



MLDS CENTER

Maryland Longitudinal Data System

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MEMORANDUM

TO: MLDS Governing Board
FROM: Ross Goldstein
DATE: February 19, 2019
SUBJECT: External Researcher and Grant Funded Projects

Purpose

The Center received an application under the *Policies and Procedures for External Researchers and Grant Funded Projects*.

Dr. Nancy Shapiro is seeking support for a grant application to the National Science Foundation on the following topic: *Infrastructure to Expand the STEM Research Capacity of the MLDS Center*

Project Summary

This project, assembles a diverse, interdisciplinary team to design and implement innovative infrastructure solutions to fill data gaps in the MLDS, and then use the data to answer critical STEM education and workforce development research questions to inform policy.

Research Questions

1. To what degree do public school resources influence the pathways of students from education to STEM careers?
2. Do inequities in the distribution of public school resources contribute to underrepresentation of female students, black students, Hispanic students, low-income students, and other groups in STEM majors and careers?
3. Is the pipeline of STEM teachers meeting the needs of Maryland schools in a way that supports workforce development?

Data Gaps/Infrastructure

1. To address the lack of workforce data on federal and military employees and contingent and alternative workers, the project will explore the possibility of creating an infrastructure to utilize Maryland income tax data from the Maryland Office of the Comptroller. Maryland income tax is collected for all workers, including federal and military employees and contingent and alternative workers.
2. To address the lack of workforce data for out-of-state workers (particularly for Marylanders who are working in neighboring states), the project will explore opportunities to pair with surrounding states to link workforce and education records.
3. To address various gaps in the information currently received from the National Student Clearinghouse (via MSDE) the grant will explore the possibility of obtaining a National Student Clearinghouse license for the MLDS Center.
4. The grant will also explore receiving data from the NSLDS, the Praxis, and the College Board to address other gaps in postsecondary data.
5. The grant will explore the possibility of forming partnerships with licensure companies, such as Cisco, to obtain licensure information for Maryland students.

6. The grant will explore the possibility of obtaining Census data on students within the MLDS. This may occur through linkage of address data to the Census block or tract information at the district level with return of data to the MLDS (pending successful initiatives in the MD General Assembly).
7. Contingent on successful outcomes of pending legislation, grant funds would be used to partner with MSDE, DJS, and DHR to add additional data.
8. The grant will explore the best solutions for obtaining older data to increase the panel of data available to researchers to include elementary to college and into the workforce to answer critical questions raised by stakeholders.

Grant Funding

National Science Foundation Mid-scale Research Infrastructure-1 (NSF 19-537). Available funding is between \$6 and \$20 million.

Review Process

The project was favorably reviewed by Center staff and was also presented to the Research and Policy Advisory Board (RPB) at its February 7th meeting. The RPB also favorably reviewed the project proposal and recommended it's referral to the Governing Board for final approval.

Recommendation







I recommend that the Governing Board approve this External Researcher and Grant Funded Project application. The research is cross-sector and is responsive to the Governing Board's Research Agenda. Further, the project would create opportunities to address several important data gaps that have been an ongoing concern to the Governing Board. Dr. Shapiro and the assembled team have the requisite expertise and experience to conduct the planned research. Finally, the proposed research addresses an important topic that may provide actionable information for state policy makers.

Action

I request the Governing Board's review and approval of Dr. Shapiro's application for External Researcher and Grant Funded Project.

[Infrastructure to Expand the STEM Research Capacity of the MLDS Center](#)

Created: 01/30/2019 Updated: 02/04/2019

Attachments:	 7_DataRequestTemplate_NSF Infrastructure.xlsx  Blazar_NSF_Biographical Sketch.docx  FINAL MLDS External Research Procedure NSF Infrastructure Grant.docx  Henneberger_CV_January 2019.pdf  Jane-Arnold-Lincove.cv_.pdf  Shapiro CV.pdf
Researcher Applicant Name:	Angela Henneberger
Researcher Email Address:	angela.henneberger@maryland.gov
Researcher Organization:	University of Maryland School of Social Work and MLDS Center
Researcher Phone Number:	410-706-6341
Research Applicant Background and Qualifications:	See CV
Multiple Research Applicants?:	Yes
Project Title:	Infrastructure to Expand the STEM Research Capacity of the MLDS Center
Abstract or Brief Description:	<p>The MLDS Center has identified a number of data gaps that exist within the system. For this project, we have assembled a diverse, interdisciplinary team to design and implement innovative infrastructure solutions to fill these data gaps, and then use these data to answer critical STEM education and workforce development research questions to inform policy:</p> <p>To what degree do public school resources influence the pathways of students from education to STEM careers?</p> <p>Do inequities in the distribution of public school resources contribute to underrepresentation of female students, black students, Hispanic students, low-income students, and other groups in STEM majors and careers?</p> <p>Is the pipeline of STEM teachers meeting the needs of Maryland schools in a way that supports workforce development?</p>

	<p>Currently, there are a number of significant limitations within the data system that prevent researchers from fully realizing the analytic potential of the MLDS to answer such research questions. For example, there are several gaps in the workforce data (i.e., lack of data on federal employees and contractors) that limit the generalizability of results using these data. Gaps in postsecondary data prevent researchers from fully realizing the ability to link student test scores, including remedial placement scores, to student outcomes in the workforce. Additionally, researchers are limited to examining the college and career outcomes of high school students due to limitations in the student cohort academic years in the system. We know, though, that students' STEM development begins much earlier than high school (Bybee & Fuchs, 2006; DeJarnette, 2012; National Research Council, 2013; Unfried et al., 2015; Wyss, Heulskamp, & Siebert, 2012). In light of MLDS- and state stakeholder-developed research interests and gaps that currently prevent us from fully answering these questions, the overarching goal of this project is to develop and implement an innovative infrastructure to significantly expand upon the research capabilities of the MLDS. The Maryland model can serve as a prototype for other State, district, and national linked administrative data systems.</p> <p>This is a five year project, and the first year of the project will focus on planning and engagement with stakeholders around data gaps that have been identified. The second year of the project will focus on developing the protocols, agreements, and methodologies needed to fill the data gaps. The third year of the project will focus on small scale proof of concept for each data gap. The fourth and fifth years will focus on implementing the new infrastructure statewide and providing secure access to researchers.</p>
<p>Research Project Question:</p>	<p>The goal of the five year project is to develop the infrastructure to fill data gaps in the MLDS to be able to more completely and accurately answer research questions related to STEM workforce development at the end of the grant period. More specifically, this proposal is motivated by the following substantive research questions:</p> <p>To what degree do student and school resources -- beginning as early as elementary school -- influence the pathways of students from education to STEM careers?</p> <p>Do inequities in the distribution of student and school resources contribute to underrepresentation of female students, black students, Hispanic students, low-income students, and other groups in STEM majors and careers?</p> <p>Is the pipeline of STEM teachers meeting the needs of Maryland schools in a way that supports workforce development?</p>
<p>Research Agenda Questions:</p>	<p>2. Are Maryland students academically prepared to enter postsecondary institutions and complete their programs in a timely manner?,</p>

