Race to the Top grant program. Prior to joining AIR, Mr. Walz-Chojnacki worked at the Supportive Housing Network of New York researching policies affecting the state's stock of supportive housing. He received master's degrees in Public Policy and Applied Economics from the University of Michigan.

Karen Melchior is a research assistant at the American Institutes for Research. She is currently working on multiple projects including: the *Gates Finance Portfolio*, the *Michael and Susan Dell Foundation Student GPS Usage and Impact Study*, the *Gates Intensive Partnership for Effective Teaching*, and the ongoing evaluation of *CryptoClub*, as well as the *National Centers for Intensive Interventions*. She has experience with data collection and analysis including conducting one-on-one interviews, coding open-ended survey data and interviews using NVivo, HyperResearch, and Atlas.ti software, data entry, and preparing both qualitative and quantitative data for final reports. Ms. Melchior received her bachelor's degree in

anthropology from the Maxwell School of Syracuse University and completed a year of study in archaeology at the University of York, England.

Complete resumes for each individual on the Evaluation team from the American Institute for American Research are included in Appendix C.

The Operational Management Plan contained in the quality of the program design details persons responsible and a detailed timeline for accomplishing project tasks is included in Appendix D. The plan is structured to assure that each goal and its related objectives are achieved. It is informed by the lessons learned in a pilot project and a previous arts integration professional development grant. Based on the nature of this grant and the *DREAM* project, there will be a project management team called the *DREAM* team that is made up of the project director, project coordinator, professional development coordinator, evaluator, and project site coordinator. This team will provide specific support and deep content knowledge for all key components for this project. The *DREAM* team will communicate at least weekly and will meet quarterly to review the project and analyze data to insure that all goals are being met. The time commitments of the project's management and key personnel are as follows:

Key Personnel	**Role and Activities**	**Time Commitment**	
		Grant Funded	**Other Sources**
Project Director	Oversee project implementation and coordinate the summative evaluation. Work with district staff to assure that all professional development is scheduled and implemented. Collaborate with the professional development coordinator to align all project professional		0.25 FTE

	development activities with the district initiatives and priorities.		
Project Coordination	Provide the day-to-day coordination, management, implementation and formative evaluation of the project; provide the administrative leadership to accomplish the goals and objectives of the project; plan and monitor the content and implementation of professional development workshops; report to the project director on a regular basis; performs all duties and responsibilities directly related to compliance with specifications of the grant.	1.0 FTE	
Project Evaluation Team	Provide formative and summative data analysis and reports. Work closely with the project director, coordinator and professional development coordinator and discuss adjustments to improve the project services.	0.20 FTE	
Professional Development Coordinator	Coordinate and provide intensive training on Visual Thinking Strategies and the student-created museums model to increase teacher skills in arts integration and the use of technology in instruction, work on site to monitor progress with individual classroom implementation and school progress in implementing the project and reaching the targeted project goals.	0.60 FTE	.15 FTE
Project site coordinator	Attend district project meetings, coordinate artist in residency schedules, create contracts for artists, conduct	0.25 FTE	

	background checks, organize student teams and facilitate school team meetings, report to the project coordinator daily to update her on the project.		
School Principals	Oversee school implementation. Principals will work with project director to assure progress is being made at the school sites and that teacher teams have adequate support including planning time. The principal will conduct evaluations of the teacher implementation through-out the year and the overall impact of the arts integration program at the end of each school year.		0.05 FTE each
Up to 35 School Support Teachers at Participating Schools	Coordinate the overall school art integration programs, monitor alignment of standards and academic content, act as the point of contact for Arts@Large, Inc.		0.15 FTE each
70 Teacher Participants	Work with project staff including fellow teachers, arts specialists, artists, students and principals to assure project activities are comprehensive; collect evaluation data; select artists to work in the school and provide suggestions for further professional development needed at their schools.		0.20 FTE each

Clerical	Provide secretarial assistance to the project director/coordinator		0.35 FTE
Artist partners	Develop meaningful residencies that integrate art forms with the school curriculum and school museum topics as they support literacy and mathematics. Higher education partners and district curriculum content specialists will guide the projects to maintain the highest level of quality.	0.25 FTE at each participat-ing school	

5) <u>Quality of the Management Plan</u>

Experienced and well-qualified personnel, research-based activities, professional development methods informed by "best practices", and ongoing assessment of progress will ensure that the desired goals/objectives of the *DREAM* project are achieved on time and within budget. The operational management plan that follows is structured to assure that the goal and its related objectives are achieved, and that data is collected and used for program improvements on an ongoing basis. The *DREAM* team, made up of the project director, professional development coordinator, project coordinator, site coordinator and the evaluator, will review results quarterly to provide feedback and recommendations to improve the implementation of the project. The project work plan below includes key activities that are aligned to specific goals and objectives; a much more detailed breakdown of implementation tasks are in the timeline (Appendix D).

Goal: Develop an effective model for professional development in quality standards-based arts integration that is replicable with practical application in urban classrooms and sustainable in districts with limited resources.				
Obj. 1: Improve the content knowledge of participating art and K-12 teachers through professional development that is supported by technology.				
Activities	**Timeline**	**Responsibility**	**Milestone**	**Indicators**
Provide professional development focused on arts integration in core curriculum through the use of technology and student-created museums	Cohort 1: Sept. 2015-Aug. 2017 Cohort 2: Sept. 2016-Aug. 2018 Cohort 3: Sept. 2017-Aug. 2019	Project director and project professional development coordinator	Evaluator analyzes test scores; Teachers in school teams analyze classroom assessments based on standards	**GPRA Indicator 1.1:** 75 percent of *DREAM* participants will complete 75 percent or more of the total hours of professional development offered. **GPRA Indicator 1.2:** There will be a statistically significant increase in the average percentage of change in scores (on a pre-post assessment of art) of teacher participants who complete at least 75 percent of the professional development hours offered by the project. The test or
Teacher teams will develop implementation plans for student-created museum projects, including an	Cohort 1: Aug. 2015, Aug. 2016 Cohort 2: Aug. 2016, Aug. 2017	Teacher teams; project director, professional development coordinator	Each plan will be reviewed by the project director and *DREAM* Team coordinator using a rubric and direct feedback	

assessment plan, alignment to CCSS, district curriculum and state and national art standards			will be provided to each teacher team	measure will be aligned with the *DREAM* project.
Teachers develop arts integration lesson plans that will support school museum projects	Cohort 1: summer 2015, 2016 Cohort 2: summer 2015, 2016	Participating teams from each school; project director, project coordinator and professional development coordinator	Approval of plans by project director and professional development coordinator	
Job-embedded coaching, team teaching, modeling and refinement of museum projects	Three times annually, fall 2015 - spring 2018	Project director, project professional development coordinator	Delivery of written feedback rubric and holding feedback meeting to ensure continuous improvement	

Obj. 2: Increase students' participation in high-quality arts education activities and programs.				
Create school teams that will participate in *DREAM*	Oct. 2014	Project director arts and non-arts teachers	Team chooses a project team lead or co-leaders	**Performance Indicator 2.1:** By 2018 increase to 85% the targeted school teachers that integrate standards-based art into the core curriculum measured by a pre- and post- survey. **Performance Indicator 2.2:** Increase K-12 grades students' skills in using technology related to the arts as measured by learning surveys taken each spring by participating teachers. **Performance Indicator 2.3:** Increase by 5% per year the frequency of student participation in standards-based arts activities as measured
School teams plan programming for their museum projects using arts integration techniques.	Fall 2014-spring 2018 bi-monthly meetings	School teams, project director, *DREAM* Team coordinator	Events/activities communicated to larger community and district via newsletters, website	
K – 12th grade students, supported by technology, participate in museum projects	Fall 2015-Spring 2018	Participating teacher teams, Project director, professional development coordinator	Public exhibitions and displays showcasing student work and providing evidence of technology literacy	
All teachers integrate arts into reading and mathematics.	2015 - 2018	School teams, school support teacher	Classroom observations by project director, coordinator,	

			professional development coordinator and school support teacher reflect higher levels of student engagement and arts integration	through teacher plans and student work samples. Baseline is set in year 1. **Performance Indicator 2.4:** By 2018 increase by 2 percentage points the share of participating students "on target" in math and reading as measured by the district's universal screener. The improvement will occur each of the years that the students are participating in the *DREAM* project.
Obj. 3: Increase frequency of collaboration among stakeholders to foster a sustainable arts model.				
Networking meetings with schools and arts providers in order to share arts integration	Each fall 2015- 2018	Project director, coordinator, and professional development	75% of the participating teachers attend the networking event, as reflected on sign-in sheets	**Performance Indicator 3.1:** 75% of the teacher participants will successfully complete a school museum project that is reviewed by the

strategies, focus on goals and objectives of the project, and develop arts programming		coordinator		project director and professional development coordinator. **Performance Indicator 3.2:** By 2017 increase by 20% the frequency of community collaboration as measured by logs of school-integrated arts events that include active involvement of the community. Baseline will be established by participant survey taken in 2014 prior to participation in project. **Performance Indicator 3.3:** By 2017 develop a web-based resource toolbox to support arts integration. Resources for the toolbox will include arts integration
Teams review and approve the arts integration programming aligned to the museum projects that is designed for the school year	Each fall 2015 - 2017	Project coordinator, school teams	Teams attend orientation; teams meet; plans developed	
Provide trainings to artists to increase their capacity for working in the schools and for integration	Fall, spring, summer 2015 - 2018	Community arts partners, such as Arts@Large; Milwaukee Art Museum, Kohler Art Museum, higher	Training program is institutionalized and offers tri-annual sessions for local artists and arts organizations	

		education partners		lessons, arts integration research, museum projects implemented and student work samples created during the project.
Project *DREAM* digital space developed to share resources and supports	Fall 2014, tri-annual updates	MPS webmaster in collaboration with project director	Project-related information and displays representing at least 75% of participating schools will be posted	
Teachers collect arts integration lesson plans to submit for the website	Oct. 2016-2017	School team, project director	School visits by site coordinator; reviewed for quality by project director and professional development coordinator; posted on website	
Teachers showcase their students' work	Spring 2016 through 2018	Project coordinator, site coordinator, school teams	Select school museums are displayed during Milwaukee	

			Gallery Night	
Teachers from participating and non-participating schools visit participating classrooms as a way to observe best practices	Fall 2016-Spring 2118	Project director, site coordinator, professional development coordinator, school teams	All participating schools serve as arts integration / student-created museum demonstration sites for colleagues from their own or other schools	

b) The *DREAM* team discussed earlier in the quality of personnel section of this narrative details the participation of a project director, project coordinator, site coordinator and professional development coordinator. The team will be supported by the knowledge and experience brought to the project by the evaluation team, AIR.

The *DREAM* team will be responsible for the following: overseeing the grant process; monitoring the timeline and budget; collaborating with community partners and the school principals; monitoring and supporting the use of data; and providing evaluations for the United States Department of Education (USDE) and the district. Quarterly *DREAM* team meetings will provide updates, results, focus for project and the professional development schedule.

The *DREAM* team, the site coordinator, and the school support teachers will monitor and support school efforts to improve or to make significant gains in the academic and arts integration areas of *DREAM*. The project director and the professional development coordinator

will meet quarterly with the external evaluator to discuss project progress and any needed modifications. The project director will facilitate communication and oversee implementation of the plan. The specific roles and responsibilities of *DREAM* team members are outlined in the Quality of Personnel section of this grant.

The *DREAM* team, led by the site coordinator, will meet quarterly to discuss the status of the project at the various participating schools and opportunities and challenges the schools and project face. Once these are identified, the *DREAM* team will share the information with and provide potential strategies to school teams during the monthly cohort meetings and during job-embedded coaching sessions. This will create a continuous feedback loop that will help ensure successful project implementation. The schools and *DREAM* team will share best practices with participating and non-participating schools through site visits, publication of lesson plans and project and through the projected-dedicated digital resource room. Participating and non-participating teachers will engage their colleagues in problem-solving, lesson plan creation and other relevant activities by using the Moodle-based TLC digital learning community tool.

MPS has forged a variety of diverse community arts partnerships through the Partnership of the Arts, which was created in 2006 to provide after-school art activities in MPS schools, and through Arts@Large, which began in 2001 and provides during- and after-school arts integration to the Milwaukee Public Schools. Ongoing planning meetings between MPS and a group of diverse community partners over the years has laid the groundwork for *DREAM* through discussions of how to integrate and coordinate the sharing of resources. These partnerships have strengthened the resolve among critical stakeholders to work collaboratively to promote arts integration to increase student achievement. With that in mind, MPS will leverage upon longstanding and new promising community partnerships to meet the goals of the *DREAM*.

6) <u>Quality of Project Evaluation</u>

American Institutes for Research (AIR) will conduct a rigorous and independent evaluation of the Design, Research, Exhibit, and Analyze Museums (DREAM) program, using experimental and quasi-experimental research designs to contribute to the research in the field of art education and produce evidence of promise. The evaluation will generate valid and reliable evidence on the degree to which DREAM improves outcomes of interest, building on existing infrastructure from an evaluation of a similar Milwaukee Public Schools (MPS) program currently being conducted by AIR, Project CREATE (Collaborate, Research, Exhibit, Analyze, Think, Educate). The primary purpose of the evaluation will be to answer the following research questions:

1. To what extent did teachers participating in DREAM receive sustained (at least 75 percent of professional development hours offered) and intensive (at least 40 hours) professional development over a period of six or more months?
2. What is the impact of DREAM on teachers' content knowledge in the arts?
3. What is the impact of DREAM on student achievement in reading and English language arts (ELA) and mathematics?
4. What is the impact of DREAM on students' social-emotional skills?

Research Design AIR and MPS will address these questions through a randomized controlled trial. DREAM will serve a total of 70 teachers in teams of two to six teachers, each consisting of one art teacher and one or more subject-area teacher. Half of the teacher teams will be randomly assigned to either begin program participation in summer of 2015 (Cohort 1) or

summer of 2016 (Cohort 2).[1] Participating teachers will receive 35 hours intensive summer professional development and 20 hours ongoing support during the school year for two years with an additional 20 hours of summer professional development after the first year of program implementation. In each cohort's two years of program participation will include a total 95 hours of professional development, all subject-area teachers will implement student-centered museums with their students, supported by the team's art teacher. Comparisons of the outcomes of Cohort 1 and Cohort 2 in the 2015–16 school year will provide an experimental estimate of the one-year impact of DREAM. Comparisons of Cohort 1 and Cohort 2 in the 2016–17 school year will provide an experimental estimate of the additional impact of a second year of DREAM support. To estimate the one- and two-year impacts of DREAM for Cohort 2 in 2016–17 and 2017–18, we will use a quasi-experimental comparison group identified through propensity score-based matching. The propensity score matching approach will use one-to-one matching considering both teacher characteristics (e.g., grade[s] taught, subject[s] taught, years of experience) and school characteristics (e.g., average performance in the previous year, school size, level of socioeconomic disadvantage; see Appendix E for details).[2]

[1] A maximum of one teacher team will be served per school. Team members will be determined before randomization.
[2] *Note:* Although matching will occur at the team level, analysis will use multilevel modeling to account for the nesting of teachers in teams.

Table 1. DREAM Evaluation Randomization Scheme

Cohort	Summer 2015	SY 2015–16	Summer 2016	SY 2016–17	SY 2017–18
Program Services Received					
Cohort 1	Intensive PD	Ongoing support	Ongoing support	Ongoing support	—
Cohort 2	—	—	Intensive PD	Ongoing support	Ongoing support
QE comparison group	—	—	—	—	—
Impact Estimates					
Experimental causal estimate	—	One year of DREAM versus no DREAM	—	Two years of DREAM versus one year of DREAM	N/A
QE causal estimate	—	—	—	One year of DREAM versus no DREAM	Two years of DREAM versus no DREAM

Note. SY = school year, PD = professional development, QE = quasi-experimental.

Power

Power analyses suggest that a total sample size of 70 teachers, with half randomized at the team level into the treatment conditions (i.e., randomized into Cohort 1), will be sufficient to detect an impact on the Northwest Evaluation Association's (NWEA's) Measures of Academic Progress (MAP) assessment scores in reading of 0.20 standard deviations. Power analyses for social-emotional outcomes indicate that 70 teachers would be sufficient to detect an effect of 0.25 standard deviations if a pretest and posttest were administered in eight students in one classroom from each teacher. These minimum detectable effect sizes meet What Works Clearinghouse (WWC) guidelines for a substantively important effect (WWC, n.d.).[3]

Data

The DREAM evaluation will measure both teacher- and student-level outcomes. DREAM is expected to increase teachers' content knowledge in the arts, lead to implementation of student-created museums, promote student-centered instruction, and support improved integration of new arts teachers into their schools. The program also is expected to lead to improvements in student achievement in reading and social-emotional skills. These outcomes will be measured through extant professional development participation data, knowledge assessment data, student and teacher surveys, and standardized assessment scores. These data sources are described below.