	<p>3. What percentage of Maryland high school exiters go on to enroll in Maryland postsecondary education?,</p> <p>4. What percentage of Maryland high school exiters entering college are assessed to need to take developmental courses and in what content areas?,</p> <p>5. Which financial aid programs are most effective in improving access and success (i.e., retention and graduation) for Maryland students?,</p> <p>7. How likely are students placed in developmental courses to persist in postsecondary education and transfer and/or graduate?,</p> <p>8. Are community college students able to transfer within the state to 4-year institutions successfully and without loss of credit?,</p> <p>9. What are the differences in performance, retention, and graduation, including time to degree, of students who initially matriculate at a Maryland community college and transfer to a Maryland 4-year institution versus those who initially matriculate at,</p> <p>10. What are the differences in performance, retention and graduation, including time to degree, of students beginning in dual enrollment programs, at 2-year institutions and at 4-year institutions?,</p> <p>11. What are the characteristics of 2-year institutions that are allowing students to persist most effectively and either graduate or transfer?,</p> <p>12. Which 4-year institutions are graduating students most effectively and in the timeliest fashion?,</p> <p>13. What happens to students who start at community colleges and do not go on to 4-year institutions?,</p> <p>14. What are the educational and labor market outcomes for individuals who use federal and state resources to obtain training at community colleges or other postsecondary institutions?,</p> <p>16. Are exiters of Maryland colleges successful in the workforce?,</p> <p>17. Assess STEM post-graduate student state and regional job acceptance and retention.,</p> <p>19. What are the workforce outcomes for Maryland students who earn a high school diploma (via high school graduation or GED®) but do not transition to postsecondary education or training?,</p> <p>20. What are the workforce outcomes for Maryland high school students who complete Career Technical Education coursework, who either enter the workforce directly or also obtain postsecondary education or training?,</p> <p>21. What are the workforce outcomes of Maryland high school non-completers?</p>
<p>Benefit to the State of Maryland:</p>	<p>Development of the STEM workforce requires investment in students before they reach college. This study will identify issues that may be hampering state progress in producing STEM workers in Maryland by identifying public elementary, middle, and high school factors that facilitate or hinder STEM career pathways, with attention to the most vulnerable high school populations. The findings of this study will help State policymakers identify the most appropriate policy and practice recommendations to improve the production of STEM workers in Maryland including strategies to improve the pipeline STEM teachers in a way that support workforce development.</p>

Explanation of Cross-Sector Qualities:	This research is cross-sector by incorporating data from Maryland high school students, data on college enrollments and degree, and workforce industry and wages.
Proposed Center Output:	MLDS Center products. This project is expected to result in the following MLDS Center products: Infrastructure system to house additional data Licenses for critical software needs Partnership support to add partners necessary for successful completion Secure portal to provide to local school systems to access Census data for students Upon completion of this project, the infrastructure should be sustained through ongoing funds provided by the State. The project will result in substantive research series presentation(s) and research report(s) related to the STEM pipeline in Maryland.
Estimated Timeline for the Proposed Project:	This is a five year project, and the first year of the project will focus on planning and engagement with stakeholders around data gaps that have been identified. The second year of the project will focus on developing the protocols, agreements, and methodologies needed to fill the data gaps. The third year of the project will focus on small scale proof of concept for each data gap. The fourth and fifth years will focus on implementing the new infrastructure statewide and providing secure access to researchers.
Plans for Further Development:	Further development. We plan to submit results to academic conferences (e.g., Association for Public Policy Analysis and Management; American Educational Research Association) and academic journals (e.g., Journal of Research on Educational Effectiveness; Education Evaluation and Policy Analysis).
Grant Funds:	Yes, I plan to apply for grant funds for this project.
Description of Grant Program:	Mid-scale RI-1 "Implementation" projects may have a total project cost ranging from \$6 million up to below \$20 million. Projects must directly enable advances in fundamental science, engineering or science, technology, engineering and mathematics (STEM) education research in one or more of the research domains supported by NSF. Implementation projects may support new or upgraded research infrastructure. Only Mid-scale RI-1 "Design" projects may request less than \$6 million, with a minimum request of \$600,000 and a maximum request below \$20 million as needed to prepare for a future mid-scale or larger infrastructure implementation project. (Successful award of a Mid-scale RI-1 design project does not imply NSF commitment to future implementation of that project.)
Name of Grantor:	National Science Foundation

RFP or Grant Program Information:	https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505602
Amount of Grant Funds Sought / Awarded:	\$6-20 million
Grant Application Date:	05/20/2019
Letter of Support:	Yes
Intent to Proceed Without Grant:	No

Infrastructure to Expand the STEM Research Capacity of the MLDS Center

National Science Foundation (NSF)
Mid-scale Research Infrastructure-1 (NSF 19-537)
(\$6-20 million)

Duration: Five years

Due date: May 2019; Preliminary proposal due Feb 2019

Principal Investigator (PI): Dr. Nancy Shapiro, USM
Co-PIs: Dr. Angela K. Henneberger, University of Maryland School of Social Work; Dr. David Blazar, University of Maryland College of Education; Dr. Jane Lincove, University of Maryland Baltimore County School of Public Policy;
Research Team; MLDS Center

January 25, 2019

Abstract

The MLDS Center has identified a number of data gaps that exist within the system. For this project, we have assembled a diverse, interdisciplinary team to design and implement innovative infrastructure solutions to fill these data gaps, and then use these data to answer critical STEM education and workforce development research questions to inform policy:

- To what degree do public school resources influence the pathways of students from education to STEM careers?
- Do inequities in the distribution of public school resources contribute to underrepresentation of female students, black students, Hispanic students, low-income students, and other groups in STEM majors and careers?
- Is the pipeline of STEM teachers meeting the needs of Maryland schools in a way that supports workforce development?

Currently, there are a number of significant limitations within the data system that prevent researchers from fully realizing the analytic potential of the MLDS to answer such research questions. For example, there are several gaps in the workforce data (i.e., lack of data on federal employees and contractors) that limit the generalizability of results using these data. Gaps in postsecondary data prevent researchers from fully realizing the ability to link student test scores, including remedial placement scores, to student outcomes in the workforce. Additionally, researchers are limited to examining the college and career outcomes of high school students due to limitations in the student cohort academic years in the system. We know, though, that students' STEM development begins much earlier than high school (Bybee & Fuchs, 2006; DeJarnette, 2012; National Research Council, 2013; Unfried et al., 2015; Wyss, Heulskamp, & Siebert, 2012). In light of MLDS- and state stakeholder-developed research interests and gaps that currently prevent us from fully answering these questions, **the overarching goal of this project is to develop and implement an innovative infrastructure to significantly expand upon the research capabilities of the MLDS. The Maryland model can serve as a prototype for other State, district, and national linked administrative data systems.**

This is a five year project, and the first year of the project will focus on planning and engagement with stakeholders around data gaps that have been identified. The second year of the project will focus on developing the protocols, agreements, and methodologies needed to fill the data gaps. The third year of the project will focus on small scale proof of concept for each data gap. The fourth and fifth years will focus on implementing the new infrastructure statewide and providing secure access to researchers.

Significance and Background

STEM Shortage in Maryland

STEM workforce development is a vital issue for the United States (U.S.) and for Maryland. A 2006 study reported that Maryland ranks second in the nation in professional and technical workers as a percentage of the workforce, and the state has over 220,000 workers employed in professional, scientific, and technical service industries (Towson University/Maryland Department of Business and Economic Development, 2006). The state's STEM-related industries account for millions of dollars in economic investment. But, with an aging workforce, significant shortfalls in qualified K-12 STEM teachers, and a rapidly changing economic and social environment, Maryland cannot assume that it can maintain this advantage unless and until it attends to the emerging challenges facing the state in STEM education and workforce development. Indeed, while national assessments of education quality, education level of workforce, and R&D volume place Maryland among the nation's leaders, Maryland already suffers from a shortage of highly qualified STEM workforce. We have approximately 6,000 STEM openings a year and we produce approximately 4,000 STEM graduates, one of the largest STEM workforce deficits among Maryland's competitor states (Passmore, 2008).