[3] The power analysis for the MAP outcomes assumed that an average of 15 students will be nested with each teacher and that an average of three teachers will be nested within each teacher team (anticipating 40 percent teacher attrition and 20 percent student attrition over the course of the study). We further assume intraclass correlations (ICCs) at the group and teacher levels of 0.10 and 0.05, respectively, and R-squared values of 0.50 at each level. These values are conservative based on those provided in published references (Hedges & Hedberg, 2007; Jacob, Zhu, & Bloom, 2009) and are similar to those found in the evaluation of the current CREATE program. (We assume that the group-level ICC and R-squared values are similar to school-level values.) For social-emotional outcomes, assuming a group-level ICC of 0.01, a teacher-level ICC of 0.10, and R-squared values of 0.50 at each level (assuming a pretest measure), data on eight students within one classroom within each teacher team would provide sufficient power to detect an effect size of 0.25 standard deviations. Evidence suggests that ICCs for social-emotional outcomes are smaller in the absence of a pretest measure (Jacob, et al., 2009). All power analyses were conducted using PowerUp! (Dong & Maynard, 2013).

Extant Professional Development Participation Data

Teachers' participation in formal professional development activities will be measured through extant participation data collected by the district in the course of providing professional development sessions. The data will track each teacher's participation in each session, enabling calculation of the total number of hours completed and the percentage of sessions attended.

Student-Created Museum Ratings

AIR and MPS will create a rubric for rating the implementation of student-created museums (based on existing rubrics created by MPS for the current Project CREATE program). The rubric will record basic aspects of museum implementation (e.g., date, content covered) and assess the degree to which museums adhere to guidelines and practices covered in the DREAM professional development. MPS staff and/or art teachers will complete the rubric for the museums created by other teachers in their teams.

Knowledge Assessment

AIR and MPS will administer a knowledge assessment to assess DREAM's effects on teachers' content knowledge in the arts before they begin implementation of the student-created museums (i.e., impacts of the intensive summer professional development). The knowledge assessment will include customized items on the conceptualization, implementation, and assessment of student-created museums. The assessment will be adapted from an existing assessment used to evaluate the existing CREATE program. Each cohort will be administered a pretest before its members begin program participation (the beginning of summer 2015 for Cohort 1 and the beginning of summer 2016 for Cohort 2) and a posttest in the fall of the following school year, after the majority of formal professional development activities have been completed (fall 2015 for Cohort 1 and fall 2016 for Cohort 2). This will enable a pre-post

comparison within each cohort, an experimental contrast of Cohort 1 posttest versus Cohort 2 pretest in spring 2016, and a quasi-experimental contrast of Cohort 2 posttest versus a matched comparison group posttest in fall 2016.[4]

Teacher Survey

AIR and MPS will administer a teacher survey to measure aspects of both implementation and intermediate outcomes, including the following:

- Implementation of student-centered museums
- Participation in and experience with teacher teams
- Comfort with and use of student-centered instruction
- Comfort with and use of technology in instruction
- Social-emotional outcomes of students
- Integration of arts teachers into schools (art teachers only)

The survey will be administered electronically, at three time points, to the following groups of teachers: Cohorts 1 and 2 in spring 2016, both cohorts and the quasi-experimental comparison group in spring 2017, and Cohort 2 and the quasi-experimental comparison group in spring 2018. This will enable measurement of levels of implementation in both treatment groups as well as the business-as-usual conditions in each year; survey measures also will be used to estimate

[4] Cohort 1's posttest will be given in the fall following each cohort's intensive summer professional development in order to meet the deadline for Government Performance and Results Act (GPRA) reporting, whereas Cohort 2's pretest will not be administered until its members begin the program in spring 2016 to maximize response rates and minimize burden. Given the specialized nature of the content covered in the professional development, Cohort 2's pretest performance is unlikely to change substantially between fall 2015 and spring 2016. Furthermore, if Cohort 2 gains relevant knowledge from fall 2015 to spring 2016, this will cause downward bias in the impact estimate. Therefore, the confound based on test timing is likely to be small and lead to conservative impact estimates. Cohort 2 and the quasi-experimental comparison group's assessments will be given concurrently.

experimental first- and second-year impacts on intermediate outcomes for Cohort 1, and quasi-experimental first- and second-year impacts on intermediate outcomes for Cohort 2.[5]

Student Survey

To capture program impacts on students' social-emotional skills, AIR and MPS will administer a brief student survey. The survey will measure outcomes such as collaboration skills, self-management, and engagement. To the extent possible, items will be adapted from existing, psychometrically validated surveys.[6] The survey will be administered electronically to one randomly selected classroom within each teacher team for both Cohorts 1 and 2 at the beginning and end of each of the 2015–16 and 2016–17 school years.[7] Because of the substantial cost of administering student surveys, student surveys will be collected only for the more rigorous experimental impacts and will not be collected for the quasi-experimental comparison group or in the 2017–18 school year.

Student Achievement

Impacts on student achievement in reading, ELA and mathematics will be measured using the district universal screener. The scores of students in treatment and control (or comparison) classrooms will be compared using hierarchical linear models to account for the nesting of students within teachers, and teachers within teams. These models also will control for student, teacher, and team characteristics [8]

[5] Note that, as described above, the second-year experimental estimate for Cohort 1 will be a marginal one-year impact, whereas the second-year quasi-experimental estimate for Cohort 2 will be a total two-year impact (see Table 1).
[6] For students at beginning grades (e.g., K–2), teacher ratings may be used instead of student surveys.
[7] Power analyses suggest that as few as eight surveys per classroom will be sufficient to detect an effect size of 0.25, although it may be logistically easier to survey all students in the selected classroom.
[8] DREAM subject-area teachers teaching multiple classrooms with different students (e.g., middle school teachers) may implement the student-created museums with only one of their classes. In these cases, the relevant control or comparison classroom will be selected by matching on relevant variables (e.g., grade, previous performance).

Data Analysis

Data analysis will begin descriptively. For teacher professional development participation data, measures of central tendency such as means and standard deviations will be used to show overall levels of participation as well as the percentage of teachers whose professional development participation was sustained (at least 75 percent of professional development hours offered) or intensive (at least 40 hours). Knowledge assessment data will be used to show the percentage of teachers answering each item correctly or incorrectly. Frequency distributions will show patterns of response for each survey item. In addition, average MAP scores will show unadjusted differences in the achievement of students in treatment and control (or comparison) classrooms.

Knowledge assessment and survey data will be analyzed using Rasch measurement models to examine the psychometric properties of each group of items (i.e., construct). Rasch analysis will be used further to calculate each teacher or student's score on a particular construct. Average scores in the treatment and control (or comparison) groups will then be compared using hierarchical linear models (HLMs) accounting for the nesting of teachers within teams (for the knowledge assessment and teacher survey) or the nesting of students within teachers and teachers within teams (for the student survey), and controlling for the characteristics of students, teachers, or teams. MAP scores also will be analyzed using HLMs (see Appendix E for further details).

Communication

AIR emphasizes the importance of keeping clients formally informed of progress and developments as well as the value of developing informal routines that foster a healthy exchange

of ideas. AIR has brought this attention to communication with MPS in two other evaluations of the district's arts education programs and will continue to do so in the evaluation of DREAM. AIR will organize regular meetings, ensuring that all parties are informed fully of all aspects of the project and providing any formative feedback available from recent data analyses. In addition to regular communication with MPS regarding emergent findings, AIR will produce an annual report in Year 2 (September 2015–September 2016) through Year 4 (September 2017–September 2018).[9] These reports will document our analyses, provide synthesized findings across data sources to fully address each of the evaluation questions, and make recommendations for project improvement, to the extent possible. The reporting schedule will be directly connected to the planning needs of the project, the schools, and the district. If desired, AIR will present and discuss the reports with the district. AIR also will assist the district in reporting annually on the extent to which the program is meeting government performance reporting measures. For a timeline of study activities, see Appendix F.

[9] No report will be submitted in Year 1 (September 2014–September 2015) because Cohort 1 will not yet have completed its first implementation of student-created museums, and few outcomes will be available to report.

Other Attachment File(s)

*** Mandatory Other Attachment Filename:** Milwaukee Public Schools Other Attachment Form.pdf

Add Mandatory Other Attachment | Delete Mandatory Other Attachment | View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment | Delete Optional Other Attachment | View Optional Other Attachment

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

APPENDIX A

DREAM Alignment to Standards

An analysis of State of Wisconsin Model Academic Standards for Art and Design indicate that the following standards will be supported through *DREAM* project over the four year program:

ART and DESIGN

Visual Memory and Knowledge

A.4.2 Learn basic vocabulary related to their study of art
A.8.2 Learn appropriate vocabulary related to their study of art
A.4.3 Learn about basic styles of art from their own and other parts of the world
A.8.3 Know about styles of art from their own and other parts of the world
A.4.4 Learn about styles of art from various times
A.8.4 Know about some styles of art from various times
A.4.6 Know that art is a basic way of thinking and communicating about the world
A.8.6 Identify ways in which art is basic to thinking and communicating about the world

Art and Design History, Citizenship, and Environment

B.4.1 Understand that artists and cultures throughout history have used art to communicate ideas and to develop functions, structures, and designs
B.8.1 Explore how artists and cultures throughout history have used art to communicate ideas and to develop functions, structures, and designs
B.4.3 Know that works of art and designed objects relate to specific cultures, times, and places
B.8.3 Identify works of art and designed objects as they relate to specific cultures, times, and places
B.4.4 Know that art is influenced by artists, designers, and cultures
B.4.6 Know basic ways to describe, analyze, interpret, and judge art images and objects from various cultures, artists, and designers
B.8.6 Know how to describe, analyze, interpret, and judge art images and objects from various cultures, artists, and designers
B.4.8 Learn that art historians, cultural anthropologists, and philosophers of art contribute to an understanding of art and design
B.8.8 Learn about the contributions of art historians, cultural anthropologists, and philosophers of art to our understanding of art and design

Visual Art and Production

C.4.4 Use design to improve artwork
C.8.4 Use design techniques to improve and/or change artwork
C.4.6 Use sketching to develop ideas for their artwork
C.8.6 Develop the craft and skills to produce quality art
C.4.10 Develop personal responsibility for their learning and creative processes

Practical Applications

D.4.2 Know about artists and designers, such as architects, furniture designers, critics, preservationists, museum curators, and gallery owners, in their community
D.8.2 Know about artists and designers, such as architects, furniture designers, critics, preservationists, museum curators, and gallery owners, in their community
D.4.3 Know that the environment influences the look and use of art, architecture,

and design
D.8.3 Know how the environment influences the look and use of art, architecture, and design
D.4.5 Learn basic language used in art
D.8.5 Learn common language in art, such as abstraction, representation, impressionism, reproduction, serigraphy, sculpture, graphic design, construction, and aesthetics

Visual Communicating and Expression
E.4.2 Communicate basic ideas by producing design art forms, such as graphic design, product design, architecture, landscape, and media arts, such as film, photography, and multimedia
E.8.2 Communicate complex ideas by producing design art forms, such as graphic design, product design, architecture, landscape, and media arts, such as film, photography, and multimedia
E.4.4 Communicate basic ideas by producing visual communication forms useful in everyday life, such as sketches, diagrams, graphs, plans, and models
E.8.4 Communicate complex ideas by producing visual communication forms useful in everyday life, such as, sketches, diagrams, graphs, plans, and models
E.4.5 Use the visual arts to express ideas that cannot be expressed by words alone
E.8.5 Use the visual arts to express ideas that can't be expressed by words alone

Visual Media and Technology
F.4.2 Know that art techniques are used in mass media
F.8.2 Understand some visual techniques used in mass media
F.4.6 Learn simple media techniques
F.8.6 Create media works with a range of media techniques
F.4.7 Learn how media productions are made

Art and Design Criticism
G.4.1 Know that art communicates ideas
G.8.2 Know how to find the meanings in artwork
G.4.3 Talk and write about the meanings of artworks and design
G.8.3 Analyze the meanings of artworks and design
G.4.4 Know how to create works of art that have meanings

Visual Thinking
H.4.4 Create three-dimensional forms with paper, clay, and other materials
H.8.4 Create three-dimensional models
H.4.5 Be able to read simple maps, charts, and plans
H.8.5 Be able to read complex maps, charts, and plans
H.4.6 Know how artists make photographs and films
H.8.6 Make and interpret photographs and videos

Personal and Social Development
I.4.1 Use art to understand how they feel
I.8.1 Use art to understand their own emotions
I.4.3 Talk or write about feelings in a work of art

I.8.3 Talk or write about feelings in a variety of works of art
I.4.4 Recognize their own feelings when they look at work of art
I.8.4 Recognize that their own feelings affect how they look at art
I.4.7 Work alone and with others to develop visual ideas and objects
I.8.7 Work independently and collaboratively to produce ideas and works of art

Cultural and Aesthetic Understanding
J.4.2 Understand that the choice of materials and techniques influences the expressive quality of art
J.8.2 Understand how the choice of materials and techniques influences the expressive quality of art
J.4.3 Learn that different cultures think about art differently
J.8.3 Learn ways different cultures think about art
J.4.5 Begin to understand their own ideas about the purposes and meanings of art
J.8.5 Understand their own ideas about the purposes and meanings of art
J.4.7 Begin to understand and apply the role of art criticism and aesthetic knowledge in art and design
J.8.7 Learn to use art criticism and aesthetic knowledge in art and design
J.4.9 Understand the difference between original artworks, reproductions, and copies
J.8.3 Learn ways different cultures think about art
J.8.4 Learn ways philosophers think about art
J.8.5 Explore their own ideas about the purposes and meanings of art
J.8.6 Learn the value of art as a basic part of being human
J.8.7 Learn to use art criticism and aesthetic knowledge in art and design
J.8.8 Explore different cultures' concepts of beauty
J.8.9 Understand the difference between original artworks, reproductions, and copies

Making Connections
K.4.1 Connect their knowledge and skills in art to other areas, such as the humanities, sciences, social studies, and technology
K.8.1 Connect their knowledge and skills in art to other areas, such as the humanities, sciences, social studies, and technology
K.4.2 Invent new ways to communicate ideas and solutions to problems in art
K.8.2 Invent new artistic forms to communicate ideas and solutions to problems
K.4.3 Use what they are learning about life, nature, the physical world, and people to create art
K.4.4 Use a variety of tools, such as words, numbers, sounds, movements, images, objects, emotions, technology, and spaces, to help understand and communicate about the visual world
K.8.4 Use a variety of tools, such as words, numbers, sounds, movements, images, objects, emotions, technology, and spaces, to help understand and communicate about the visual world
K.4.5 Know art includes activities, such as museum curation, historic preservation, collecting, and writing about art and design
K.8.5 Know about a range of art activities, such as museum curation, historic preservation, collecting, and writing about art and design

K.4.6 Know about some of the similarities and differences of world cultures by studying their fine arts: music, dance, theatre, literature, and architecture
K.8.6 Explore the similarities and differences of world cultures by studying their fine arts: music, dance, theatre, literature, and architecture

The following Common Core Standards for English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects are supported in this project:

College and Career Readiness Anchor Standards for Reading
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

College and Career Readiness Anchor Standards for Writing
Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience

Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Draw evidence from literary or informational texts to support analysis, reflection, and research.

College And Career Readiness Anchor for Speaking and Listening
Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, and orally.

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Alignment of *DREAM* project to state Model Academic Standards, national standards and district report card criteria for Visual Art and Design

Visual Art and Design

	Beginning Course Focus	Mid Course Focus	End of Course Focus
Standards-based Report Card Primary Area of Focus	Knows basic art concepts and vocabulary	Creates quality artwork that demonstrates creative thinking and problem-solving	Connects art with culture, community and history
Draft National Arts Standards- Visual Art	**PRESENTING** Select and analyze their artwork and the artwork of others when deciding what artwork to present Use a variety of methods for preparing their artwork and the artwork of others for presentation Communicate artistic meaning through sharing their artwork and the artwork of others.	**CREATING** Initiate making art and design by experimenting, imagining and identifying content. Investigate, plan and work through materials and ideas to make works of art and design. Reflect on, share insights about, and refine artwork and design.	**RESPONDING** Experience, analyze and interpret art and other aspects of the visual world Use criteria when responding to artwork Communicate through art helps viewers understand and appreciate, the natural world, and constructed environments.
State Performance Standards:	**A.2:** Learn the basic vocabulary related to their study of art. **A.6** Learn that art is a basic way of thinking and communicating about the world. **D5:** Learn the basic language of art **E4:** Communicate basic ideas by producing visual communication forms useful in everyday life, such as sketches, diagrams, graphs, plans, and models. **G3:** Talk and write about meanings of artworks and design. **J10:** Talk about art in basic terms	**C9:** Be aware of their creative processes to better understand their work. **C10:** Develop personal responsibility for their learning and creative processes. **I7:** Works alone and with others to develop visual ideas and objects. **K2:** Invent new ways to communicate ideas, and solutions to problems in art.	**B3:** Know that art and designed objects relate to specific cultures, times, and places. **D1:** Know basic information, such as the history, public art, and unique architecture, of their own cultural community. **I5:** Understand that art is made by people from different times, places and cultures. **J.3** Learn that different cultures think about art differently. **H5:** Be able to read simple maps, charts and plans. **K1:** Connect their knowledge and skills in art to other areas, such as humanities, sciences, social studies, and technology. **K6:** Know about some of the similarities and differences of world cultures by studying their affine arts, music, dance, theatre, literature, and architecture.