Maryland is a strong performer in STEM secondary, postsecondary, and workforce production; however, competing states significantly outproduce Maryland in terms of STEM graduates, STEM workforce development, and STEM-based economic development (STEM Taskforce, 2009). Strengthening Maryland's STEM secondary, postsecondary, and workforce production is critical for maintaining and enhancing Maryland's status as a leader and strengthening the State's education and workforce development. Furthermore, there is an under-representation of female, minority, and low income students in STEM fields (STEM Taskforce, 2009).

To date, research on STEM workforce development has focused extensively on the link from high school to college and then to the labor market (Le, Robbins, & Westrick, 2014; LeBeau et al., 2012; Maltese & Tai, 2011; Tai, Liu, Maltese, & Fan, 2006). However, a significant theoretical literature and some quantitative evidence indicates that STEM interest can begin prior to secondary school (Bybee & Fuchs, 2006; DeJarnette, 2012; National Research Council, 2013; Unfried et al., 2015; Wyss, Heulskamp, & Siebert, 2012). Therefore, examining the full STEM pipeline from elementary school through K-12 graduation, into college and into the workforce is critical for determining the best policies to implement in order to increase Maryland's STEM production.

MLDS Center Data Gaps

The MLDS is uniquely positioned to answer critical STEM pipeline research questions because of its ability (and mandate) to link data across K-12 education, post-secondary, and

workforce sectors. Several state stakeholders recently have expressed a desire to leverage the MLDS data in order to understand the STEM pipeline to inform policymakers across the state about how to intervene.

However, a number of data gaps have been identified by MLDS staff, significantly reducing the reliability and validity of MLDS research and reporting, as well as opportunities to fully leverage the longitudinal design. The data gaps identified result from a variety of issues including the fact that the data are not collected, the data are collected but not by one of the Center's data partners, or the Center is prohibited from collecting the data. **As such, filling these data gaps may require innovative partnerships, data linkage techniques, technological infrastructure, and access.**

The data gaps proposed to be addressed by this grant proposal are as follows:

Workforce Data Gaps

- Workforce data are missing federal and military employees and self-employed and contractual employees.
 - Federal and military employment are not included in the MLDS because they are not subject to Unemployment Insurance (UI) from DLLR. Maryland ranked fourth among the states in federal government employment in 2013 according to information from the Bureau of Labor Statistics.¹ Federal employment in Maryland accounted for 6.5% of total employment in the state (119,097). Maryland ranks fourth among the states in federal government employment, with 145,783 non-military federal jobs in 2016. On a per capita basis, the state ranks first with 242 federal jobs per 10,000 residents. Further, these jobs pay better in Maryland than in any other state, with an average annual wage of \$99,351, which is 27% higher than the national average.² The lack of federal wage information leaves an incomplete picture of employment - especially considering that government jobs are often STEM and higher salary jobs.
 - Contingent and contractual employees are not included in the MLDS because they are not subject to Unemployment Insurance (UI) from DLLR. Contingent workers are people who do not expect their jobs to last or who reported that their jobs are temporary. These workers may also be referred to as freelance. Alternative employment arrangements include people employed as independent contractors, on-call workers, temporary help agency workers, and workers provided by contract firms.³ In 2005 contingent and alternative employment accounted for up to 4 percent of all workers.⁴ More recent estimates show these types of

¹ U.S. Department of Labor, Bureau of Labor Statistics. *Career Outlook: Working for the federal government: Part 1*. Retrieved February 2018 from <https://www.bls.gov/careeroutlook/2014/article/federal-work-part-1.htm>.

² Maryland State Department of Commerce. *Rankings and Statistics, Rankings, Workforce*. Retrieved February 2018 from <http://commerce.maryland.gov/about/rankings-and-statistics>.

³ U.S. Department of Labor, Bureau of Labor Statistics. *Labor force characteristics*. Retrieved February 2018 from <https://www.bls.gov/cps/lfcharacteristics.htm#contingent>.

⁴ U.S. Department of Labor, Bureau of Labor Statistics. *Career Outlook: Working in a gig economy*. Retrieved February 2018 from <https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm>.

employment increasing.^{5,6} The lack of information on independent contractors and self-employed workers leaves an incomplete picture of employment outcomes for Maryland workers.

- **As a solution, this grant will explore the possibility of creating an infrastructure to utilize Maryland income tax data from the [Maryland Office of the Comptroller](#). Maryland income tax is collected for all workers, including federal and military employees and contingent and alternative workers.**
- Workforce data do not include information for students who were educated in Maryland and work out of state.
 - The MLDS only has access to Maryland Unemployment Insurance records, and as such, does not include any information on out of state employment. There are interstate programs that are designed to exchange workforce data to allow states to continue to analyze student outcomes even if the student leaves the state. However, these interstate programs require re-disclosure of data which is currently prohibited by State law.
 - Maryland is closely located to other states and the District of Columbia. Movement across state lines is commonplace. Information on the movement of students across state lines for employment can assist the Center in answering STEM policy questions related to “brain-drain”, education and workforce retention, and STEM teacher training outside of Maryland.
 - **As a solution, this grant will explore opportunities to pair with surrounding states to link workforce and education records.**

Postsecondary Data Gaps

- Limitations to out-of-state postsecondary data received from MSDE in partnership with the National Student Clearinghouse.
 - Out-of-State postsecondary education data is limited to enrollments and degrees awarded to students who exited from a Maryland public high school. The out-of-state postsecondary data does not provide information on GPA, course enrollment, or credit accumulation. It also does not provide information for students who started in a Maryland public school but did not reach 12th grade in Maryland, but then went to college (stop out of Maryland public school).
 - This limits the Center’s ability to make comparisons between students who went to college in-state and out-of-state on key college variables, including GPA. Additionally, we are unable to control for these variables when looking at outcomes across groups, because the variables are only present for one group.
 - **As a solution, this grant will explore the possibility of obtaining a National Student Clearinghouse license for the MLDS Center**
- A number of data gaps exist with the financial aid data received from MHEC and with college placement exams, including Praxis and Accuplacer.

⁵ [U.S. Department of Commerce](#), U.S. Census Bureau. *More Than 380,000 Nonemployer Businesses Added to the U.S. Economy*, U.S. Census Bureau Reports. Retrieved February 2018 from <https://www.census.gov/newsroom/press-releases/2013/cb13-99.html>.

⁶ Noguchi, Yuki. (2018, January 22). Freelanced: The Rise of the Contract Workforce. NPR. Retrieved February 2018 from <https://www.npr.org/2018/01/22/578825135/rise-of-the-contract-workers-work-is-different-now>

- The National Student Loan Data System (NSLDS) is the U.S. Department of Education's (ED's) central database for student aid. NSLDS receives data from schools, guaranty agencies, the Direct Loan program, and other Department of ED programs. NSLDS Student Access provides a centralized, integrated view of Title IV loans and grants so that recipients of Title IV Aid can access and inquire about their Title IV loans and/or grant data. More information can be found here: https://nslds.ed.gov/nslds/nslds_SA/ . Obtaining data from NSLDS would allow the MLDS Center to verify data provided by its partner agency, MHEC, as well as fill in gaps for any missing data or omitted records. MHEC's current financial aid data collection is intended to provide annual net disbursements for state, federal and institutional fund sources for degree-seeking students in a given year. Obtaining data from NSLDS would provide supplemental data on disbursements, such the actual aggregate amount of a student's loan disbursements and outstanding loan balances, neither of which can be derived from the data collected by MHEC.
- The *Praxis*® tests measure the academic skills and subject-specific content knowledge needed for teaching. The *Praxis* tests are taken by individuals entering the teaching profession as part of the certification process required by many states and professional licensing organizations. More information can be found here: https://www.ets.org/praxis/institutions/services_tools/data_requests. These data are not currently available from our partner agencies, but would aid in the study of the STEM teacher pipeline in Maryland.
- The Accuplacer is administered by the College Board <https://accuplacer.collegeboard.org/educator/about-accuplacer> and is the placement exam that students take upon enrolling in college to determine whether remedial coursework is needed. Currently the MLDS Center just has a yes/no indicator of need for remedial coursework, which limits our ability to examine the predictors of need for remedial coursework and the long term outcomes associated with needing remedial coursework.
- **As a solution, this grant will explore receiving data from the NSLDS, the Praxis, and the College Board.**
- There is no current source of information on licensure from private companies (e.g., Cisco).
 - MSDE has information on whether the student was involved in career and technical education (CTE), which may indicate an interest in an area that may require licensure. However, MSDE, nor MHEC or the MLDS Center, currently include information on (1) whether the student took a licensure exam or (2) the students' performance on a licensure exam.
 - This information is particularly pertinent to the STEM pipeline, because many STEM careers require licensure.
 - **As a solution, this grant will explore the possibility of forming partnerships with licensure companies, such as Cisco, etc.**

PreK-12 Data Gaps

- The MLDS Center must rely on free and reduced price meal status (FARMS) as a measure of student socioeconomic status (SES).
 - The MLDS, like the education community as a whole, has historically relied on free and reduced-price meals (FARMS) data to identify socioeconomically disadvantaged students and schools. Using the FARMS indicator as a measure of SES has advantages and disadvantages. The advantage is that it is readily available and it is a commonly used measure in educational research (because it is usually the only measure available). One disadvantage is that the FARMS indicator is only a proxy measure of poverty; it reflects only household income and not parental educational attainment or occupational status (Cowan et al., 2012). A second disadvantage is that it reflects only families that chose to participate. A third disadvantage is that recent changes to the National School Lunch Program have expanded eligibility so that many students receive free meals at school regardless of household income, making data since 2012 particularly inaccurate (USDE, 2012).
 - Socioeconomic status (SES) has been correlated with an individual's skill development, academic achievement, work and life outcomes, and overall psychological and behavioral well-being.⁷ SES data can inform additional context to inform policies at all levels of the education system.⁸ The term "socioeconomic status" can be defined broadly as one's access to financial, social, cultural, and human capital resources. Variables from three primary components are typically used to "measure" socioeconomic status:
 - family income
 - parental educational attainment
 - parental occupation.⁹
 - **As a solution this grant will explore the ability to obtain Census data on students within the MLDS. This may occur through linkage of address data to the Census block or track information at the district level with return of data to the MLDS (pending successful initiatives in the MD General Assembly).**
- Consistent with current efforts in the MD General Assembly (and contingent on the success of those initiatives), we also are interested in pulling in data on student discipline, juvenile delinquency, child in need of assistance, and child welfare records.
 - Includes student discipline data from MSDE; juvenile delinquency records; child in need of assistance records. Both the Departments of Juvenile Services (DJS) and Human Resources (DHR) have expressed an interest in working with the Center to report on the educational and workforce outcomes of children served by those agencies.

⁷ National Forum on Education Statistics. (2015). [Forum Guide to Alternative Measures of Socioeconomic Status in Education Data Systems](#). (NFES 2015-158). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

⁸ American Psychological Association (APA). Education and Socioeconomic Status Fact Sheet. Retrieved February 2015 from <http://www.apa.org/pi/ses/resources/publications/factsheet-education.aspx>.

⁹ National Forum on Education Statistics. (2015). (NFES 2015-158).

- It is well known that several roadblocks exist in the STEM education to workforce pipeline. For example, we know that there is disproportionately low minority and low-income student uptake in STEM advanced courses, college majors, and careers (Zheng et al., 2017). Disproportionate involvement of these students groups in the juvenile justice and child welfare system may help to explain the gaps in STEM education and career outcomes. Including these data in the MLDS will help to provide implications for policy intervention for these student subgroups.
- **Contingent on successful outcomes of pending legislation, grant funds would be used to partner with MSDE, DJS, and DHR to add additional data.**
- K-12 data in the MLDS begins with the 2007-08 school year, which limits the ability to link students across the full life cycle, from elementary school through high school graduation, college, and the workforce. Currently, we are limited to examining the full progression of cohorts of sixth graders and older. However, several recent research questions posed by critical stakeholders, including MSDE, focus on the elementary to college to workforce transition. These research questions include:
 - (1) How early can we begin to identify Maryland students interested in teaching?
 - (2) How early can we begin to identify Maryland students who will eventually engage in STEM pathways?
 - (3) What early resources and supports can Maryland provide to engage underrepresented students in STEM teaching and career pathways?
 - The statewide use of the SASID was mandated during the 2007-2008 academic year, which is the reason for that start date in the MLDS. Prior to that districts used a LEA student identifier and an LEA code.
 - **As a solution, this grant will explore the best solutions for obtaining older data to increase the panel of data available to researchers to include elementary to college and into the workforce to answer critical questions raised by stakeholders.**

Research Questions

The goal of the five year project is to develop the infrastructure to fill data gaps in the MLDS to be able to more completely and accurately answer research questions related to STEM workforce development at the end of the grant period. More specifically, this proposal is motivated by the following substantive research questions:

1. To what degree do student and school resources -- beginning as early as elementary school -- influence the pathways of students from education to STEM careers?
2. Do inequities in the distribution of student and school resources contribute to underrepresentation of female students, black students, Hispanic students, low-income students, and other groups in STEM majors and careers?
3. Is the pipeline of STEM teachers meeting the needs of Maryland schools in a way that supports workforce development?

This project will also help move the State toward a universal definition of STEM. This will help align State and local reporting across local school systems and institutions of higher education.

Research Design and Methods

The Maryland Longitudinal Data System (MLDS) is Maryland's statewide repository for individual-level education and workforce data that are longitudinally linked across three state agencies: (1) the Maryland State Department of Education (MSDE); (2) the Maryland Higher Education Commission (MHEC); and (3) the Department of Labor, Licensing and Regulation (DLLR). Data are linked using students' social security number (SSN), state assigned student identification (SASID) number (for education data), name, date of birth, and demographics. Greater than 95% of student high school records can be linked to either a higher education or a workforce record. The MLDS currently houses data from academic years 2007-08 through 2017-18, and there are close to 7 million distinct student and employee records.

The overarching goal of this project is to develop and implement innovative infrastructure to significantly expand upon the research capabilities of the MLDS to answer STEM education and workforce questions to inform State and local policy. The Maryland model can serve as a prototype for other State, district, and national linked administrative data systems. We will work collaboratively with the MLDS Center partner agencies and other stakeholders across the State to explore the solutions to noted data gaps. This collaborative work will occur through:

- Discussions at the MLDS research and policy advisory board meetings
- Stakeholder convenings with research and policy expertise around specific data gaps
- Ongoing discussions with cybersecurity experts
- Ongoing collaboration between data and IT staff and substantive researchers to ensure a system that is well-aligned with the substantive research questions motivating this proposal.