Enduring Understandings		People create and interact with objects, places, and design that define, shape, enhance and empower their lives. Artists and designers develop excellence through practice and constructive critique, reflecting on, revising, and refining work over time.	People develop ideas and understandings of society, culture, and history through their interactions with and analysis of art. Through artmaking, people make meaning by investigating and developing awareness of perceptions, m=knowledge, and experiences.
Essentials (BIG Ideas):	How does art and design communicate stories and ideas? How do artists create works of art that effectively communicate? How can the viewer "read" a work of art? How does knowing and using art vocabularies help us understand and interpret works of art?	What inspires people to make art? Can all people be artists? How d artists work? What conditions, attitudes and behaviors support creativity and innovative thinking? What responsibilities come form the freedom to create?	How do artists and designers make and use connections from various sources? Why do people value objects, artifacts and artwork? How does technology influence how we share and experience images and works of art? How does art help us understand the lives of people of different times, places, and cultures?

Wisconsin Model Academic Standards or Art and Design Content Standard			
	Standard A: Visual Memory Students will know and remember information and ideas about art and design around them and through out the world. **Standard D:** Practical Application Students will apply their knowledge of people, places, ideas, and language of art to their daily life. **Standard E:** Visual Communication and Expression Students will produce quality images and objects that effectively communicate and express ideas, using varied media, techniques, and processes.	**Standard C:** Visual Design and Production Students will design and produce quality images and objects, such as paintings, sculptures, designed objects, photographs, graphic designs, videos, and computer images **Standard I:** Personal and Social Development Students will use their senses and emotions through art to develop their minds and to improve social relationships.	**Standard B:** Art History, Citizenship, and Environment Students will understand the value and significance of the visual arts, media and design in relation to art history, citizenship, the environment, and social development. **Standard K:** Making Connections Students will make connections among the arts, other disciplines, other cultures, and the world of work.
Grade Level and specific language to reflect developmental considerations for teachers	**Knows basic art concepts and vocabulary**	**Creates quality artwork that demonstrates creative thinking and problem-solving**	**Connects art with culture, community and history**
PreK	Share and talk about personal artwork.	Use a variety of artmaking tools	Recognize that people make art.

	Create and share artwork that communicates a story about a familiar place or subject. Interpret art by identifying and describing the subject matter. Know and use the appropriate level vocabulary in talking about artwork.	Engage in self-directed play with materials. Recognize art in their life. Select a preferred work of art	Create art that tells a story about a life experience.
Kindergarten	Explain the process of making art while creating. Share and talk about personal artwork. Describe what an object represents. Interpret art by identifying subject matter and describing relevant details. Know and use the appropriate level vocabulary in talking about artwork.	Shares materials with others Through experimentation, build skills in various media and approaches to artmaking. Crete art that represents natural and constructed environments.	Identify a purpose of an artwork
1	Use art vocabulary to describe choices while creating art. Explore the world using descriptive and expressive words and artmaking Know and use the appropriate level vocabulary in talking about artwork.	Collaboratively engage in exploration and imaginative play with materials. Use observation and investigation to make a work of art.	Understand that people from different places and times have made art for a variety of reasons. Identify times and reasons when students make art outside of school. Identify the purpose of a piece of artwork.
2	Discuss and reflect with peers about choices made in creating artwork. Know and use the appropriate level vocabulary in talking about artwork.	Collaboratively engage in exploration and imaginative play with materials. Make art or design with various materials and tools to explore personal interests, questions, and curiosity. Experiment with various materials and tools to explore personal interests in a work of art or design. Demonstrate safe procedures for using and cleaning art tools and equipment and studio spaces.	Compare and contrast cultural uses of artworks from different times and places. Recognize that toys are playthings of cultures are art forms. Create works of art about events in home, school or community life. Understand that artists of many cultures have contributed to our heritage
3	Elaborate visual information by adding details in an artwork to enhance the meaning. Determine messages communicated by an image. Evaluate an artwork based on given criteria.	Elaborate on an imaginative idea. Apply knowledge of available resources, tools, and technologies to investigate own ideas through artmaking process. Create personally satisfying artwork using a variety of artistic processes ad materials.	Recognize that responses to art change depending on knowledge of the time and place it was made. Appreciate the unique forms or folk and ethnic art forms.

	Know and use the appropriate level vocabulary in talking about artwork.	Demonstrate safe and proficient use of materials, tools, and equipment for a variety of artistic processes.	
4	Revise artwork in progress on the basis of insights gained through peer discussion. Analyze components in visual imagery that convey messages. Know and use the appropriate level vocabulary in talking about artwork.	Brainstorm multiple approaches to a creative art or design problem. Collaboratively set goals and create artworks that are meaningful and have purpose to the makers. Explore and invent artmaking techniques and approaches through practice. When making works of art, utilize care for materials, tools, and equipment in a manner that prevents danger to self or others.	Infer information about time, place, and culture in which a work of art was created. Create works of art that reflect community cultural traditions. Recognize the ethnic and folk art contributions of immigrants to America
5	Create artist statements using art vocabulary to describe personal choices made in artmaking. Apply formal and conceptual vocabularies of art and design to see surroundings in new ways through artmaking. Identify, describe and visually document objects of personal significance. Know and use the appropriate level vocabulary in talking about artwork. Effectively communicate art ideas in written and spoken word.	Combine ideas or generate an innovative idea for artmaking. Experiment and develop skills in multiple techniques and approaches through practices. Demonstrate quality craftsmanship through care and use of materials, tools, and equipment.	Identify how art s used to inform or change an individual's or society's beliefs, values, or behaviors. Identify and analyze cultural associations suggested by visual imagery. **I**dentify Hispanic, African American ad Native American art and craft forms.
6	Reflect on whether one's artwork conveys the intended meaning and revise accordingly. Assess, explain and provide evidence of how museums or other venues reflect history and values of a community. Know and use the appropriate level vocabulary in talking about artwork. Effectively communicate art ideas in written and spoken word.	Collaboratively combine concepts to generate innovative ideas for creating art. Formulate an artistic investigation of personally relevant content for creating art. Demonstrate openness in trying new ideas, materials, methods, and approaches in making works of art and design.	Analyze how art reflects changing times, traditions, resources, and cultural uses. Recognize and appreciate customs, traditions, languages and beliefs of others. Understand that art is a reflection of culture. Compare two different art objects that are similar from two distinct cultures (American quilt, Kente

			Cloth, Hmong whisper cloth, Adinkra Cloth, Arpillera)
7	Reflect on and explain important information about personal artwork in an artist statement or another format. Know and use the appropriate level vocabulary in talking about artwork. Effectively communicate art ideas in written and spoken word.	Demonstrate persistence in developing skills with various materials, methods, and approaches in creating works of art or design. Apply visual organization strategies to design and produce a work of art, design, or media that clearly communicates information or ideas. Develop criteria to guide making a work of art or design to meet an identified goal.	Analyze how response to art is influenced by understanding the time and place, which it was created, available resources and cultural uses. Recognize and appreciate customs, traditions, languages and beliefs of others. Understand that art is a reflection of culture. Compare two different art objects that are similar from two distinct cultures (American quilt, Kente Cloth, Hmong whisper cloth, Adinkra Cloth, Arpillera)
8	Document early stages of the creative process visually and/or verbally in traditional or new media. Analyze why and how an exhibition or collection may influence ideas, beliefs, and experiences. Know and use the appropriate level vocabulary in talking about artwork. Effectively communicate art ideas in written and spoken word.	Select, organize, and design images and words to make visually clear and compelling presentations. Apply relevant criteria to examine, reflect on, and plan revisions for a work of art or design in progress. Collaboratively prepare and present selected artworks, based on a theme, for display and formulate exhibition narratives for the viewer.	Distinguish different ways art is used to represent, establish, reinforce and reflect group identity. Recognize and appreciate customs, traditions, languages and beliefs of others. Understand that art is a reflection of culture Compare two different art objects that are similar from two distinct cultures (American quilt, Kente Cloth, Hmong whisper cloth, Adinkra Cloth, Arpillera)
9- 12 High School	Apply relevant criteria from contemporary cultural contexts to examine, reflect on, and plan revisions for works of art and design in progress. Interpret an artwork or collection of works, supported by relevant and sufficient evidence found in the work and its various contexts. Analyze select and curate artifacts and or artworks for presentation and preservation.	Use multiple approaches to begin creative endeavors. Demonstrate willingness to experiment, innovate, and take risks to pursue ideas, forms, and meanings that emerge in the process of artmaking. Engage in making art without having a preconceived plan. Apply relevant criteria from traditional and contemporary cultural contexts to examine, reflect on, and plan revisions for works of art and design in progress.	Describe how knowledge of culture, traditions, and history may influence personal responses to art. Document the process of developing ideas from early stages to fully elaborated ideas including influences.

APPENDIX B

“Learning on Display”

Linda D'Acquisto

Learning on display

Student-Created Museums That Build Understanding

Learning on display

Figure List vi

Foreword by Jay McTighe ix

Preface xi

Acknowledgments xv

Part I: The Purpose

1. Creating Student-Designed School Museums 3
2. Collaborating to Develop Museum Projects 11
3. Clarifying What Students Will Learn 22
4. Assessing Student Learning 42

Part II: The Process

5. Introducing the Museum Project 63
6. Visiting a Professional Museum 83
7. Researching the Museum Topic 89
8. Designing the Exhibits 114
9. Writing for a Museum Audience 134
10. Constructing the Exhibition 147
11. Learning the Full Exhibition 153
12. Opening the Museum to the Public 160

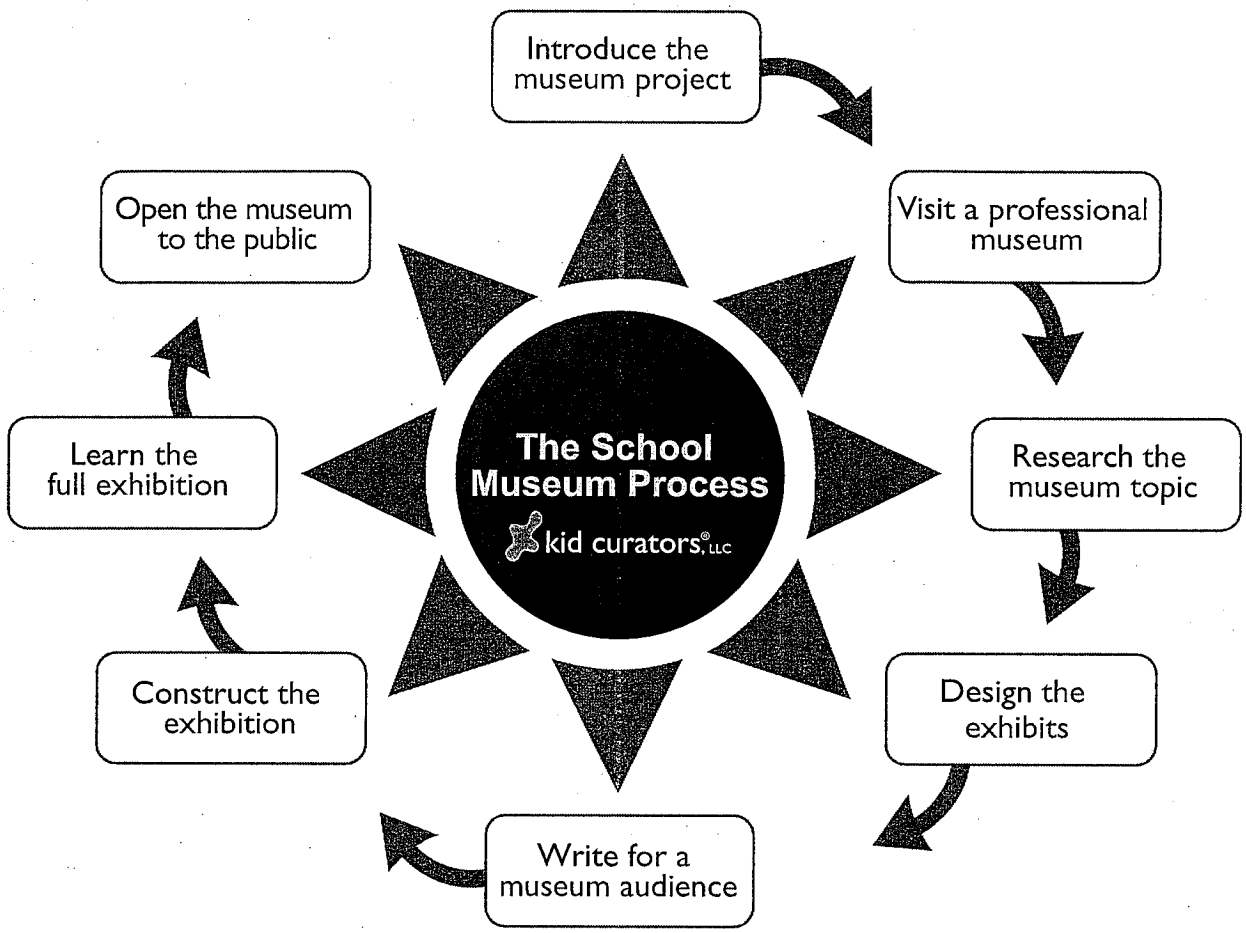
Afterword 172

Appendixes 173

References 184

Index 186

About the Author 191



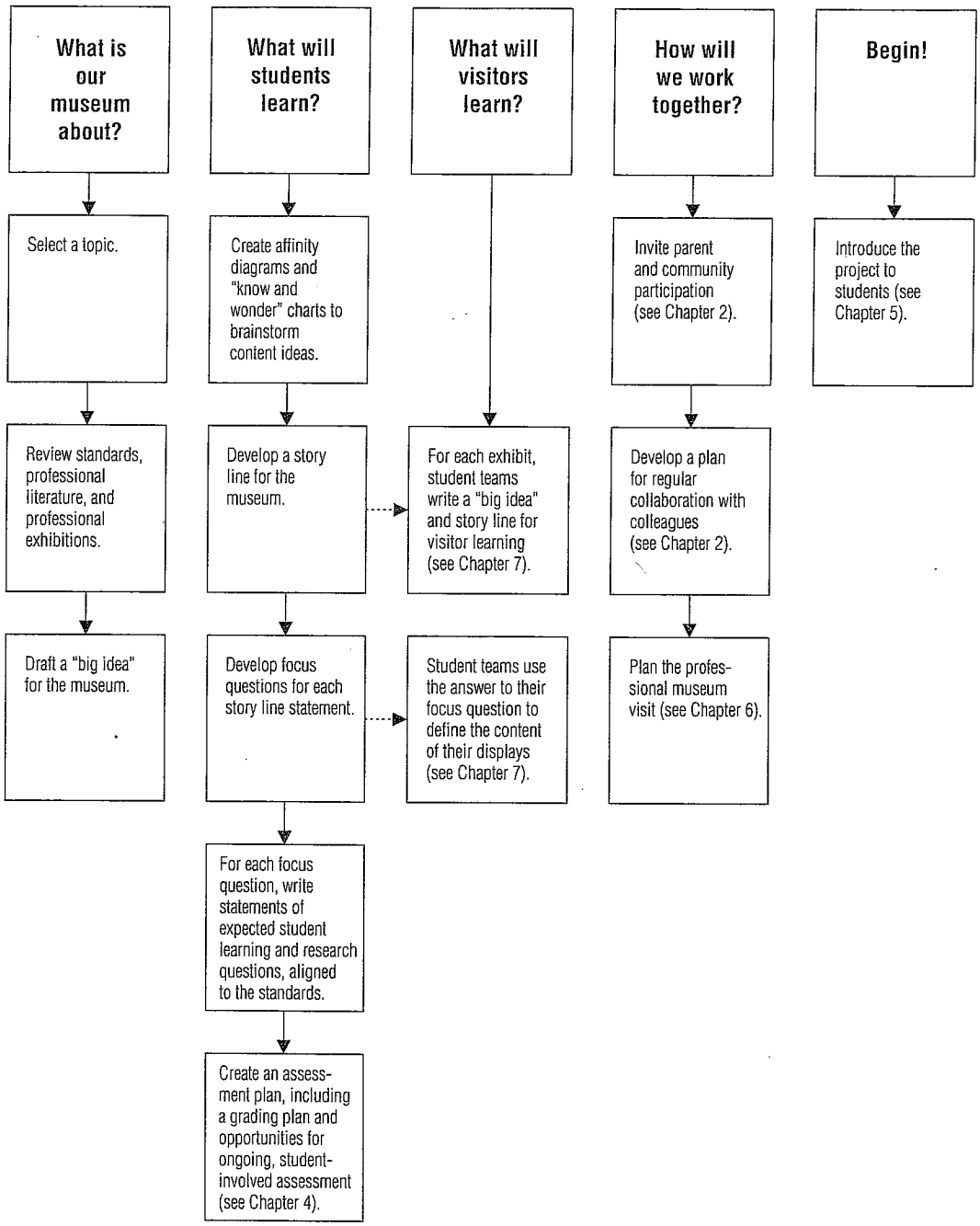
Steps to Take	Key Questions
Introduce the museum project	• What is our job? • What is a museum? • How will we work as a team? • What do visitors know and wonder about our museum topic?
Visit a professional museum	• What are the characteristics of high-quality exhibits? • What criteria will we use for our exhibits?
Research the museum topic	• What are our research questions? • Where will we locate information? • How will we summarize information as we take notes? • How will we analyze information to answer our research questions? • How will we synthesize information to answer our focus question? • What is our big idea? • What is our story line for visitor learning?