Maryland is uniquely positioned for partnerships that promote infrastructure building to increase the capacity for research for a number of reasons. First, the infrastructure and partnerships already provided through the MLDS enable a jumping off point for further collaboration amongst State agencies, universities, and local entities. Second, because there are only 24 local school systems in Maryland, it is eminently feasible to collaborate amongst these entities and stakeholders to (a) build a solid research infrastructure, and (b) conduct policy-relevant work on the STEM student/teacher pipelines that are responsive to the varied needs of multiple stakeholders across the State. Third, through its geographical proximity to DC and Virginia, Maryland students and employees are critical to a well-educated and diverse STEM workforce, including the workforce necessary to fill federal government positions. Furthermore, the STEM workforce in the Maryland vicinity is growing rapidly, particularly with the placement of the Amazon H2 in Crystal City, Virginia.

At the end of the five year grant period, we expect to have designed a training manual that trains users of the MLDS. In the fourth year of the project, we plan to conduct a local training academy, inviting local faculty, state agency representatives, and policy makers to train in how to use the system. In the fifth year of the project, we plan to invite national experts on STEM research to train in how to use the MLDS to conduct research on the STEM pipeline.

Timeline

This is a five year project, and the first year of the project will focus on planning and engagement with stakeholders around data gaps that have been identified. The second year of the project will focus on developing the protocols, agreements, and methodologies needed to fill the data gaps. The third year of the project will focus on small scale proof of concept for each data gap. The fourth and fifth years will focus on implementing the new infrastructure statewide and providing secure access and training to researchers.

Evaluation of a state or federal education program

This work proposes to create an infrastructure that will aid in capabilities to evaluate Maryland public elementary, middle, and high schools and postsecondary institutions (e.g., their ability to educate students to prepare for STEM, with a specific focus on female, minority, and low income students).

Cross-sector

This research is cross-sector by incorporating data from Maryland high school students, data on college enrollments and degree, and workforce industry and wages.

Benefit to the State of Maryland

First, this project will move the State toward a universal definition of STEM, which will help align reporting requirements across local school systems and institutions of higher education. Second, development of the STEM workforce requires investment in students before they reach college. This study will identify issues that may be hampering state progress in producing STEM workers in Maryland by identifying public elementary, middle, and high school factors that facilitate or hinder STEM career pathways, with attention to the most vulnerable high school populations. The findings of this study will help State policymakers identify the most appropriate policy and practice recommendations to improve the production of STEM workers in Maryland including strategies to improve the pipeline STEM teachers in a way that support workforce development.

Available Resources

As a team, we have substantial capacity to complete this work, including strong pre-existing relationships with agency partners. The investigators on this project have ample experience with developmental science, education policy, and advanced statistical analyses. We have access to doctoral students and sufficient work space to complete the work at the University of Maryland Baltimore County, the University of Maryland School of Social Work, and the

College of Education. Funding from NSF will provide infrastructure support for the MLDS Center and additional partners proposed by this grant. Furthermore, funding from NSF will provide effort support for the faculty and graduate students working on the project. In addition, this project will include an advisory board of senior researchers as advisors and mentors for our empirical work.

Center Product and Further Development

- **MLDS Center products.** This project is expected to result in the following MLDS Center products:
 - (1) Infrastructure system to house additional data
 - (2) Licenses for critical software needs
 - (3) Partnership support to add partners necessary for successful completion
 - (4) Secure portal to provide to local school systems to access Census data for studentsUpon completion of this project, the infrastructure should be sustained through ongoing funds provided by the State. The project will result in substantive research series presentation(s) and research report(s) related to the STEM pipeline in Maryland.

- **Further development.** We plan to submit results to academic conferences (e.g., Association for Public Policy Analysis and Management; American Educational Research Association) and academic journals (e.g., *Journal of Research on Educational Effectiveness*; *Education Evaluation and Policy Analysis*).

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EDUCATION

Ph.D. University of Maryland, (Education, EDCI)
M.Ed. University of Delaware, (English Education)
B.A. Brandeis University, (American History)
Phi Beta Kappa; Magna Cum Laude

PROFESSIONAL EXPERIENCE SUMMARY

Associate Vice Chancellor for Education and Outreach, University System of Maryland (2000-present)
Special Assistant to the Chancellor for P-20 Education, University System of Maryland (2011-present)

Responsibilities: Lead and manage the USM P-20 agenda high priority policy issues: high quality teacher preparation, system-wide strategic planning, student learning outcomes assessment, collaboration with K-12 and community colleges to develop articulation policies; and undergraduate educational reform initiatives for the USM public four-year colleges and universities in the areas of general education, student learning outcomes and accountability, curriculum alignment with K-12 and community colleges. Lead and facilitate Maryland Education Deans Council, including all public and private four-year colleges of education. Lead and facilitate the AAT (Associate of Arts in Teaching) Oversight Council. The position reports to the Senior Vice Chancellor for Academic Affairs and the Chancellor of the University System of Maryland. Additional responsibilities include senior staff to Board of Regents committees, statewide task forces, and higher education oversight panels. Fiscal responsibility for state teacher education grants, USM K-16 funds, and federal and foundation external funds. Supervise a staff of four direct reports.

Accomplishments: Authored and won 17 multi-year federal grants totaling over \$44 million dollars in partnership with, public and private universities, community colleges and Maryland school systems to support teacher professional development and curriculum design in science education. Designed an administered system-wide mini-grant offerings to USM campuses to expand professional development schools in colleges of education. Convened numerous statewide P-20 Conferences with representation for all educational segments on Higher Education policy issues: Climate Change Education Summit (2016); Teacher Education Summit (2014); Teacher Preparation, Quantitative Literacy, Academic Transformation, Common Core and PARCC; A “Policy Journey” to College Completion and Academic Transformation; Teaching to meet the Changing Needs of Students and Society (2013); Counting on our Future: Redefining Quantitative Literacy in Maryland (2014); Stride to 55: The Practice and Policy Journey to Completion and Academic Transformation (2014). Served as lead staff on General Assembly Joint Chairs Reports (2014 and 2015). Staff director to Governor’s STEM Task Force and author of STEM Task Force Report (2009) and Teacher Education Task Force (2014). Authored K-16/P-20 reports addressing developmental education in reading, writing, and mathematics. Developed and negotiated state policy and new degree programs in teacher education, community college transfer, and general education through alliances of faculty in disciplines across all segments (K-12, two-year, four-year colleges) in the areas of high school assessment and standards, curriculum alignment, student learning outcomes assessment, and Associate of Arts of Teaching degree. Led the five-year System-wide undergraduate course redesign project, funded by Lumina Foundation and Carnegie Foundations. Currently leading the statewide policy work to expand definitions and pathways for college level mathematics.

Founding Executive Director, College Park Scholars (CPS) (1994-1997)

Responsibilities: Led and managed the first interdisciplinary, residential living/learning program for 2000 academically talented freshmen and sophomores. Supervised 5 associate staff, and managed a \$1 million

budget. Managed a program with 25 staff members, including 7 tenured professors. Collaborated with Arts and Sciences deans to deliver interdisciplinary programs. Developed and implemented policy in the areas of academic curriculum, admissions, residence life, student affairs, and program evaluation. Designed short-term and long-term learning outcomes assessment. Assisted faculty in course design for General Education (CORE) approval. Chaired the College Park Scholars Faculty Council, the College Park Scholars strategic planning committee, and served as senior staff to the campus College Park Scholars Advisory Council.