© Kid Curators®, 2001, 2006, www.kidcurators.com, Linda D'Acquisto

Steps to Take	Key Questions
Design the exhibits	• What will we use to tell our story? • How do we get visitors to experience our story? • What will our completed exhibit look like? • Will our exhibit work?
Write for a museum audience	• Does the content and order of our exhibit labels help visitors understand our big idea? • Is our writing relevant and useful to the visitor? • Is the tone of our writing clear and consistent? • Does the visual quality, organization, and structure of our text make it easy to read? • Is the text in our exhibit is grammatically correct?
Construct the exhibition	• What is our exhibit team's plan for accomplishing our work? • How are we working as a team? • How will we install our exhibit?
Learn the full exhibition	• How can the completed exhibit be used as a teaching tool? • How can we engage visitors with our exhibit? • When will we take school groups on tours of our museum? • How will we learn about the other exhibits in our museum? • What did we learn?
Open the museum to the public	• What roles will we play on opening night? • What activities will we have during our opening night event? • How will we advertise our event? • What is our schedule for opening night? • How will we dismantle our museum? • How will we celebrate our accomplishments?

© Kid Curators®, 2001, 2006, www.kidcurators.com, Linda D'Acquisto

Figure 3.1
Project Planning Overview



Copyright 2001, 2005 by Kid Curators. Reprinted with permission.

Figure 3.2
Project Plan Rubric

Note the performance level that is most descriptive of the curriculum and project plan for your school museum. If necessary, set goals for improving the quality of your project plan.

Trait	Excellent	Progressing	Needs Improvement
Topic	The museum topic is interesting to students and adults. It supports the curriculum and is multifaceted enough to warrant deep study.	The museum topic is interesting to students but is not quite compelling enough to interest adults. The topic supports the curriculum and is multifaceted enough to warrant deep study.	The museum topic holds some interest for students, peripherally relates to the curriculum, and lends itself to superficial study. The topic is too narrow or lacks focus to justify deep study.
Content	The big idea of the school museum generates curiosity among students and adults and clarifies the particular angle that students will take in their study of the museum topic.	There is an unstated big idea for the school museum that eventually may be evident to the students and visitors.	There has been no attempt to identify a big idea for the school museum.
	The story line and focus questions for the school museum provide direction for upcoming research while still being open-ended enough to encourage student exploration. The focus questions add up to a significant and coherent "story worth telling" regarding the museum topic and provide a rough outline of the content that will be studied—content that reflects areas of interest among teachers and students.	The story line and focus questions for the school museum provide direction for upcoming research while still being open-ended enough to encourage student exploration. Although the focus questions don't quite add up to a significant and coherent story line for the museum topic, they do provide a rough outline of the content that will be studied—content that reflects areas of interest among teachers and students.	The story line and focus questions for the school museum are either so open-ended that students don't understand them or so narrow that they limit interest in the subject. Focus questions don't provide direction for upcoming study. They may yield some interesting facts, but the questions don't add up to anything significant about the topic. The content doesn't reflect areas of interest among teachers and students.
	The statements of expected student learning are comprehensive and realistic. They specify subject area content that students will learn in the school museum project—content that is well aligned to the local curriculum and state standards.	There are some statements of expected student learning that specify subject area content that students will learn in the school museum project, but they aren't complete. However, the content that has been defined is well aligned to the local curriculum and state standards.	There hasn't been a thoughtful effort to develop statements of expected student learning. No attempt has been made to align the project to the local curriculum and state standards.
	Research questions are clear and stated in such a way that students can easily pursue their study.	Research questions are clear and stated in such a way that students can easily pursue their study. They are, however, somewhat incomplete because the statements of expected student learning aren't comprehensive.	Students aren't given (or coached to develop) research questions. Rather, they are expected to do this work on their own.

Figure 3.2 ***(continued)***

Project Plan Rubric

Trait	Excellent	Progressing	Needs Improvement
Instructional time line	The instructional time line is planned backward from the scheduled opening event. For every step in the process, there is adequate time for student learning, planning, and reflection.	The instructional time line is planned several weeks in advance, but there isn't an outline for the entire project. There is adequate time for student learning, but for some phases of the project student planning and reflection are given short shrift.	The instructional time line isn't planned in advance. Rather, teachers plan one week or even one lesson at a time as the project unfolds. Critical steps in the process (e.g., learning the full exhibition) are given short shrift.
Collaboration	Planning time is arranged for teachers to engage in ongoing professional development activities, such as examining students' work, discussing research-based instructional strategies, creating student-involved assessment, and differentiating instruction. Teachers engage in peer coaching throughout the museum project to improve these practices.	Planning time is arranged for teachers to develop the school museum project, but they don't intend to use the project as an opportunity for ongoing professional development.	There is no arrangement for ongoing planning time for teachers. Teachers will plan as they move through the project, stealing time whenever they can. Teachers intend to use meeting time for logistical planning, not professional development.
	Planning time is arranged throughout the project specifically for teachers to examine student assessment data and develop improvement plans based on the results.	Planning time is not arranged for teachers to examine student assessment data, but individual teachers agree to examine this data on their own.	There has been no discussion about collaboration to examine student assessment data.
	Individuals and organizations within the community are invited to participate in the development of the school museum. Parents are informed of the upcoming project before it starts, invited to offer their skills and knowledge, and encouraged to volunteer.	Individuals and organizations within the community are invited to attend the opening, but there is no plan to encourage their participation in the development of the school museum. Parents are informed of the project but not at the outset, limiting their level of involvement.	Parents and community members are informed of the project but only as invited guests.
Logistics	Exhibit teams are the appropriate size (fewer than six students), take into account students' interests, and are balanced by gender, ability, and leadership skill.	Exhibit teams are the appropriate size (fewer than six students) and take into account students' interests. The teams aren't as balanced as they could be—for example, some teams lack a student leader.	Exhibit teams are too large (six or more students), do not reflect students' interests, and are not balanced by gender, ability, and leadership skill.
	A museum visit is planned for students to study exhibit design using an observation guide.	A museum visit (or comparable activity) is scheduled, but how students will study exhibit design is not clear.	A museum visit (or comparable activity) has not been planned.
	An opening date is scheduled and publicized before the project begins.	An opening date is scheduled soon after the start of the project—in time to adequately publicize the event.	An opening date isn't scheduled before the start of the project and is selected weeks or days before the end of the project.

Copyright 2005 by Kid Curators. Reprinted with permission.

Figure 4.1

Assessment Plan Rubric

Note the performance level that is most descriptive of the assessment plan for your school museum. If necessary, set goals for improving the quality of your assessment plan.

Trait	Excellent	Progressing	Needs Improvement
Student learning targets	The learning targets are written in language that students understand. There is a plan to provide students with examples of high-quality work for all learning targets so that they develop a vision of quality for these areas. The content targets—the statements of expected student learning—are comprehensive.	The learning targets are clear to teachers, but there is no plan to present them to students. There is a plan to provide students with examples of high-quality work for some learning targets, but adequate time isn't allotted to do this for all targets. The content targets—the statements of expected student learning—exist for some but not all focus questions.	The learning targets aren't identified. Students don't examine examples of high-quality work for the learning targets. The content targets—the statements of expected student learning—exist for very few or no focus questions.
Student-involved formative assessment	For all targets, assessment activities are integrated into the instructional plan to help students understand quality work, compare their work to the standard, and improve their performance. Time is allotted to provide students with frequent descriptive feedback so that they know how to improve their performance for all targets. Students use work samples to explain progress toward all learning targets.	For some targets, assessment activities are integrated into the instructional plan to help students understand quality work, compare their work to the standard, and improve their performance. Time is allotted to provide students with descriptive feedback so that they know how to improve their performance for some targets. Students use work samples to explain progress toward some learning targets.	Very few assessment activities are integrated into the instructional plan. Students don't fully understand quality work, are unable to compare their work to a standard, and have difficulty knowing how to improve their performance. Little time is allotted to provide students with descriptive feedback. Students don't know how to improve their performance. Students use work samples to explain progress toward very few learning targets.
Grading plan	The grading plan includes summative assessments that show student achievement for all learning targets. Student performance on all learning targets is measured by using an appropriate assessment method—selected/constructed response test, extended written response test, performance assessment, or personal communication. There is a student-friendly version of the grading plan that shows how student performance will be measured and grades will be calculated. "Scores" on formative assessments and practice work are not included in the grading plan. Grades are based on summative assessments.	The grading plan includes summative assessments that show student achievement for some learning targets, but there isn't time to collect this evidence for all targets. Student performance on most learning targets is measured by using an appropriate assessment method—selected/constructed response test, extended written response test, performance assessment, or personal communication. There is a grading plan that shows how student performance will be measured and grades will be calculated, but it is primarily used by teachers, not students. The grading plan includes some formative assessments and some practice work calculated into the final grade.	The grading plan includes some summative assessments, but they aren't well aligned to the learning targets. There isn't always a good match between the learning targets and an appropriate assessment method—selected/constructed response test, extended written response test, performance assessment, or personal communication. There isn't a grading plan to show how student performance will be measured. It is possible that everything a student does will be given a score and every score will be included in the grading plan, including formative assessments and practice work.

Copyright 2005 by Kid Curators. Reprinted with permission.

Figure 4.2

Plan for Matching Learning Targets to Assessments

Learning Target	Classroom Assessment Method			
	Selected/Constructed Response Test	**Extended Written Response Test**	**Performance Assessment**	**Personal Communication**
Knowledge: Student knows core facts and concepts. School museum target *Knowledge:* Student is able to answer each of the focus questions in the school museum (student as content expert).	Good match for assessing core facts and concepts. School museum ideas Create test based on statements of expected student learning for each exhibit.	Good match for assessing understanding of relationships among elements of knowledge. School museum ideas Create a pre-test and post-test for exhibit focus questions.	Not a good match for assessing knowledge alone, but a good match for use of knowledge in context. School museum ideas Use exhibit design rubric, content trait.	Good match but time-consuming process. School museum ideas Listen to docent tour, ask questions, evaluate answers, and infer understanding.
Reasoning: Student uses knowledge to reason and solve problems. The student may induce, deduce, analyze, compare, classify, evaluate, or synthesize. School museum target *Reasoning:* Student uses multiple resources to find relevant information and synthesizes research notes to answer research and focus questions (student as researcher).	Good match for assessing basic patterns of reasoning around core facts and concepts. School museum ideas Create test based on statements of expected student learning for each exhibit, making sure to include reasoning items.	Good match if certain that writing skill will not interfere with the student's ability to reason and solve problems. School museum ideas Create a pre-test and post-test for exhibit focus questions.	Good match if the product or performance requires and assesses reasoning proficiency. School museum ideas Use research rubric to evaluate students' work.	Good match. Ask students to "think aloud," or ask follow-up questions to probe reasoning. School museum ideas Listen to docent tour, ask questions, evaluate answers, and infer understanding.
Performance skills: Student uses knowledge and reasoning while performing skillfully.	Not a good match. Cannot infer through these methods that the student has the skill being assessed. May be able to assess understanding of prerequisite performance skills.		Good match. Can observe and evaluate skills as they are being performed in the task.	Good match if oral communication proficiency is being assessed.

Figure 4.2 ***(continued)***

Plan for Matching Learning Targets to Assessments

Learning Target	Classroom Assessment Method			
	Selected/Constructed Response Test	Extended Written Response Test	Performance Assessment	Personal Communication
School museum targets *Performance skills:* Student interacts effectively with museum visitors, explaining exhibit content and actively engaging visitors in learning (student as skilled communicator). *Performance skills:* Student works effectively on a team (student as team player).	Not a good match. Cannot infer through these methods that the student has the skill being assessed. May be able to assess understanding of prerequisite performance skills.		School museum ideas Use teacher-developed oral communication rubric for docent presentation. Use teamwork rubric to evaluate students' work.	School museum ideas Listen to docent tour, ask questions, evaluate answers, and infer understanding.
Products: Student creates quality products that require use of knowledge, reasoning, and performance skills. School museum targets *Products:* Student writes appropriate label copy that describes exhibit artifacts and answers research and focus questions (student as writer). *Products:* Student designs appealing, effective, informative displays that answer focus questions and engage visitors (student as exhibit designer).	Not a good match. Cannot evaluate the quality of student products with these methods. May be able to assess prerequisite understandings.	Good match if writing proficiency is being assessed. School museum ideas Not appropriate for these targets in this project.	Good match. Can assess student performance in creating the product and can assess the quality of the product. School museum ideas Use exhibit design and label copy rubrics to evaluate students' work.	Not a good match. Can assess knowledge of procedures and knowledge of attributes of quality products, but cannot assess the quality of the product itself.

Adapted from Classroom Assessment for Student Learning *(p. 100), by R. Stiggins, J. Arter, J. Chappuis, and S. Chappuis, 2004, Portland, OR: Assessment Training Institute. Copyright 2004 by Assessment Training Institute. Adapted with permission. Copyright 2004 by Kid Curators. Reprinted with permission.*

Figure 6.1

Observation Guide for Museum Visit

Find an exhibit that you think is excellent and explain why. We will use your ideas to generate our list of criteria for high-quality exhibits.

Name: _____ **Date:** _____

Museum: _____ **Exhibit:** _____

Description of Exhibit: _____

How does this exhibit . . .

Engage?

Does the exhibit capture and maintain your interest? How?

Inform?

Does the exhibit tell a simple but important story? What is it?

What points of view are represented?

Organize information?

What objects and images are used to tell the story?

How is text used to interpret these objects and images?

How are different ideas connected to one another?

Show creativity?

Does the exhibit arouse your curiosity and imagination? How?

What are some of the clever, original, or unique display techniques used in this exhibit?

Teach?

Does the exhibit teach you something new or help you see something in a new light? How?

What should we remember about this exhibit as we begin our project?

Copyright 2001 by Kid Curators. Reprinted with permission.

APPENDIX C

Resumes of Key Project Personnel

Kimberly A. Abler

Milwaukee Public Schools

5225 West Vliet 414-475-8051

Milwaukee, WI 53207—2181 ablerka@milwaukee.k12.wi.us

Experience

2001- present Arts@Large, Inc, Milwaukee, WI

Co-founder and Co-Director

- Wrote and received several Department of Education grants creating an integrated arts program for Milwaukee Public Schools
- Created a non-profit arts organization (Arts@Large, Inc.) to continue the successful program (2005)
- Provide professional development to school teams and artists related to arts integration
- Created a mentoring program to support university arts education students, education students and local artists
- Received the Americans for the Arts 2012 Art Education Organization Award

1997–present Milwaukee Public Schools Milwaukee, WI

Art Curriculum Specialist

- Created K-12 Learning Targets aligning local art and design curriculum to Wisconsin state standards
- Created Arts @ Large program to increase arts opportunities for students and teachers in MPS as well as local artists
- Wrote and received numerous grants including DOE Model Arts Development and Dissemination, National Endowment for the Arts to increase arts programming and teacher training in the arts

1997-2008 University of Wisconsin-Milwaukee

Adjunct Faculty

- Taught Books and Pictures course which integrates the visual and written elements of children's books.

1991–present Cardinal Stritch University Milwaukee, WI

Adjunct Faculty

- Taught courses in Art Curriculum, Art Methods and Integrated Art at the undergraduate level
- Created and taught an Arts Integration course for the graduate level
- Supervised Student Teachers in the area of Art Education

1985-1997

Art Specialist Milwaukee Public Schools

- Taught elementary art designing curriculum to support other content areas
- Created and implemented the integrated art program at Tippecanoe

School for the Arts and Humanities

- Wrote school wide curriculum focused on themes with a team of teachers
- Received and implemented Wisconsin Arts Board grants to provide artist in residency programs at the school
- Team taught at all grade levels K-8 connecting visual art and design with classroom teachers and their content

Education

1995–1997 Lesley College Cambridge, MA

- M.A., Creative Arts and Learning

1985- 1987 Cardinal Stritch University Milwaukee, WI

- M.A., Educational Leadership

1980–1984 Cardinal Stritch University Milwaukee, WI

- B.A., Art education

Certifications

1985- present

Wisconsin 550 Pre-Kindergarten – 12 Art Education License

1984- present

Wisconsin 10 Director of Instruction 1997- present

Teri Sullivan

CAREER SUMMARY

2005-Present Arts @ Large, Inc. ***Founder & Co-Director***
Provides operations management for nonprofit arts organization serving students and teachers in Wisconsin's public schools. Responsible for program design and implementation of inclusive arts integration initiatives that build arts-rich environments for students with little or no ongoing arts education. Designs and implements professional development for artist educators and teachers in model arts integration programming that links to academic learning. Provided development of the Arts @ Large initiative in 2001 in collaboration with Co-Director Kim Abler for Milwaukee Public Schools, developed a sustained model, and initiated 501(c)3 status in 2005.