Accomplishments: Secured permanent funding for program (over \$1 million), and balanced budget every year of operation. Recruited talented students to raise SAT/GPA profile of incoming students resulting in significant rise in scores (from 1150/3.0 to 1300/3.6 in three years). Increased the size of the program from 250 students to 2000 over 4 years. Phased in new interdisciplinary curricula, beginning with 4 thematic tracks (1994) to 10 (1997), by recruiting deans and faculty across campus. Supervised program for construction/renovation of three residence halls and one community center. Brought two renovated high-rise residence halls on line in cooperation with residence life and residential facilities (935 beds). Initiated program-wide service learning curriculum in all 10 programs, including University/community collaboration in Day of Service for 500 freshmen. (Awarded first commendation from City of Takoma Park for Service Day). PI and Project Director on \$211,000 FIPSE grant to support undergraduate research projects (Discovery Projects) and attracted external funding from Lockheed Martin to support Service Day.

Special Member of the Graduate Faculty of the University of Maryland, College of Education, College Park, 2013

Project Director of the First Year Focus Cluster Program (1993-1994).

Coordinator and Faculty Associate, Center for Teaching Excellence (CTE) (1992-1994).

Acting Director of the Freshman Writing Program, University of Maryland (1992-1993).

Assistant Director of the Professional Writing Program (1984-1992).

Education Staff to the President Carter's Select Commission on Immigration and Refugee Policy, Areas of specialization: Bilingual and Civic Education (1980-1981).

High School English Teacher, New Trier High School, Winnetka, IL (1974-76) and Mount Pleasant High School, Wilmington, DE (1971-1974).

AREAS OF TEACHING EXPERTISE

Higher Education Policy (Leading Change in Higher Education, K-12 School Reform Policy, Teacher Education, School/University Partnership, P-20 Policy, Program Evaluation)

Composition Theory and Rhetoric

Editing and Document Design

Freshman Writing

Professional Writing

Technical Writing

GRANTS AND FUNDED RESEARCH

U.S. Department of Education First in the World Grant, \$3,000,000 (2015-2019), Principal Investigator and Project Director. "Maryland Mathematics Reform Initiative," Principal Investigator (P116F150201)

National Science Foundation STEM-C Grant, \$500,000 (2014-2018) MSP-Targeted Award - Computing Partnerships, Computing Ed for 21st Century, ITEST. Principal Investigator. (DUE-0831970).

AASCU: College and Career Readiness Project, (2013-14) \$15,000. Team Leader.

Business Higher Education/Sloan Foundation, (2012-2015) \$1,000,000. “Cyber-Security Network,” Principal Investigator.

National Governor’s Association/National Association of System Heads, “Common Core Postsecondary Collaborative” \$65,000/2012. Principal Investigator.

National Science Foundation Climate Change Education Project (CCEP) Phase II; \$5,000,000/5 years (2012-2017). Co-Principal Investigator. MADE-CLEAR: Maryland-Delaware Climate Change Education, Assessment and Research.” (DUE1239758)

National Science Foundation Climate Change Education Planning Grant, \$1,000,000/2 years (2010-2012). Co-Principal Investigator. “MADE-CLEAR: Maryland-Delaware Climate Change Education, Assessment and Research.” (DUE-1043262)-)

Lumina Foundation Making Opportunity Affordable, \$1,032,000/3 years (2009-2012). Principal Investigator, University System of Maryland, MICUA, MACC, MHEC, and Office of the Governor.

National Science Foundation Math Science Partnership Grant \$12,396,945/5 years. (2008-2013) Co-Principal Investigator and Partnership Director. “Minority Student Pipeline Math Science Partnership” (MSP)² (with Prince George’s Public Schools).

National Science Foundation, Supplemental Grant \$499,999/3 years. (2004-2007). Principal Investigator and Project Director. “Change and Sustainability in Higher Education (CASHÉ).”

U.S. Department of Education Title II Teacher Quality Enhancement Grant \$6,000,000/5 years. (2003-2008). Principal Investigator and Project Director. “Education Equals Mentoring, Coaching and Cohorts ($E=MC^2$)” (with Baltimore City Public Schools).

National Science Foundation Math Science Partnership Grant \$7,500,000/5 years. (2002-2007). Principal Investigator and Project Director. “Vertically Integrated Partnerships K-16, (VIP)” (with Montgomery County Public Schools).

U.S. Department of Education Title II Teacher Quality Enhancement Grant \$4,187,000/5 years. (2000-2005) Principal Investigator and Project Director. “Learning in Communities, (LINC).”

AAC&U/FIPSE “Greater Expectations for Undergraduate Education,” \$35,000, (2001-2003). Project Director.

National Science Foundation, \$20,000 (1998-1999). “Shaping the Future,” Principal Investigator and Project Director.

Pew Charitable Trusts, \$800,000. (1997-2001). Project Director. K-16 Partnership for Teaching and Learning, University System of Maryland.

Lockheed Martin, \$5000, (1997). Service Learning Grant, to support College Park Scholars Community Service Curriculum.

FIPSE Grant, U. S. Department of Education, \$211,000/3 years. (1996-1999). Principal Investigator and Project Director. “Discovery Project: an Undergraduate Research Curriculum Initiative.”

Internal Campus Grants for Curriculum Improvement, University of Maryland. Including grants to develop “Instructors’ Handbook” for Freshman Writing. (1993). Principal Investigator on Community College/ University Articulation Study (1992).

BOOKS

Laufgraben, J., and **Shapiro, N.** (2004). *Sustaining and Expanding Learning Communities*. San Francisco: Jossey Bass Publishers.

Shapiro, N., and Levine, J. (1999). *Creating Learning Communities: A Practical Guide to Winning Support, Organizing for Change, and Implementing Programs*. San Francisco: Jossey Bass Publishers.

Shapiro, N. (Invited Editor). (1999). *Metropolitan Universities, K-16 Issue*, 10 (2).

Anson, C., Graham, J., Jolliffe, D., **Shapiro, N.**, and Smith, C. (1993). *Scenarios for Teaching Writing: Contexts for Discussion and Reflective Practice*. Urbana, IL: NCTE.

ARTICLES, CHAPTERS, AND PUBLISHED ESSAYS

Shapiro, N., Morgan, D., Hall, S., (2018 in press). Counting on our Future: First in the World (FITW) Maryland Mathematics Reform Initiative (MMRI) in *Emerging issues in Mathematics Pathways*, The Dana Center, (coming in 2018)

May, D., Susskind, D., and **Shapiro, N.** (2013). Faculty Grassroots Leadership in Science Education Reform: Considerations for Institutional Change, Culture, and Context. *Creative Education*, Vol. 4, No. 7A (special issue on Higher Education), July 2013.

Shapiro, N. (2013). When the Students We Have Are Not the Students We Want: The Transformative Power of Learning Communities. *Learning Communities Research and Practice*, 1(1), Article 17.
Available at: <http://washingtoncenter.evergreen.edu/lcrjournal/vol1/iss1/17>

Shapiro, N. (2008). Powerful Pedagogy: Learning Communities at Historically Black Colleges and Universities. *The Journal of Negro Education*, 77 (3) (Summer 2008).

Frank, J. and **Shapiro, N.** (2010). *Report of the leadership collaborative retreat*. APLU/SMTI, Paper 1. Washington, DC: Association of Public and Land-grant Universities.
<http://www.aplu.org/document.doc?id=2923>

Frank, J. and **Shapiro, N.** (2010). *Spring 2010 TLC team leaders survey*. Washington, DC: Association of Public and Land-grant Universities. <http://www.aplu.org/document.doc?id=4192>

Shapiro, N., Frank, J., and Susskind, D. (2007). Studying Higher Education Change and Sustainability Efforts in the Context of PK-16 Partnerships. *American Educational Research Association (AERA)*. Chicago, Illinois, April 12, 2007.

Shapiro, N., and McAdams, K. (2006). Discovery Projects: Contextualized Research Experiences for College Sophomores. In *Student Engagement and Information Literacy*, Washington D.C.: American Council of Research Librarians.

Shapiro, N. (2006). Review of "Learning Communities: Reforming Undergraduate Education," by B. L. Smith et al. *Journal of Higher Education*, May/June 77(3), 550-553.

Shapiro, N. (2004). Learning Communities: Renewing a Commitment to Civic Engagement. In J.A. Galura et al. (Eds.) *Engaging the Whole of Service-Learning, Diversity, and Learning Communities*. Ann Arbor: OCSL Press, University of Michigan, 20-25.

Shapiro, N. (2003). University of Maryland College Park Scholars: Creating a Coherent Lens for General Education. *Learning Communities at Research Universities*, Washington D.C.: American Association of American Universities, 39-42.

Shapiro, N. (2003). The Maryland Partnership for Teaching and Learning: A State System Perspective on K-16. *Peer Review* 5 (2), 24-26.

- Langenberg, D., and **Shapiro, N.** (2002). Systemic Reform: K-16 Partnerships. *Basic Education Monthly Forum*, 46 (6), 3-6.
- Shapiro, N.** (2002). Learning about Learning Communities. In C. Anson (Ed.), *Casebook for Writing across the Curriculum Instructors*, New York: Oxford University Press, 266-271.
- Levine, J., and **Shapiro, N.** (2002). Harry Potter Goes to College: Enriching the Student Learning Experience,” *About Campus*, 5(4), 8-13.
- Shapiro, N.**, and Levine, J. (2001). “How Learning Communities Affect Students. *Peer Review*, 3 (1) 42-44.
- Shapiro, N.** and Levine, J. (2000) Curricular Learning Communities. In B. Jacoby (Ed.), *New Directions for Higher Education, Involving Commuter Students in Learning*, No. 109, San Francisco: Jossey Bass, 13-22.
- Shapiro, N.**, and Levine, J. (1999). Introducing Learning Communities to Your Campus. *About Campus*, 4(5), 2-10.
- Shapiro, N.** (1999). Creating a Seamless Educational System K-16—The Role of Higher Education in School Reform. *Metropolitan Universities*, 10 (2), 7-10.
- Shapiro, N.**, and Haeger, J. (1999). Maryland’s K–16 Model. *Metropolitan Universities*, 10 (2), 25-32.
- Langenberg, D., Marx, G., and **Shapiro, N.** (1999). Coordinating Efforts for System-wide Change: K-16 Partnerships. *High School Magazine, NASSP*, 6(4), 8-13.
- Shapiro, N.** (1998). Learning Communities: Moving Beyond the Classroom Walls. *Metropolitan University*, 9 (1), 25-34.
- Anson, C., Jolliffe, D., and **Shapiro, N.** (1995). Stories Teachers Tell. *Writing Program Administrator*, 18 (3), 34-39.
- Shapiro, N.** (1994). Course Structures That Elicited Students’ Ethnographic Studies of Workplace Writing: The Teacher’s Overview. *Maryland English Journal*, 28, 1-3.
- Shapiro, N.** (1992). Rereading Multicultural Readers: What Definition of Multicultural Are We Buying? In Hilgers, T., Wunsch, M., & Chattergy, V. (Eds.). *Academic Literacies in Multicultural Higher Education: Selected Essays*, Hawaii: University of Hawaii Press, 16-23.
- Shapiro, N.** (1991). Textbooks in Focus: Cross-Cultural Readers. *College Composition and Communication*, 42, 524-530.
- Shapiro, N.**, and Grant-Davie, K. (1988). Responding to Student Writing: Choosing Our Reading Roles Carefully. *The Greater Washington Reading Council Journal*, 13, 36-41.
- Shapiro, N.** (1986). Review of Research in Composition and Rhetoric: A Bibliographic Source Book. In M. G. Moran & R. F. Lunsford (Eds.), *Literary Research Newsletter*, Winter, 71-74.

SELECTED KEYNOTE ADDRESSES

“Taking Student Success to Scale: Math Pathways,” SHEEO NASH Meeting, Baltimore, MD, July 12, 2016.

Plenary Moderator: “Perspectives from the field: what research do we need?” National Science Foundation DR K-12 Annual Project Directors Meeting, Washington, DC. June 3, 2016.

“Mathematics Pathways: ‘Of course it’s hard—hard is what makes it great!’” Maryland Mathematics Association of Two Year Colleges, Annual Meeting, May 24, 2016.

- “Enacting Systemic Climate Change Education: Maryland and Delaware Climate Change Education, Assessment and Research (MADE CLEAR) Research and Practice for a Changing Planet,” AERA National Conference, Washington DC, April 8, 2016.
- “Common Core and Teacher Education: Aligning Standards and Instruction,” Coppin State University College of Arts and Sciences, Baltimore, MD, August 19, 2013.
- “Transformation Transfer Templates: ‘More Juice for the Squeeze,’” AAC&U Annual Meeting, with Frank, J., January 20-13, 2010, Washington, D.C.
- “Examining the Policy Context of P-20 Partnerships,” Higher Education Group of Washington, March 11, 2008.
- “Crossing Boundaries: P-16 Partnerships under the Microscope,” The Center for Transnational Women’s Issues and the International Exchange Institute, Towson University, March 8, 2008.
- “When the Students We Have Are Not the Students We Want,” 12th National Learning Communities Conference in Indianapolis, November 7-9, 2007.
- “Avoiding Expensive Mistakes: Moving toward Learner-centered Teaching,” Howard University Conference on Efficacy and New Teaching and Learning Models, April 9, 2007.
- “Information Literacy and Student Engagement,” MILEX Annual Meeting, October 2006
- “When You See a Fork in the Road, Take It,” Phi Beta Kappa Induction Ceremony, University of Maryland, May 21, 2006.
- “Connecting the Teacher Pipeline: Creating an Associate of Arts in Teaching (AAT) Degree in Maryland,” AACTE and NACCTEP Conference, Connecting the Teacher Pipeline: Effective Collaborations Between Community Colleges and Four-Year Institutions, October 25, 2005.
- “K-16 and Mathematics Alignment: Creating Contexts for Change,” University System of Connecticut, State-wide Mathematics Conference, October 14, 2005.
- “Is Freshman Writing Really a K-16 Issue?” Maryland Composition Conversations Conference, Community College of Baltimore County, Catonsville, Maryland, November 7, 2003.
- “Access and Alignment: A K-16 Approach,” Jobs for the Future Double the Numbers Conference, sponsored by Bill and Melinda Gates Foundation, Washington, DC, October 2003.
- “Expanding and Sustaining Learning Communities: Getting Past Go,” Gallaudet University, Washington, D.C., September 23, 2003.
- “Leading and Sustaining Change,” AAC&U Conference on Learning Communities: Research Informing Practice, April 10-12, 2003.
- “Learning Communities: A Pathway to the Renewal of Civic Engagement, Ohio State,” Conference on Living Learning Programs and Residential Colleges, November 2002.
- Keynote Panelist, Western Association of Schools and Colleges Accrediting Commission for Senior Colleges and Universities (WASC), 2002.
- “Building Premier Learning Communities: Strategies for Successful Library Involvement,” American Library Association Annual Meeting, Atlanta, June 2002.
- “Learning Communities: The National Scene,” Learning Communities Workshop, James Madison University, February 2002.