2001-2006 Sulli & Associates, Inc. ***President***
Provided program and Fund Development for nonprofit organizations including educational institutions, arts organizations, and youth service organizations. Services provided in strategic planning, program & curriculum design, fund development, board recruitment, grant writing, special event planning, evaluation and outcomes assessment, collaborative partnership development, multimedia software development, marketing, budgeting and team building.

2000-2001 Boys & Girls Clubs of Greater Milwaukee ***Director, Arts & Cultural Education***
Designed, implemented, and provided ongoing assessment of Arts & Cultural Education Programs serving more than 20,000 central city youth at six Clubs, fifteen satellite sites in Milwaukee Public Schools and a 300-acre camp. Created collaborations with educational institutions, arts organizations, youth service organizations, libraries and community organizations to provide visual art and design, and performing arts experiences for at-risk youth.

1998-2000 Boys & Girls Clubs of Greater Milwaukee ***Annual Fund Director***
Fund development for $14 million capital campaign to support general operations, endowment, and new capital and program initiatives. Coordinated donor cultivation activities, prepared proposals and grants, and supervised marketing, special events, database, and administrative staff.

1996-1998 Rockwell Automation ***Senior Administrative Coordinator***
Assistant to Operations Manager, Facilities Manager, Manufacturing Engineers and Supervisors.

1991-1996 The Book Rack ***Owner***
Supervised the design and build-out of a new bookstore/coffeehouse. Facilitated inventory control, customer relations, personnel, marketing, public relations, special event planning, and bookkeeping.

1990-1991 Embassy Theatre, Fort Wayne, IN ***Executive Director***
Coordinated booking and contract negotiations for promoted and presented performances in a 2,600 seat historic theatre. Coordinated facility management, marketing, strategic and long-range planning, budget development, and supervised personnel. Prepared state, regional and national grant applications. Administered corporate, individual and endowment fundraising campaigns.

W4885 Valley Heights Drive, Fredonia, WI 53021 262.302.7854 teri@artsatlargeinc.org

1986-1990 Council for the Performing Arts ***Executive Director***

Coordinated booking and contract negotiations for presented and produced performances in a 1,000 seat, school-based performing arts facility. Administered marketing plan for subscription series and individual ticket sales. Designed and coordinated an arts education series, senior film series, educational workshops, and outreach services to developmentally and physically challenged patrons. Produced children's and adult theatrical productions. Coordinated facility management, scheduling, personnel management, board development, and finance. Prepared state, regional and national grant applications. Administered corporate and individual fundraising campaigns.

1985-1986 United Performing Arts Fund ***Campaign Assistant***

Assisted director of individual giving for $4 million campaign.

1985 Milwaukee Repertory Theatre ***Public Relations Assistant***

Copy writing and public relations.

1984-1985 Western Wisconsin Regional Arts ***Program Coordinator***

Designed and presented an annual performance and arts education series for a 100 seat facility and local school district. Produced/hosted public radio performing arts talk show.

EDUCATION

B. S. Arts Administration *Viterbo College, La Crosse, WI*

Ballet, Modern, Jazz Dance *Western Wisconsin Ballet Academy, Viterbo College*

Voice *University of Wisconsin La Crosse, Viterbo College*

Arts Presenters Leadership Institute *Hubert H. Humphrey Institute for Public Affairs*

Marketing the Arts *The Dawson Group*

Leadership and Facilitator Training *The Pacific Institute*

Grantsmanship Training Program *The Grantsmanship Center*

Master Gardener Training *University of Wisconsin*

VOLUNTEER ACTIVITIES

State of Wisconsin Task Force on Creativity and the Arts

Milwaukee Public Schools Art and Creativity Task Force

Past President Board of Directors – African American Children's Theatre

Grant Reviewer Wisconsin Arts Board

Grant Reviewer Indiana Arts Commission

Penfield Children's Center

Habitat for Humanity

W4885 Valley Heights Drive, Fredonia, WI 53021 262.302.7854 teri@artsatlargeinc.org

Linda D'Acquisto

4961 N. Newhall Street ■ Whitefish Bay, WI 53217
608.334.3444 ■ ldacquisto@mac.com ■ kidcurators.com

Education and Certification

Education: University of Wisconsin, Madison, WI, M.S., August 1986, Curriculum and Instruction
University of Wisconsin, Madison, WI, B.S., May 1980, Behavioral Disabilities
Certification: Wisconsin Director of Instruction (10), K-12; Elementary Education, 1– 8

Employment Summary

Educational Consultant, D'Acquisto Consulting and Kid Curators, LLC, 2000–present.
Consultant, coach, and facilitator providing services in leadership training, school improvement planning, program evaluation, project coordination, classroom assessment training, professional development planning, process facilitation, and arts integration. Author of *Learning on Display: Student-Created Museums that Build Understanding,* a book published by the Association for Supervision and Curriculum Development (ASCD) that outlines a student-centered, project-based instructional process utilizing exhibit design as a catalyst for learning.

Arts @ Large Professional Development Specialist, 2011- present.
Under a D.O.E. grant, provides extensive professional development program for three cohorts of Milwaukee Public School teachers over three years, using the school museum framework as an alternative curriculum and instructional design process. Manages quarterly gallery installations that feature student-created artwork and exhibits.

Senior Outreach Specialist, University of Wisconsin, Department of Educational Leadership & Policy Analysis, Dec. 2008-12
Led the development and ongoing implementation of a school-wide team structure to build leadership capacity for improved student learning at Knapp Elementary School in Racine, Wisconsin, in a three-year school improvement project through the Wisconsin Idea Leadership Academy (WILA Project, through UW-Madison Department of Education Leadership & Policy Analysis.)

Director of Instruction, Shorewood School District, Shorewood, WI, 1993–00
Curriculum Coordinator, Fox Point-Bayside School District, Bayside, WI, 1991-93
Provided K-12 leadership for curriculum review and development, district-wide assessment, annual school performance reports, professional development, program evaluation, strategic planning, grant programs, Title I, and various task force committees.

School and Public Program Manager, SciTrek: The Science and Technology Museum of Atlanta, 1988-91
Museum Educator managing public and school programs; training and supervising program staff, interpretation staff, and volunteers; and assessing and redeveloping exhibits.

Teacher, Greenfield Hebrew Academy, Atlanta, GA, 1987; Lowell Elementary School, Madison, WI, 1986-87; Behavioral Disabilities Teacher, Schenk Middle School, Madison, WI, 1981-84; and Bartlett Middle School, Savannah, GA, 1980-81.

Teaching Assistant, Supervisor of Practicum Students, University of Wisconsin, Madison, WI, 1984-86.

Selected Publications

D'Acquisto, Linda, (2006). Learning on Display: Student-Created Museums That Build Understanding, Association for Supervision and Curriculum Development, Alexandria, VA.

D'Acquisto, L., Museums @ Schools, *Educational Leadership,* Volume 70, No. 5, February 2013, online issue.

D'Acquisto, L., Kids as Curators, *Educational Leadership,* Volume 64, No. 8, May 2007, pp. 50-51.

D'Acquisto, L., Scatena, M., K-12 Curators: What Kids Learn by Designing Exhibitions, *VAM Voice,* Virginia Association of Museums, Fall 2007. (Reprint of *Exhibitionist,* Volume 25, No. 2, Fall, 2006, pp. 38-45).

Website, kidcurators.com

Selected Conference Presentations

Association for Supervision and Curriculum Development Annual Conference, *Student-Created Museums: Project-Based Learning In and With the Community;* Linda D'Acquisto, Kid Curators, LLC; Kim Abler, Arts @ Large, Milwaukee, WI; Kelly DiGiacinto, NOVA Middle and High School, Milwaukee, WI, Michelle Tranchita, Waukesha School District, WI, March 17, 2013, Chicago, IL.

The Institute @ CESA #1, Public Education Transformation Convening, Getting Learning Right The First Time—Every Time, *Students as Knowledge Curators,* Linda D'Acquisto, Kid Curators, LLC; John Hallagan and Terry Kaldhusdal, Magee Elementary School, Kettle Moraine, WI, November 1, 2011, Brookfield, WI.

Indiana ASCD State Conference: Educating the Whole Child, *Information Curators: Learning by Designing School Museums,* Linda D'Acquisto, Kid Curators, LLC, October 7, 2010, Indianapolis, IN

World Future Society's Annual Conference, *Youth Can Change The World;* Dr. Ted Kahn, Design Worlds for Learning, Inc.; Linda D'Acquisto, Kid Curators, LLC, July 18, 2009, Chicago, IL.

World Future Society's Annual Conference, *Toward a Global Virtual Museum and Collaboratory of the Future Designed by and For Students;* Dr. Ted Kahn, Design Worlds for Learning, Inc.; Linda D'Acquisto, Kid Curators, LLC, July 29 – 31, 2007.

Association for Supervision and Curriculum Development Annual Conference, *School Museum Projects: A Powerful Way to Organize Curriculum and Instruction;* Linda D'Acquisto, Kid Curators, LLC; Pat Morrissey, New Berlin Public Schools, WI; Dan Lyons, Maplewood Richmond Heights School District, MO, March 19, 2007, Anaheim, CA.

American Association of Museum Annual Conference, *K-12 Curators: What Kids Learn by Making Exhibitions,* Linda D'Acquisto; Marie Scatena, Chicago Historical Society; Christi Atkinson, Walker Art Center; April 27, 2006, Boston, MA.

Ryan W. Hurley

608-217-1054 | rwhurley@gmail.com | Milwaukee, WI

Objective

To work with communities to build successful models of education that put the student, family and community at the core.

Education

Ph. D. | University of Wisconsin-Milwaukee | 2012 - Present

- Urban Education, Social Foundations of Education

Master's Degree | University of Wisconsin-Milwaukee | 2010 - 2012

- Cultural Foundations of Education

Bachelor's Degree | University of Wisconsin-Madison | 2002 - 2006

- Journalism and Communications, English, Creative Writing

Professional Experience

Program Manager | Arts @ Large | Milwaukee | April 2008 – Present

- Develop, organize and coordinate after-school and daytime programs focused on arts integration in Milwaukee Public Schools, including curriculum development, artist residencies and professional development for local educators and after-school providers
- Organize and train teams of students, teachers, administrators and parents at over 20 school sites each year on strategies to use the arts to build community
- Develop and manage diverse community, political and national partnerships
- Develop and coordinate special projects focused on, but not limited to, community engagement and social justice
- Manage A@L site coordinators to ensure program cohesiveness and efficacy at all A@L school sites
- Supervise and train staff members
- Manage financial budgets, program evaluation and data
- Research, prepare and write grants for local and national fundraising opportunities
- Build strategic relationships with a variety of local community-based organizations
- Assist in the development and management of youth gallery exhibitions, related programming and community events in one of the state's largest youth art galleries
- **Awards while at A@L**: Americans for the Arts 'Arts Education Award,' St. Bonaventure Justice Award, State Farm "Go To Bat" Award, Milwaukee Public Schools Excellence in Education Award, MANDI nominee

Emerging Leaders Council | Americans for the Arts | U.S.A. | January 2010 – January 2013

- Elected member of Emerging Leaders Council, Develop programming for National Emerging Leaders Networks, Blog about progressive educational models

Instructor | University of Wisconsin-Madison | Madison | June 2007 – September 2010

- Taught summer and fall courses for the Education Outreach pre-college program

Therapist | Integrated Development Services | Madison, Milwaukee | Dec 2006 – Sept 2010

- In-home therapist for children diagnosed with autism

Communications Manager | Kiddo Publishing | Madison | Oct 2006 – March 2008

- Developed strategic marketing plans and built community partnerships
- Organized youth outreach and research, provided creative concepts for new endeavors

Artist Educator | National Poetry Slam Team | Milwaukee, Madison | May 2007 – Present

- Perform spoken word poetry, speak at school assemblies and professional development conferences; facilitate writing and performance workshops with youth and educators

After-School Program Facilitator | Madison Metropolitan School District | May-Aug 2007

- Facilitator at an after-school program for children in transitional housing

Journalism Intern | Wisconsin State Journal | Madison | Jan – May 2006

- Wrote articles for the Arts and Entertainment desk

Marketing Intern | Morgridge Center for Public Service | Madison | Sept – Dec 2005

- Developed marketing plans, logos and trademarks for non-profit programs

Strategic Planning Intern | MindShare Media Agency | New York, NY | June – Aug 2005

- Developed strategic integrated marketing communications platform and creative concepts for a variety of international companies

Journalist | Madison Observer Newspaper | Madison | 2004 – 2005

- Wrote music reviews, covered local events, and contributed creative writing to independent and multicultural media source at University of Wisconsin

Other Memberships/Affiliations/Writings

Featured Work in National and International Publications, Writer

- *Dream of a Nation* (book), Positive Impact Magazine, The Progressive (online magazine), Burning Word (literary magazine), ArtsFWD.org, Blog.ArtsUSA.org and more.

National Conference Presentations, Lead Speaker/Workshop Leader

- Americans for the Arts, National Coalition of Community Schools, Board for People with Developmental Disabilities, Medical College of Wisconsin

Meredith J. Ludwig

Education

Ed.D.	1979, Clark University, Educational Analysis
M.Ed.	1974, Clark University, Educational Analysis
B.A.	1970, University of North Carolina at Greensboro, French, Junior Year Abroad in Paris, Sweet Briar Program, 1968–1969

Honors and Awards

Phi Beta Kappa, University of North Carolina at Greensboro, 1969

Present Position

Principal Research Analyst, American Institutes for Research (AIR)
Currently leads three grants (for the National Science Foundation and the U.S. Department of Education, Arts in Education Development and Dissemination) studying professional development and teacher practices for middle school teachers and for pre K and K teachers. Conducting case study research focusing on best practices in teacher preparation (to prepare teachers working with English Learners) and in implementing teacher effectiveness systems. Advises project teams regarding teacher education policy, including preparation, alternative certification, and accreditation. Applies research expertise in evaluation design, survey development, and case study design, data collection and reporting.

Selected Professional Experience

Project Director, Massachusetts Department of Elementary and Secondary Education, Program Review Rubric, AIR (current)
Developing a rubric aligned with state educator standards for use in reviewing new and current preparation programs for educators.

Project Director, the Evaluation of the Alliance for Physics Excellence (APEX) project, AIR (2012-2017)
Manages external evaluation of this five-year NSF funded Mathematics and Science Partnership, awarded to a consortium led by Alabama A and M University. The project seeks to improve the content knowledge of in service physics teachers and prepare new teacher candidates for schools in Alabama.

Project Director, Wolf Trap Foundation for the Performing Arts, Evaluation of the Early STEM Learning Through the Arts Wolf Trap AEMDD grant project, AIR (2010-Present)
Manages external evaluation of this four-year Arts In Education Development and Dissemination Project (AEMDD), awarded to the Wolf Trap Foundation for the Performing Arts. Designs evaluation data collection instruments, manages evaluation activities, manages staff, budget, and client work in a study of the impact of professional

development on teacher practices and the math knowledge of young children in pre-K and K classrooms. Writes reports and presents at project meetings.

Project Director, National Science Foundation (NSF), Impact of MSP Professional Development (PD) on Teacher Practices in Secondary Mathematics and Science, AIR (2010-Present)
Manages staffing, budgeting, subcontractors and project task implementation for three-year study of MSP initiatives in secondary school mathematics and science. Investigating the impact of PD, sponsored by the MSP projects, on teacher practices.

Researcher, U.S. Department of Education, Policy and Program Studies Service (PPSS), Task Order project: Case Studies of Current and Former Grantees Under the Title III National Professional Development Program (NPDP), AIR (2011-Present)
Conducting a study of the implementation of promising professional development and teacher preparation approaches to prepare new candidates and current teachers of English Learners.

Project Director, Syracuse Support Project, AIR (2010–2011)
Managed scope, staffing, budgeting, and task implementation for multiphase, five-year study of the implementation of Say Yes Foundation Support to the Syracuse School District schools.

Researcher, U.S. Department of Education, Policy and Program Studies Service (PPSS), Comparative Case Studies of Promising Systems of Evaluator Effectiveness, AIR (2011-Present)
Conducting case studies in a national study of promising practices in teacher effectiveness system design and implementation under contract to Policy Studies Associates (PSA).

Employment History

2000–Present	Principal Research Analyst, AIR
1996–2000	Director, Postsecondary Statistics Support, Education Statistics Services Institute
1982–1996	Director of Association Research and Program Associate, American Association of State Colleges and Universities
1979–1982	Research Associate, Evaluation Technologies Inc.
1977	Consultant, Richmond Community High School
1978–1979	Doctoral Research, Richmond City Schools
1994–1999	Adjunct Faculty, George Washington University

Publications

Journal articles

Ludwig, M., & Taymans, Juliana. (2005). Teaming: Constructing high-quality faculty development in a PT3 project. *Journal of Technology and Teacher Education.*

Ludwig, M. (2000). The next ten years: Trends affecting study abroad participation for U.S. students. *International Educator.*

Ludwig, M., & students at George Washington University. (1996). Crossing paths: Using the case study in course evaluation. *Assessment Update.*

Ludwig, M., & Scott, J. (1995). Community service at urban public institutions: A report on conditions and activities. In Metropolitan Universities.

Books and book chapters

Ludwig, M. (1995). *On the brink.* Washington, DC: American Association of State Colleges and Universities.

Professional Presentations

Ludwig, M. (2010). *Making Professional Development More Strategic: A Conceptual Model for District Decisionmakers*. Presented with Kwang Suk Yoon at the AERA meeting, New Orleans, LA.

Ludwig, M. (2006). *Improving Teacher Quality for All Students*. Presented with Kwang Suk Yoon at the AERA meeting, San Francisco, CA.

Ludwig, M. (2006). *The Use of Daily Logs to Document the Role and Activities of the Literacy Coach*. Presented with the assistance of Mike Garet and Terry Salinger at the AERA meeting, San Francisco, CA.

Ludwig, M. (2005, February). *Alternative certification: Research needs.* Presented at the National Center on Alternative Certification, Orlando, FL.

Ludwig, M. (1994, February). *Major symposium: ATE commission on quality standards and enhancement of teacher education.* Presented at the American Association of Colleges for Teacher Education annual meeting, Chicago, IL.

Ludwig, M. (1993, March). Invitational pre-conference session. Presented at the American Association for Higher Education Research Forum, the American Association for Higher Education annual meeting, Washington, DC.

Ludwig, M. (1993, April). *Teacher education programs for non-traditional students: The art and science of preparing mid-career changers for teaching mathematics and science.* Symposium participant and facilitator, the American Educational Research Association annual meeting, Atlanta, GA.

Karen Melchior

Education

B.A 2012, Syracuse University, Anthropology (magna cum laude)
N/A 2011, University of York, Archaeology

Honors and Awards

Lambda Alpha National Honor Society for Anthropology, 2012

Present Position

Research Assistant, American Institutes for Research (AIR) (2013–Present)
Provides research, analytical and administrative support to senior staff members for program evaluation. Responsibilities include data collection and analysis, communication and coordination with program sites, as well as necessary administrative tasks.

Professional Experience

Research Assistant, First® Robotics, Center for Youth and Communities (Summer 2012)
Assisted with the survey development, data management and analysis for a retrospective study of the First Robotics Programs, as well as the implementation of an additional longitudinal study. This is an ongoing program to encourage STEM learning and careers with children ages 6-18, and is currently operating in over 1,000 schools across the country. Responsibilities included assisting survey design and implementation, receiving and inputting survey data, coding interview responses, and preparing data for final reports.

Research Assistant, Earth Force, Center for Youth and Communities (Summer 2012)
Assisted with the external evaluation of a national STEM and service learning program that aims to educate student and teachers about local environmental issues and community involvement. Primary responsibilities include creating survey templates, data entry, qualitative analysis, and assisting with site communication and coordination.

Research Assistant, Hyams Foundation Teen Futures Initiative, Center for Youth and Communities (Summers 2012)
Provided data support for an initiative designed to provide aid to young people ages 16-22 who have dropped out of school and are unemployed. The program seeks to provide education, skill development, employment and support. Primary responsibilities include data entry and management, and preparing data for project reports.

Student Worker, Department of Education and KIDS Consortium, Center for Youth and Communities (Summers 2008-2010)

Assisted with the evaluation of four federally funded service learning and community engagement programs in New England, including Massachusetts, Rhode Island, and Maine. Primary responsibilities included data entry, cleaning, and analysis, and support for site communication and coordination.

Employment History

2013–Present	Research Assistant, American Institutes for Research
2012–2013	Telephone Interviewer, National Opinion Research Center
2012–2012	Research Assistant, Center for Youth and Communities, Brandeis University
2008–2010	Student Worker, Center for Youth and Communities, Brandeis University

Nicholas Sorensen

Education

Ph.D.	2010, University of Michigan, Social Psychology
M.S.W	2010, University of Michigan, Social Work (Social Policy Evaluation)
M.S.	2006, University of Michigan, Social Psychology
B.A.	2004, University of Michigan, Psychology

Honors and Awards

Daniel Katz Dissertation Fellowship in Psychology, University of Michigan, 2009-2010
Rackham Conference Travel Award, University of Michigan, 2009
Pre-doctoral Prevention Research Fellowship in Intervention Design and Evaluation, National Institute for Mental Health, 2004-2007
High Honors in Psychology, Department of Psychology, University of Michigan, 2004
Patricia Gurin Award in Intergroup Relations, University of Michigan, 2004
Angell Scholar Award for Scholastic Achievement, University of Michigan, 2002-2003
Honor Society Memberships (Phi Beta Kappa, Golden Key, National Society for Collegiate Scholars), 2001-present

Present Position

Researcher, American Institutes for Research (AIR)
Conducts rigorous educational research and evaluation studies, with a focus on randomized-controlled trials (RCTs). Responsibilities include developing study designs and analysis plans, conducting advanced quantitative data analyses, providing analytical and statistical expertise to clients, developing conceptual frameworks that guide project work, organizing and reporting analytical results and research procedures, preparing technical reports and journal articles, presenting findings to clients and the public, assisting in developing and drafting proposals, and mentoring junior research associates. Substantive areas of focus include: educational technology; achievement in science, technology, engineering and mathematics (STEM) disciplines; and foreign language/ intergroup/cross-cultural education.

Selected Professional Experience

Research Analyst, Online Algebra Credit Recovery Study, Institute for Educational Sciences, U.S. Department of Education, AIR (2011–Present)
Funded by the Institute for Education Sciences, this randomized field trial tests the effects of an online credit-recovery program relative to a face-to-face version and a business-as-usual control group for first-year high-school students who fail Algebra I in Chicago Public Schools. *Responsibilities include school recruitment, randomization, data*

collection, study coordination, data analysis, reporting of study findings in journals and other publication outlets, and supervision of junior research associates.

Research Analyst, Virtual Algebra Study, U.S. Department of Education, Regional Educational Laboratory – Northeast and Islands (REL-NEI), AIR (2010–Present)
Funded by the Institute for Education Sciences, this large-scale cluster randomized field trial tests the effects of online delivery of Algebra I on student achievement and college readiness for students in rural schools who lack access to Algebra I in eighth grade. *Responsibilities include data analysis including multiple imputation and multi-level modeling with continuous and binary outcomes, technical report writing, developing presentation displays of study findings, preparation of restricted-use files, and supervision of junior research associates.*

Research Analyst, Content Validation Study of the Medical College Admissions Test, Association of American Medical Colleges (2010–present)
The purpose of this project is to ensure that the discipline-specific content for this high-stakes standardized test used for selection is up-to-date and reflects information that students should know before entering professional training. *Responsibilities include applying analytic expertise to ensure quality and accuracy of data presentation used for decisions focused future revisions of the test, and supervision of junior research associates.*

Teaching

Graduate Instructor, Research Methods in Psychology, Department of Psychology, University of Michigan (2009–2010)
Course focused on basic and advanced research design principles for basic and applied research as well as scientific writing (upper-level writing requirement for students concentrating in psychology). *Responsibilities included independently instructing two weekly lab sections focused on research methodology and design for 120 students over 3 academic terms.*

Graduate Instructor, Facilitation of Intergroup Dialogue, Program on Intergroup Relations, University of Michigan (2007–2008)
Course focused on training undergraduate students for intergroup dialogue facilitation. Learning objectives focused on exploring social identity, inequality and communication across difference and intergroup conflict. *Responsibilities included co-instructing a course for approximately 100 students over 3 academic terms, designing and coaching simulated facilitation exercises, providing targeted feedback on in-class observations of facilitation of intergroup conflict and guiding facilitators in session planning to utilize exercises and facilitation techniques to address student learning objectives.*

Employment History

2010–Present Researcher, American Institutes for Research

2007-2010 Graduate Instructor, University of Michigan

2004-2010 Research Associate, Program on Intergroup Relations and Department of Psychology, University of Michigan

Publications

Technical and Final Research Reports

Adams, K., Mueller, L., Sorensen, N., & Herleman, H. (forthcoming). *MR5 content review study of natural sciences for the Medical College Admissions Test.* Washington, DC: American Institutes for Research.

Heppen, J., Walters, K., Clements, M., Faria, A., Tobey, C., Sorensen, N., & Culp, K. (forthcoming). *Access to Algebra I: The effects of online mathematics for grade 8 students.* Washington, DC: U.S. Department of Education, Institute for Educational Sciences.

Journal articles

Sorensen, N., Nagda, B. A., Gurin, P., Stephan, W., & Gonzalez, R. (revise and resubmit). Not just what we say but how we say it: A critical-dialogic model of intergroup dialogue for fostering empathy in interracial interactions. *Psychological Science.*

Gurin, P., Nagda, B. A., Sorensen, N. (in press). Intergroup dialogue: Education for a broad conception of civic engagement. *Liberal Education.*

Book chapters and encyclopedia entries

Gurin, P., Sorensen, N., Nagda, B. A., Stephan, W.G., Gonzalez, R., Lopez, G., & Rodriguez, J. (in press). Effects of intergroup dialogue and how they happen. In P. Gurin, B. Nagda and X. Zuniga's (Eds.) *Engaging race and gender: Intergroup Dialogue in Higher Education*. Russell Sage.

Gurin, P., Wong(Lau), K., Sorensen, N., & Nagda, B.A. (in press). Studying intergroup dialogue: A mixed methods approach. In P. Gurin, B. Nagda and X. Zuniga's (Eds.) *Engaging race and gender: Intergroup Dialogue in Higher Education*. Russell Sage.

Selected Presentations

Sorensen, N. (2010, May). Thinking structurally, so what? Implications for action. Paper presented in symposium "Learning about structural inequalities: Why, how, and for what?" (Chair, P. Gurin) at the American Educational Research Association, Denver, CO.

Sorensen, N., Gurin, P., Nagda, B. & Zuniga, X. (2010, January). From separate corners to connection and collaboration: A randomized controlled evaluation of intergroup dialogue. Paper presented at the Society for Social Work Research, San Francisco, CA.

Gregory Walz-Chojnacki

Education

Master of Public Policy	2012, University of Michigan Ford School of Public Policy
M.A.	2012, University of Michigan, Applied Economics
B.A.	2005, Macalester College, Political Science (cum laude)

Honors and Awards

Meijer Family Fellow, University of Michigan, 2010-2012

DeWitt Wallace Distinguished Scholar, 2001-2005

Present Position

Researcher, American Institutes for Research (AIR) (2013–Present)
Contributes to evaluation projects at all levels, from formation to completion. Assists in preparing proposals for evaluation work, develops protocols for quantitative analysis, and coordinates data collection procedures. Has extensive experience in coordinating, collecting and analyzing quantitative data using various methodologies. Expertise in data analysis using Stata. Plays a significant role in analyzing data and determining project findings and outcomes.

Professional Experience

Research Analyst, Hawaii Department of Education, Evaluation of Race to the Top Programs and Processes, AIR (2012–Present)
Three-year, mixed-methods evaluation of Hawaii's Race to the Top program, a 4-year federal competitive grant that provides the state with $75 million to implement state-led systemic reforms aimed at improving learning for all students. Conducts and helps design quantitative analytic tasks for major reports and presentations, 60 school-level implementation reports, manages survey data, contributes to design of analysis products such as reports and briefs.

Research Analyst, Indiana Diagnostic Assessment Study, Indiana Department of Education and Institute for Education Sciences (2012–Present)
Contribute to data analysis, data management and the development of analytic approaches. This randomized controlled trial seeks to measure the impact of interim assessments on teacher instruction and student achievement, helping the Indiana Department of Education to evaluate and improve a statewide initiative and contributing to general understanding of interim assessment and differentiated instruction. The study follows two cohorts of students in approximately 50 schools, with treatment schools receiving interim assessment systems immediately and control schools receiving the systems the following school year. Multiple data sources are used, including assessment data, server logs, teacher checklists documenting instructional practices, teacher surveys, and teacher interviews.

Analyst, Analysis of Repeal of Michigan's Personal Property Tax: Economic and Revenue Effects, Anderson Economic Group (AEG) (2011)
Collect and analyze Michigan tax revenue data to evaluate the fiscal and economic impact of a proposal before the Michigan State Senate to repeal the state's personal property tax. Contribute to study design employing historical and geographical comparison of alternative tax policies, conduct data analysis and draft white paper of findings in collaboration with AEG staff.

Graduate Student Instructor, Ford School of Public Policy, University of Michigan (2011–2012)
Plan and conduct weekly lectures in two-semester Microeconomics sequence for Ford School Master of Public Policy students. Develop lecture materials and hold office hours and small group lessons. As teaching apprentice in Quantitative Methods for Program Evaluation, lead weekly instruction session on statistical methods for graduate students in public policy, education and social work.

Research Associate, Survey of Barriers to Supportive Housing Development, Supportive Housing Network of New York (2009–2010)
Collaborate with policy team to develop survey of 54 housing development organizations to measure severity and frequency with which New York State and New York City building regulations impede construction of new supportive housing units. Contribute to data collection efforts, manage processing and analysis of survey data and draft internal report of findings for use in outreach to policymakers. Results from the survey prompted New York City officials to substantially revise housing development regulatory procedure with regard to supportive housing construction.

Employment History

2013–Present	Researcher, American Institutes for Research
2012	Research Associate Intern, American Institutes for Research
2011	Analyst Intern, Anderson Economic Group
2011–2012	Graduate Student Instructor, University of Michigan
2008–2010	Research Associate, Supportive Housing Network of New York
2007	Instructor, Walker-West Music Academy
2005–2006	Legislative Researcher, Minnesota Senate

Publications

Rosaen, A.L., Horwitz, J., Chojnacki, G.J. (2011). *The Michigan Personal Property Tax: Effects of Repeal on Michigan's Economy and Tax Revenues*. East Lansing, MI: Anderson Economic Group, LLC.

APPENDIX D

Organizational Management Plan

***DREAM* Project Milestone Activities**

Sem 1 2014	Awards for the PDAE grant are announced
	Community art partners, museum and higher education partners meet to explore available resource that will support the project.
	Project direct sets up budget and contracts for DREAM
	DREAM team is organized and sets scheduled meetings
	Recruit interested K-12 teachers from eligible schools for the project
	AIR will random assign the teachers into tow cohorts of 35 teachers each
	Notify participating teachers and their principals that they will be part of *DREAM* project
	Prepare *DREAM* project launching event for the 70 participating teachers and the community partners
	Hold the orientation event
	Submit *DREAM* project evaluation plan for approval to MPS Division of Research and Evaluation
	Review surveys and collection systems for evaluation of project
	Staff Development on research, arts integration and student created museum process for local artists
Sem 2 2015	Begin design of project *DREAM* space within portal for resources and documentation
	DREAM team meets to review project progress
	Schedule dates for summer professional development and secure locations
	Communicate the summer schedule to the Cohort 1 teacher participants
	Purchase supplies and technology to be used in the professional development
	Prepare a project orientation for the Cohort 1 teachers

	Secure signed contracts from each teacher participant in Cohort 1 to document their understanding of the project goals and expectations
	Staff Development on research, arts integration and student created museum process for local artists
	Needs assessments for arts integration administered for each participating school and teacher.
Summer 2015	Implement summer PD for Cohort 1
	Teacher participants take pre survey to measure arts content knowledge
	Teachers in Cohort 1 visit local museums as part of PD
	Cohort 1 designs museum project plans
	Museum project plans are reviewed by project director, coordinator and professional development coordinator
	Feedback is provided to each teacher on their museum plan, assessment plan and timeline by the projector coordinator, project professional development coordinator and project director
	DREAM team meets to review project progress
	Staff Development on research, arts integration and student created museum process for local artists
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Post resources and sample museum plans to *DREAM* project site
	Project director compiles data and reviews project for DOE report
Sem 1 2015	Meet with participating school principals and support teachers to increase school level supports
	Teachers begin to implement museum projects
	DREAM team meets to review project progress
	Staff Development on research, arts integration and student created museum process for local artists

	Provide Monthly cohort meetings to support teachers' implementation
	Classrooms begin to explore local museums
	Students select areas to research related to their museum topic
	Teachers meet in school teams at their schools
	Job embedded coaching is provided by project professional development coordinator and director
	Supplies and materials are ordered for arts integration activities at schools
	Secure signed contracts from each teacher participant in Cohort 2 to document their understanding of the project goals and expectations
	Post resources and sample museum plans to *DREAM* project site
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
Sem 2 2016	Monthly cohort meetings continue
	Students are involved in deep research for their museum topic *DREAM* team meets to review project progress
	Calendars for the museum openings at each school are set
	Plan event to link cohort 1 with cohort 2
	Staff Development on research, arts integration and student created museum process for local artists
	Schedule dates for summer professional development and secure locations
	Communicate the summer schedule to the Cohort 1 & 2 teacher participants
	Job embedded coaching is provided by project professional development coordinator and director
	AIR makes data request to analyze student MAP data
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events

	Cohort 1 museum openings take place
	Host event to build collaboration between Cohort 1 and Cohort 2
	Post resources and sample museum plans to *DREAM* project site
Summer 2016	Implement initial summer PD for Cohort 2
	Implement review of museum projects with Cohort 1
	Provide summer PD for Cohort 2 focused on virtual museums
	Cohort 1 and Cohort 2 design museum plans
	Staff Development on research, arts integration and student created museum process for local artists
	Museum plans are reviewed by project director, coordinator and professional development coordinator
	Feedback is provided to each teacher on their museum plan, assessment plan and timeline by the projector coordinator, project professional development coordinator and project director
	DREAM team meets to review project progress
	Post resources and sample museum plans to *DREAM* project site
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Project director compiles data and reviews project for DOE report
Sem 1 2016	Meet with participating school principals and support teachers to increase school level supports
	Teachers in Cohort 1 & 2 begin to implement museum projects
	Provide Monthly cohort meetings to support cohort teachers' implementation
	Staff Development on research, arts integration and student created museum process for local artists
	DREAM team meets to review project progress

	Classrooms begin to explore local museums
	Students select areas to research related to their museum topic
	Teachers meet in school teams at their schools
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Job embedded coaching is provided by project professional development coordinator and director
	Post resources and sample museum plans to *DREAM* project site
	Supplies and materials are ordered for arts integration activities at schools
	Cohort 2 teachers receive support to create virtual museum spaces
Sem 2 2017	Monthly cohort meetings continue
	Students are involved in deep research for their museum topic
	DREAM team meets to review project progress
	Calendars for the museum openings at each school are set
	Plan event to showcase museums of Cohort 1 & Cohort 2
	Job embedded coaching is provided by project professional development coordinator and director
	Schedule dates for summer professional development and secure locations
	Communicate the summer schedule to the Cohort 2 teacher participants
	Staff Development on research, arts integration and student created museum process for local artists
	Cohort 1 & 2 museum openings take place
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Post resources and sample museum plans to *DREAM* project site
	AIR makes data request to analyze student MAP data

Summer 2017	Implement review of museums projects for Cohort 2
	Provide summer PD for Cohort 2 focused on virtual museums
	Cohort 2 design museum projects
	Museum plans are reviewed by project director, coordinator and professional development coordinator
	Feedback is provided to each teacher on their museum plan, assessment plan and timeline by the projector coordinator, project professional development coordinator and project director
	DREAM team meets to review project progress
	Staff Development on research, arts integration and student created museum process for local artists
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Post resources and sample museum plans to *DREAM* project site
	Project director compiles data and reviews project for DOE report
Sem 1 2017	Meet with participating school principals and support teachers to increase school level supports
	Teachers in Cohort2 begin to implement museum projects
	Provide Monthly cohort meetings to support cohort teachers'
	Classrooms begin to explore local museums
	Staff Development on research, arts integration and student created museum process for local artists
	Students select areas to research related to their museum topic
	Teachers meet in school teams at their schools
	Job embedded coaching is provided by project professional development coordinator and director
	Supplies and materials are ordered for arts integration activities at schools

	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Post resources and sample museum plans to *DREAM* project site
	Cohort 2 teachers receive support to create virtual museum spaces
Sem 2 2018	Monthly cohort meetings continue
	Students are involved in deep research for their museum topic
	Calendars for the museum openings at each school are set
	Staff Development on research, arts integration and student created museum process for local artists
	Plan event to showcase museums of Cohort 2
	Job embedded coaching is provided by project professional development coordinator and director
	AIR makes data request to analyze student MAP data
	Cohort 2 museum openings occur
	Select museums projects are featured at Arts @ Large gallery for the Milwaukee Gallery night and day events
	Post resources and sample museum plans to *DREAM* project site
	Project director completes final reports for the DOE

APPENDIX E

Evaluation Technical Methodology

Appendix E. Technical Methodology

This appendix outlines the analytic approaches that will be used for the teacher assessment, teacher survey, and student achievement data.

Knowledge Assessment and Survey Data

AIR will perform psychometric analyses, examining the validity and reliability of the teacher knowledge assessment and student and teacher surveys by employing Rasch measurement models (Andrich, 1978). Rasch models are probabilistic models that allow one to calculate a single scale score, or a summary of data, obtained from the teacher assessment or conceptually related groups of survey items. The general rating scale model can be written in the following format (Linacre, 2005):

$$\pi_{nix} = \frac{\exp \sum_{j=0}^{x} (\beta_n - (\delta_i + \tau_j))}{\sum_{k=0}^{m} \exp \sum_{j=0}^{k} (\beta_n - (\delta_i + \tau_j))}$$

The above equation describes the probability that a respondent n, with ability β_n on the underlying construct (or assessment), responds with a rating of x to item i of difficulty δ_i (where the response scale is ordered from 0 to m). The τ_j represent the rating scale thresholds, or transition points, between categories. The model is similar for dichotomous items, such as those from the teacher knowledge assessment, with $\tau_j = 0$ and $m = 1$.

Quasi-Experimental Matching

Propensity score matching will be used to create a quasi-experimental comparison group for Cohort 2. This approach will allow identification of MPS teachers who are similar to Cohort 2 teachers on a variety of observable characteristics, but who are not participating in DREAM.[1] In propensity score modeling, the outcome of interest is treatment status (1 for teachers who have participated in DREAM, 0 for teachers who have not). To account for this binary outcome, logistic regression is used to model the logit (or log-odds) of teachers' treatment status. The propensity score will be formulated as follows:

$$\text{logit}(D_{ij}) = \alpha + X'_{ij}\beta_1 + Z'_j\beta_2$$

where D_{ij} indicates the treatment status for teacher i in school j (D_{ij} = 1 for a teacher who participated in DREAM, D_{ij}= 0 for a teacher who did not), the logit of which is a linear function of a vector of teacher characteristics (e.g., gender, race/ethnicity, and classroom average previous performance), X'_{ij}, with a corresponding coefficient vector β_1; school characteristics (e.g., percentage male, percentage minority, percentage English language learners [ELLs], and previous performance), Z'_j, with a corresponding coefficient vector β_2.

[1] Although randomization will occur at the team rather than the teacher level, selection into DREAM will take place at the teacher level. Therefore, it is the teacher selection process that should be accounted for through the matching approach. However, outcomes analysis will use multilevel modeling to account for the nesting of teachers within teams.

We will match only Cohort 2 teachers to comparison teachers who teach the same grade(s) and subject(s). Within these groups, propensity score matching will be used to find the comparison teacher who is most similar to each treatment teacher. After a propensity score is calculated for each teacher (the predicted score for each teacher using the model described previously), a nearest neighbor caliper matching algorithm will be employed to match each Cohort 2 teacher to a similar nonparticipating teacher based on the propensity score. After matching, the research team will examine balance of the Cohort 2 and matched comparison teachers on all observable characteristics and will adjust the propensity score model if imbalance remains.

Impact Estimation

Impacts will be estimated through HLMs, comparing the outcomes of treatment and control students. For student outcomes, these regressions will take the form of the following equation:

$$Y_{ijk} = \beta_0 + \beta_1 X_{ijk} + \beta_2 Z_{jk} + \beta_3 W_k + TrtD_k + u_k + v_{jk} + \varepsilon_{ijk}$$

Here, Y_{ijk} is the outcome of student *i* of teacher *j* in team *k* (e.g., the student's MAP score); β_0 is a constant term; X_{ijk} is a set of student characteristics for student *i* (e.g., pretest, gender, socioeconomic status, special education status, and ELL status); β_1 is a set of coefficients showing the relationships between those student characteristics and the outcome; Z_{jk} is a set of teacher characteristics for teacher *j* in team *k* (e.g., content pretest scores, survey pretest measures, years of experience); β_2 is a set of coefficients showing the relationships between those teacher characteristics and the outcome; W_k is a set of team characteristics for team *k* (e.g., average

content or survey pretest measures); β_3 is a set of coefficients showing the relationships between those team characteristics and the outcome; D_k is an indicator for whether team j is a treatment or control team; Trt is the program's impact on the outcome; u_k is a team-level random error term; v_{jk} is a teacher-level random error term; and ε_{ijk} is a student-level random error term. The coefficient of interest is Trt, which represents the conditional difference between treatment and control students and therefore the impact of the program. Test scores will be standardized by grade to allow for pooling of student scores across grades. Regressions will be HLMs to account for the nesting of students within teams (represented by v_{jk}) nested within teachers (represented by u_k). Analyses of teacher knowledge assessment and survey measures will be similar but will omit the student-level terms (X_{ijk} and ε_{ijk}).

APPENDIX F

Evaluation Timeline

Appendix F. *DREAM* Evaluation Timeline

Table F.1. *DREAM* Evaluation Timeline, 2014–2015

Milestone	2014				2015											
	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Program Implementation																
Cohort Randomization								X								
Cohort 1 Summer PD/Ongoing Support										X	X	X	X	X	X	X
Cohort 2 Summer PD/Ongoing Support																
Knowledge Assessment																
Cohort 1 Knowledge Assessment										X				X		
Cohort 2 Knowledge Assessment																
QE Group Knowledge Assessment																
Museum Rubric																
Cohort 1 Rubric Ratings																
Cohort 2 Rubric Ratings																
Teacher Survey																
Survey Instrument Design																
Cohort 1 Teacher Survey																
Cohort 2 Teacher Survey																
QE Group Teacher Survey																
Student Survey																
Survey Instrument Design											X	X				
Cohort 1 Student Survey													X			
Cohort 2 Student Survey													X			
Impact Analyses																
Cohort 1 Impact Analyses																
Cohort 2 Impact Analyses																
Reporting																
Annual Report																

Table F.2. DREAM Evaluation Timeline, 2016–2017

Milestone	2016												2017											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Program Implementation																								
Cohort Randomization																								
Cohort 1 Summer PD/Ongoing Support	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
Cohort 2 Summer PD/Ongoing Support						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knowledge Assessment																								
Cohort 1 Knowledge Assessment																								
Cohort 2 Knowledge Assessment						X				X														
QE Group Knowledge Assessment						X				X														
Museum Rubric																								
Cohort 1 Rubric Ratings				X	X											X	X							
Cohort 2 Rubric Ratings																X	X							
Teacher Survey																								
Survey Instrument Design			X	X																				
Cohort 1 Teacher Survey					X												X							
Cohort 2 Teacher Survey					X												X							
QE Group Teacher Survey																	X							
Student Survey																								
Survey Instrument Design																								
Cohort 1 Student Survey					X				X								X							
Cohort 2 Student Survey					X				X								X							
Impact Analyses																								
Cohort 1 Impact Analyses						X	X	X										X	X	X				
Cohort 2 Impact Analyses																		X	X	X				
Reporting																								
Annual Report								X												X				

Table F.3. DREAM Evaluation Timeline, 2018

Milestone	2018							
	J	F	M	A	M	J	J	A
Program Implementation								
Cohort Randomization								
Cohort 1 Summer PD/Ongoing Support								
Cohort 2 Summer PD/Ongoing Support	X	X	X	X	X			
Knowledge Assessment								
Cohort 1 Knowledge Assessment								
Cohort 2 Knowledge Assessment								
QE Group Knowledge Assessment								
Museum Rubric								
Cohort 1 Rubric Ratings								
Cohort 2 Rubric Ratings				X	X			
Teacher Survey								
Survey Instrument Design								
Cohort 1 Teacher Survey								
Cohort 2 Teacher Survey					X			
QE Group Teacher Survey					X			
Student Survey								
Survey Instrument Design								
Cohort 1 Student Survey								
Cohort 2 Student Survey								
Impact Analyses								
Cohort 1 Impact Analyses								
Cohort 2 Impact Analyses						X	X	X
Reporting								
Annual Report								X

APPENDIX G

Logic Model

PDAE *DREAM* Logic Model

Program Theory of Change: If teachers are provided targeted, evidence-based professional development using technology focused on arts integration, THEN teachers will show an increase knowledge in the area of arts integration and their students will demonstrate increased academic gains.

Process Theory: Teachers receive sustained intensive professional development.

Impact Theory: Students of the participating teachers will show an increase in academic achievement.

Inputs	Activities	Outputs	Short-term Outcomes	Intermediate Outcomes	Long-term Outcome
• Funding • Ongoing Professional development with job embedded coaching • Time • Staff • Equipment • Materials • Curriculum • Community Partners • Artists • Transportation • Facilities • Supplies	**Recruit interested teachers and assign the teachers randomly** Teacher participants will be recruited through outreach, including district website, professional development department announcements, informational sessions to share the grant project, principal recommendations and communications in the electronic Thursday Update that comes from the superintendent's office. Evaluation will be provided by American Institute of Research (AIR) and after teachers are recruited AIR will randomly assign the teacher school teams to one of the cohorts. The program's intensive professional development approach includes focused arts integration professional development over the summer with a total of 35 hours in the first year ,8 monthly 2.5 hour support sessions provided over the course of the following school year providing an additional 20 hours of professional development, individual job embedded coaching to provide specific support to each teacher 2-3 sessions per year. **Implement museum projects at schools to improve students'**	**<u>Number of participants:</u>** Year 1: 35 teachers to receive intensive art integration professional development 35 hours focused on Visual Thinking Strategies 10 hours focused on student created museums - Summer 2015 Year 2: 35 teachers from Cohort 1 to receive additional intensive professional development totaling 35 hours - Summer 2016 35 teachers in Cohort 2 to receive 45 hours of initial professional development **<u>Number of students served:</u>** Year 1 35 teachers x 30 -35 students = 1,050 - 1,225 students Year 2	As compared to the non-participating comparison group, teacher participants will: • Increase participation in district provided art integration professional development; • Increase awareness and knowledge about arts integration; • Increase planning and curriculum design of art integration, student created museum projects; • Increase awareness and knowledge of the use of technology in the classroom • Increase awareness and knowledge of community resources to support student created museums. • Increase knowledge of how to successfully partner with local resources including museums, artists and content experts	As compared to the non-participating comparison group, teacher participants will: • Increase the use of project-based and inquiry based learning strategies; • Increase teachers' successful implementation and completion of student created museums process; • Increase teachers' proficiency in the use of technology to deliver instruction; • Increase number of positive relationships with others, including school staff, teachers across the cohort and community members; • Increase parent and community participation in students' classroom activities; • Increase feedback to teachers on their teaching through job-embedded coaching; • Increase the number of teachers and their student participants who participate in arts integrated school-created museum projects. • Increase documentation of student work through technology	MPS teachers will increase skills and knowledge related to arts integration, student created museum process and their students will improve academic achievement in the areas of mathematics and reading as measured by the district universal screener.

	classroom behavior and social skills and academic achievement. Based on the plans that participating teachers created over the summer, they will each implement a student created museum in their classroom during the following school year. Teachers will work individually as well as collaboratively in their school teams to provide support to each other. Technology will be used to support research of topics and sharing students work, as well as teacher work across the district and beyond. Student work samples will be reviewed at monthly cohort meetings to improve students' work. **Collaborate with artists** Each teacher will receive arts integration support through local artists in the form of artist in residencies that are connected to their school museum project. **Provide ongoing support and enrichment to improve teaching performance**. In Year 2 the first cohort of 35 teachers will receive an additional 20 hours of professional development over the summer focused on evaluation of their initial museum project and to design their Year 2 museum project. Teachers will receive an individual review with feedback of their museum plan, assessment plan for museum project and proposed timeline using a rubric. Year 2 cohort will receive their Phase 2 PD in the Summer 2017 **Collaborate across the participating teacher cohorts and with the broader community** Teachers will work in teams at school sites to increase collaboration Monthly cohort meetings will provide collaboration across the cohorts.	70 teachers x 30- 35 students= 2,100 – 2,450 students Year 3 70 teachers x 30- 35 students= 2,100 – 2,450 students Year 4 35 teachers x 30 -35 students = 1,050 - 1,225 students Total students served over 4 year project = 6,300 – 7350 students **<u>Number of museum exhibits:</u>** Year : 1 exhibit per 35 teachers = 35 exhibits Year 2: : 1 exhibit per 70 teachers = 70 exhibits Year 3: 1 exhibit per 70 teachers = 70 exhibits Year 4: 1 exhibit per 35 teachers = 35 museums Total number of museum exhibits over the four year program= 210 museum exhibits		As compared to the non-participating comparison group, student participants will: • Increase engagement in school; • Increase participation in the arts; • Increase collaboration between teachers in the cohort and their students; • Increase awareness and knowledge of positive social skills; • Increase skills in self and peer assessment; • Increase knowledge and skill in using technology as a part of the learning experience.	As compared to the non-participating comparison group, student participants will: • Increase students' research skills; • Increase students' skills in using technology; • Increase artistic skills; • Increase students' social skills and time spent working effectively in groups with peers; • Increase knowledge of what quality work is and ability to create quality work; • Increase independence and learner efficacy.	

	Through the TLC and Moodle, teachers will share resources, post museum plans, arts integration plans and communicate in an electronic environment. **Provide rigorous and relevant instruction using technology to better engage students in learning and provide the skills needed to complete a student created museum** The professional development coordinator and the project director will review each completed school museum project. A rubric to assess quality of work and fidelity of implementation will be used and feedback will be provided to each teacher to improve future efforts. **Implement school museum projects that culminate in a public opening** Each participating teacher will implement at least one school museum project per school year. **Showcase the students' work and project impact** Select student created museums will be featured for the Milwaukee Gallery Night events (Fall 2016 – Summer 2018) Additional exhibition opportunities in Milwaukee and Wisconsin will be pursued. Teacher participants and project director and professional development coordinator will submit proposals to present at education conferences, art conferences and museum conferences. Project director and professional development coordinator will write articles to publish to widely share and disseminate results of the project.					
	↓	↓		↑	↑	

What conditions, internal and external, might prevent your target population from achieving outcomes?
Internal Factors: Coordination between school, community partners and district staff; Access to technology within individual school sites; Communication and accountability for responsibilities; Teacher follow through in implementing their museum project with fidelity; Issues related to academic performance.
External Factors: Student interest /involvement; Community buy-in; Issues related to academic performance; and teacher turn-over or retirement.

APPENDIX H

References

Andrich, D. (1978). A rating formulation for ordered response categories. *Psychometrika, 43*(4), 561–573.

Aprill, A. Arts Education Partnership. (2004). *The arts and education: New opportunities for research.* Washington, DC: Author.

Aprill, A., Burnaford, G., & Weiss, C. (2001). Renaissance in the Classroom: Arts Integration and Meaningful Learning. Mahweh, NJ: Lawrence Erlbaum Associates, Publishers

Arts Education Research Initiative. (2009). *K–12 arts education, every student, every school, every year: a report on arts education in Washington.* Olympia, WA: Washington State Arts Commission

Burnaford, G. *et al.* (2007). *Arts integration frameworks, research & practice: A literature review.* Washington, DC: Arts Education Partnership. Retrieved from http://www.aep-arts.org/files/publications/arts_integration_book_final.pdf

Catterall J. S., Dumais, S.A. & Hampden-Thompson, G. (2012). *The Arts and Achievement in At-Risk Youth: Findings from Four Longitudinal Studies,* Research Report #55, National Endowment of Arts, Washington D.C.

Catterall, J.S. (2009). *Doing well and doing good by doing art: The effects of education in the visual and performing arts on the achievements and values of young adults*. http://tiny.cc/Oprbg

Cooper-Solomon, D. (2005). *The arts are essential*. School Arts, 94(6), 29.

Darling-Hammond, L. & Richardson, N. (2009). *Teacher learning: what matters?*. Educational Leadership, 66(5),46-53.

DeMoss, K., & Morris, T. (2002). *How arts integration supports student learning: Students shed light on the connections.* Chicago, IL: Chicago Arts Partnerships in Education (CAPE)

Dong, N. and Maynard, R. A. (2013). PowerUp!: A tool for calculating minimum detectable effect sizes and sample size requirements for experimental and quasi-experimental designs. *Journal of Research on Educational Effectiveness, 6*(1), 24–67.

Dwyer, M. Christine, 2011. *Reinvesting in Arts Education: Winning America's Future through Creative Schools,* Washington D.C.: President's Committee on the Arts and Humanities.

Driver, C.E. (2010). Can the arts become part of the 'basics' of our public education? In *Thought leader forum on arts and education: Assuring equitable arts learning in urban K-12 public schools*. Report of conference hosted by Grantmakers in the Arts

and Grantmakers for Education. Seattle, WA: Grantmakers in the Arts

Hanover Research Report. (2014). *Elementary Visual Arts Integration*. Washington, DC: Author.

Hedges, L. V., & Hedberg, E. C. (2007). Intraclass correlation values for planning group-randomized trials in education. *Educational Evaluation and Policy Analysis, 29*, 60–87.

Jacob, R., Zhu, P., & Bloom, H. (2009). *New Empirical Evidence for the Design of Group Randomized Trials in Education.* MDRC Working Papers on Research Methodology. Available at http://www.mdrc.org/publication/new-empirical-evidence-design-group-randomized-trials-education (accessed April 28, 2014).

Ingram, D., & Reidel, E., (2003). *Arts for Academic Achievement: What does art integration do for students?* University of Minnesota: Center for Applied Research and Educational Improvement, College of Education and Human Development.

Israel, D. (2009). *Staying in school: Arts education and New York City high school graduation rates.* New York City: The Center for Arts Education

Linacre, J. M. (2005). *WINSTEPS: Rasch measurement computer program* [Computer software]. Chicago: Winsteps.com.

Pianta, R.C., & Belsky, J. (2007) *Opportunities to learn in America's elementary classrooms*. Science ,31(5820), p.1795-1796.

Starnes, B.A., & Carone, A. (with Paris, C.) . (2002). (Rev. ed.). *From thinking to doing: The Foxfire core practices*. Mountain City, GA: Foxfire Fund.

What Works Clearinghouse. (n.d.). *What Works Clearinghouse: Procedures and Standards Handbook, Version 3.0.* Available at http://ies.ed.gov/ncee/wwc/documentsum.aspx?sid=19 (accessed April 28, 2014).

Wilhelm, J. D. (2002). "Reading is Seeing: Using Response to Improve the Literacy Reading of Reluctant Readers". In R. Deasy (Ed.), *Critical Links: Learning in the Arts and Student Achievement and Social Development*, Washington, DC: AEP.

Wright, B. D., & Masters, G. N. (1982). *Rating scale analysis: Rasch measurement.* Chicago: MESA Press.

Yin, Y., Shavelson, R., Ayala, C., Ruiz-Primo, M.A., Brandon, P., & Furtak, E. (2008). On the impact of formative assessment on student motivation, achievement, and conceptual change. *Applied Measurement in Education, 21*(4), 335-359.

Budget Narrative File(s)

*** Mandatory Budget Narrative Filename:** Milwaukee Public Schools Budget Narrative.pdf

Add Mandatory Budget Narrative | Delete Mandatory Budget Narrative | View Mandatory Budget Narrative

To add more Budget Narrative attachments, please use the attachment buttons below.

Add Optional Budget Narrative | Delete Optional Budget Narrative | View Optional Budget Narrative

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

Federal Funds Requested					
		Year 1	**Year 2**	**Year 3**	
Personnel					
	Professional development will be provided to teachers outside the school day, in the summer and on weekends. Budgeted for after school is $26.33/hr. and budgeted for summ Participants in years 1 and 4 - 35 teachers; years 2 and 3 -70 teachers.				
	Professional development @ $26.33/hr. Year 1 - 20 hours of professional development for 35 teachers (cohort 1); year 2 and 3 - 20 hours of professional development for 70 teachers (cohort 1 and 2); year 4 - 20 hours for professional development for 35 teachers (cohort 2).	$ 18,431	$ 36,862	$ 36,862	$
	Professional development @ $40.60/hr. Year 1 - 35 hours of professional development for 35 teachers (cohort 1); year 2 - 35 hours of professional development for 35 teachers (cohort 2) and 20 hours for 35 teachers (cohort 1); year 3 - 20 hours of professional development for 35 teachers (cohort 2).	$ 49,735	$ 78,155	$ 28,420	
	Substitute Teachers. Substitute teachers will be paid to allow teacher to participate in non-summer professional development and planning activities. Daily substitute pay rate is substitutes, year two and three: 15 substitutes, and year four: 10 substitutes.				
	Substitute teachers. Budgeted is $200/day for years 1 and 4 - 10 days; years 2 and 3 - 15 days.	$ 2,000	$ 3,000	$ 3,000	$
	Sub-total personnel	$ 70,166	$ 118,017	$ 68,282	$
Fringe Benefits					
	MPS' current average fringe benefit rate is 57.9%. Fringes covered include social security, insurances, and pensions.				
	Fringe Benefits each year: 57.9%	$ 40,626	$ 68,332	$ 39,535	$
Travel					
	Conference attendance and dissemination opportunities will be provided for project teachers and staff including workshops coordinated by the Wisconsin Art and Music Educat each year to include transportation, hotel accommodations, and meals.				
	Conference participation (2 conferences per year)	$ 2,000	$ 2,000	$ 2,000	$
	Sub-total travel	$ 2,000	$ 2,000	$ 2,000	$

Milwaukee Public Schools

Federal Funds Requested (cont'd)					
		Year 1	Year 2	Year 3	
Supplies					
	Professional development books will be purchased for participants. The book, Learning on Display Student-Created Museums That Build Understanding, will be used as an ac implementation of *DREAM* . Books will be purchased to support professional development for 70 teachers at $25.70 per book.				
	Books for professional development	$ 1,799			
	Non Capital Equipment -- student presentation technology, including projectors, digital cameras and laptop computers, will be determined based on the needs of the project. Th information and to communicate through virtual museums. The virtual museums will provide for the development and dissemination of grant products and results through free di teacher for 70 teachers.				
	Non-Capital Equipment. Budgeted is $400 per teacher for 70 teachers.	$ 28,000			
	Art supplies will be purchased by each site to meet the individual needs of the school. Budgeted is $500 per teacher per year. Participants in years 1 and 4 - 35 teachers; years				
	Art supplies	$ 14,000	$ 28,000	$ 28,000	$
	Printing: Poster/invitations for art/music, performances and museum text panels. Budgeted is $200 per teacher per year. Participants in years 1 and 4 - 35 teachers; years 2 and				
	Printing $200 per teacher per year. Participants in years 1 and 4 - 35 teachers; years 2 and 3 - 70 teachers.	$ 7,000	$ 14,000	$ 14,000	$
	Workshop materials and supplies for professional development				
	Supplies for workshops. Budgeted each year is $3,000	$ 3,000	$ 3,000	$ 3,000	$
	Sub-total supplies	$ 53,799	$ 45,000	$ 45,000	$

Milwaukee Public Schools

Federal Funds Requested (cont'd)					
		Year 1	**Year 2**	**Year 3**	
Contractual					
	Project coordination will occur by a collaborative *DREAM* team through a contract with Arts @ Large. The *DREAM* team will include a 1.0 FTE equivalent that includes three p **coordinator,** will oversee day to day activities, collaborate with partners, attend required annual U.S. Department of Education Project Directors meeting and ensure that school goals. Also supporting project implementation and coordination will be a school site coordinator and a professional development coordinator. The primary responsibilities of thi directing staff, organizing professional development schedules, reviewing project budget and spending, collecting data for assessment, ordering needed materials and supplies to *DREAM* team will work collaboratively to ensure strategic implementation. The *DREAM* team will report directly to the project director, who is the MPS arts curriculum special *DREAM* team is **$35,000.**				
	1.0 FTE DREAM team coordination and management	$ 35,000	$ 35,000	$ 35,000	$
	Through an RFP process MPS identified **American Institutes for Research (AIR)** to conduct project evaluation. MPS will contract with AIR to provide formative and summa will work closely with the project director and coordinator, including attending required U.S. Department of Education meetings, to focus on implementation of the project and i delivered. AIR will also serve on the DREAM team.				
	AIR. Budgeted is $35,000 per year.	$ 35,000	$ 35,000	$ 35,000	$
	MPS will contract with **local bus companies** to provide student transportation to community arts events and local museums.				
	Student transportation to community arts events. 35 buses budgeted in years 1 and 4; 70 buses budgeted in years 2 and 3.	$ 4,200	$ 8,400	$ 8,400	$
	Arts @ Large was identified through an RFP process to serve as a broker to provide Visual Thinking Strategies training and the artists in residency programs. Budgeted each p provide the VTS training and to contract with local arts organizations such as African American Children's Theatre, Cardinal Stritch University, Dancecircus, Dr. Bob Kann- Li Museum, Harley Davidson Museum, Jewish Museum Milwaukee, Milwaukee Art Museum, Milwaukee Public Museum, Milwaukee Institute of Art and Design, New Moon Pr Arts Alliance for Educators, and Woodland Pattern Book Center to work with teacher participants in their museum displays. The school district requires that all contracted servic local artists/ arts groups do not have the required level of coverage and would not be eligible to provide services on their own. To identify artists the application process is comple take place; quality control is through criminal background checks, reference checks, input from the external evaluator and project director, project coordinator and schools observ review. Individual schools and the artist complete an online evaluation feedback form for continual improvement and quality control purposes.				
	Arts @ Large contract. Budgeted is $40,000 per year.	$ 40,000	$ 40,000	$ 40,000	$
	Through an RFP process Linda D'Acquisto of **Kid Curators,** LLC was identified to provide professional development around student created museums. She will provide intensi support and professional development throughout the school year.				
	Contract Kid Curators. Budgeted is $40,000 per year.	$ 40,000	$ 40,000	$ 40,000	$
	Sub-total contractual	$ 154,200	$ 158,400	$ 158,400	$

Milwaukee Public Schools

Federal Funds Requested (cont'd)				
		Year 1	Year 2	Year 3
Other				
	Admission fees for students: Budgeted each year is $300 per teacher to allow participating teachers and students to attend museums and community art events. Participants in y 3 - 70 teachers.			
	Admission fees - participating teachers * $300 per year per teacher	$ 10,500	$ 21,000	$ 21,000
	Meeting accommodations for professional development in-service activities.			
	Meeting accommodations. Budgeted is $1,000 annually.	$ 1,000	$ 1,000	$ 1,000
	Sub-total other	$ 11,500	$ 22,000	$ 22,000
Total Direct Costs		$ 332,291	$ 413,749	$ 335,217
Indirect				
	The restricted indirect cost rate is 5.17% and does not include contracts. The most recent indirect cost rate agreement covers the period from July 1, 2013 - June 30, 2014. The le is dated December 23, 2013 and the rate will be in effect until a new letter is issued in December 2014. Contracts are not included in the calculation for indirect costs. Document rate is included in the Other Attachments Form.			
	Indirect 5.17%	$ 9,207	$ 13,202	$ 9,141
Total Request				
Grand Total		**$ 341,498**	**$ 426,951**	**$ 344,358**

Milwaukee Public Schools

U.S. DEPARTMENT OF EDUCATION
BUDGET INFORMATION
NON-CONSTRUCTION PROGRAMS

OMB Number: 1894-0008
Expiration Date: 04/30/2014

Name of Institution/Organization

Milwaukee Public Schools

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

SECTION A - BUDGET SUMMARY
U.S. DEPARTMENT OF EDUCATION FUNDS

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel	70,166.00	118,017.00	68,282.00	20,431.00		276,896.00
2. Fringe Benefits	40,626.00	68,332.00	39,535.00	11,830.00		160,323.00
3. Travel	2,000.00	2,000.00	2,000.00	2,000.00		8,000.00
4. Equipment						
5. Supplies	53,799.00	45,000.00	45,000.00	24,000.00		167,799.00
6. Contractual	154,200.00	158,400.00	158,400.00	154,200.00		625,200.00
7. Construction						
8. Other	11,500.00	22,000.00	22,000.00	11,500.00		67,000.00
9. Total Direct Costs (lines 1-8)	332,291.00	413,749.00	335,217.00	223,961.00		1,305,218.00
10. Indirect Costs*	9,207.00	13,202.00	9,141.00	3,607.00		35,157.00
11. Training Stipends						
12. Total Costs (lines 9-11)	341,498.00	426,951.00	344,358.00	227,568.00		1,340,375.00

Indirect Cost Information *(To Be Completed by Your Business Office):

If you are requesting reimbursement for indirect costs on line 10, please answer the following questions:

(1) Do you have an Indirect Cost Rate Agreement approved by the Federal government? ☒ Yes ☐ No

(2) If yes, please provide the following information:

Period Covered by the Indirect Cost Rate Agreement: From: 07/01/2013 To: 06/30/2014 (mm/dd/yyyy)

Approving Federal agency: ☐ ED ☒ Other (please specify): OMB/Wisconsin Department of Public Instruction

The Indirect Cost Rate is 5.17 %.

(3) For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:

☒ Is included in your approved Indirect Cost Rate Agreement? or, ☐ Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is ____ %.

Name of Institution/Organization

Milwaukee Public Schools

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

SECTION B - BUDGET SUMMARY
NON-FEDERAL FUNDS

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Project Year 5 (e)	Total (f)
1. Personnel						
2. Fringe Benefits						
3. Travel						
4. Equipment						
5. Supplies						
6. Contractual						
7. Construction						
8. Other						
9. Total Direct Costs (lines 1-8)						
10. Indirect Costs						
11. Training Stipends						
12. Total Costs (lines 9-11)						

SECTION C - BUDGET NARRATIVE (see instructions)

ED Form No. 524

Tracking Number:GRANT11649212 Funding Opportunity Number:ED-GRANTS-031814-001 Received Date:2014-05-14T16:47:04-04:00

U.S. DEPARTMENT OF EDUCATION
SUPPLEMENTAL INFORMATION
FOR THE SF-424

1. Project Director:

Prefix:	First Name:	Middle Name:	Last Name:	Suffix:
Ms.	Kimberly		Abler	

Address:

Street1: 5225 W. Vliet Street
Street2:
City: Milwaukee
County: Milwaukee
State: WI: Wisconsin
Zip Code: 53208-2627
Country: USA: UNITED STATES

Phone Number (give area code): 414-475-8051
Fax Number (give area code): 414-475-8277

Email Address:
ablerka@milwaukee.k12.wi.us

2. Novice Applicant:

Are you a novice applicant as defined in the regulations in 34 CFR 75.225 (and included in the definitions page in the attached instructions)?

☐ Yes ☐ No ☒ Not applicable to this program

3. Human Subjects Research:

a. Are any research activities involving human subjects planned at any time during the proposed project Period?

☐ Yes ☒ No

b. Are ALL the research activities proposed designated to be exempt from the regulations?

☐ Yes Provide Exemption(s) #:

☐ No Provide Assurance #, if available:

c. If applicable, please attach your "Exempt Research" or "Nonexempt Research" narrative to this form as indicated in the definitions page in the attached instructions.

Add Attachment | Delete Attachment | View Attachment