“Quantitative Literacy: Why Numeracy Matters for Schools and Colleges,” National Forum on Quantitative and Mathematical Expectations in Grades 11-14, National Academy of Sciences Washington, DC., December 2001.

“Building Communities of Learners,” Penn State University, Common Wealth College, June 2001.

“Learning Communities: A National Perspective,” University of Michigan, Provost's Seminar, October, 2000.

“Creating Learning Communities: Faculty Driven Curricular Reform,” Faculty Development Retreat, Towson University, January 2000.

State Higher Education Executive Officers (SHEEO), Southern Regional Policy Forum, Keynote Panelist, 1999.

SELECTED PAPERS AND PRESENTATIONS

“Finding a balance: Purposeful mathematics pathways,” with Dewayne Morgan, AACU Annual Meeting, San Francisco, January 2017.

“Maryland's journey of academic innovation.” With Knepler, E. Presentation given at the Lumina Foundation's Capstone Convening. Indianapolis, IN, April 2014.

“Maryland's journey of academic innovation.” With Knepler, E. Talk given at University System of Maryland Center for Academic Innovation's Lecture Series. Adelphi, MD, June 2014.

“Connecting the dots: Aligning academia and industry for a sustainable future.” With Knepler, E. and Williams, T. Research Talk given at University System of Maryland Center for Academic Innovation's Lecture Series. Adelphi, MD, May 2014.

“Industry and academic partnerships: Perceptions of career services, students, faculty, and staff.” With Knepler, E. and Williams, T. Paper presented at the American Association of Colleges and Universities Annual Meeting, Washington, DC, January 2014

“Creating a sustainable professional network of K-16 science faculty,” With May, D. 2011 Network for Academic Renewal Conference, Engaged STEM Learning: From Promising to Pervasive Practices, Association of American Colleges & Universities (AAC&U), Miami, Florida, March 2011.

“Faculty grassroots leadership in science education reform: Considerations for institutional change, culture, and context,” with Frank, J., May and Susskind, D. Annual meeting of the American Educational Research Association (AERA), New Orleans, Louisiana, April 2011.

“Growing by degrees: Maryland's college attainment agenda,” with Morgan, D. and Knepler, E. AAC&U National Meeting, Washington, DC, January 2011.

“Strengthening institutional commitment to STEM teacher preparation and STEM education: Lessons learned from the Leadership Collaborative (TLC),” With Presley J., and Frank, J., Association of Public Land Grant Universities (APLU) Annual Meeting, with Miami, FL, March 2011.

“Maryland's Growing by Degrees Lumina Productivity Grant—Cost Savings Worksheet for Students and Institutions,” with Knepler, E. Lumina National Productivity meeting, with Knepler, E. MI, April 2011.

“Maryland Course Redesign: Redesigning Developmental Courses,” with Knepler, E. Howard Community College Summit on Student Success, Columbia, MD, June 2011.

“Inquiry-based Curriculum Reform from Faculty Learning Communities,” with May, D. and Sokolove, P. Transforming Undergraduate Biology Education Conference of the American Association for the Advancement of Science (AAAS), July 2009.

- “Doing more with less is not a myth: Maryland Course Redesign,” AAC&U General Education Conference, Baltimore, Maryland, March 2009.
- “Closing the Achievement Gap: A System Approach,” AAC&U Annual Meeting, Seattle, WA, January 2009.
- “Powerful Pedagogy: Learning Communities at Historically Black Colleges and Universities.” *The Journal of Negro Education*, 77 (3) Summer 2008, 280-287.
- “Recruiting and Retaining Under-represented Minority Teachers,” Achievement Initiative for Maryland's Minority Students (AIMMS), Baltimore, MD, October 20, 2008.
- “Reversing the Downward Spiral of Science and Mathematics Education in the United States,” University System of Georgia, Conference on Accepting the STEM Challenge, Atlanta, GA, September 2008.
- “Measuring Retention Rates, Movement, and Employment of Newly Certified Graduates of Education Programs,” with Stack, T. and Stevens, D. 2008 Forum of the Association for Institutional Research, Seattle, WA, May 24-28.
- “From Sea to Shining Sea: Evaluating Title II TQE Partnership Strategies to Ensure Quality,” with Tucker, S. Association of Colleges for Teacher Education (AACTE) National Conference, New Orleans, LA, February 8, 2008.
- “If We Build It, Will They Come? The Case for Structural Change to Support STEM Education Reform,” with Frank, J. AAC&U National Conference, Washington, D.C., January 25, 2008.
- “Studying Higher Education Change and Sustainability Efforts in the Context of K-16 Partnerships,” AERA Conference, Chicago, April 12, 2007.
- “Practitioner Research: Strategies Workshop,” Howard University Conference on Efficacy and New Teaching and Learning Models, April 9, 2007.
- “Maryland’s Standard for a ‘C’ Paper: Building Community through Curriculum Alignment,” College Composition and Communication Conference (CCCC), Chicago, IL, March 2006.
- “Connecting the Teacher Pipeline: Effective Collaborations between Community Colleges and Four-Year Institutions,” AACTE Web cast, October 25, 2005.
- “Building State Wide Partnerships for Student Success,” AAC&U General Education Meeting, Atlanta, GA, February 2005.
- “Developing Education Partnerships with Community Colleges,” AACTE National Conference, Washington, DC, February 2005.
- “Faculty Roles in Alignment of Learning Across College Levels, Program, and Disciplines,” Achieving Greater Expectation Conference, AAC&U Conference, November 2003.
- “When Students Cross Boundaries, Teachers Cross Boundaries: Transferring General Education Outcomes Between Two-year and Four Year Colleges,” American Association for Higher Education (AAHE) National Conference, March 2002.
- “Improving Educational Access and Success,” Education Trust National Conference, November 2001.
- “Quantitative Literacy and the Maryland Bridge Goals Alignment Project,” K-16 States Conference, July 2001.
- “Attracting and Retaining Quality Teachers,” Leadership Maryland Education Session, May 2001.

- “Synergy that Promotes Change: Educators, Legislators, and Concerned Citizens Collaborating to Improve College Access and Success,” AAHE National Conference on Higher Education, March 2001.
- “Best Practices in General Education: Using Learning Communities,” AAC&U Network for Academic Renewal Conference, February 2001.
- “Closing the Gap: K-16 Work in Maryland,” Education Trust Annual Conference, November 2000.
- “Crossing Borders, Creating Interfaces: Articulating High School and College Writing in Ways that Work,” CCC Conference, April 2000.
- “Honors Programs and Diversity,” AAHE National Conference, Anaheim, CA, March 2000.
- “Rewarding Faculty for Work with Schools,” AAHE Faculty Roles and Rewards Conference, New Orleans, February 2000.
- “Anticipating Changes in K-16 Education: Toward New Curricular Connections,” AAC&U Annual Meeting, January, 2000.
- “Expanding Access and Supporting Success in University Honors Programs,” AAHE National Conference, Anaheim, CA, March 2000.
- “Undergraduate Programming and the Alliance of Education and the Disciplines,” Coalition of Urban and Metropolitan Universities Sixth Annual Conference, Boise, ID, October, 1999.
- “It Takes a University to Educate a Teacher,” AAHE National Conference, Washington DC, March, 1999.
- “Thinking Locally, Acting Globally: Crossing Institutional Boundaries in General Education,” AAC&U National Conference, San Francisco, CA, January 1999.
- “State-wide K-16 Initiatives,” Education Trust National Conference, Washington, D.C., November 1998.
- “Discovery Projects: Habits of Mind,” CCC Conference, Chicago, IL, April 1998.
- “Creating a Statewide K-16 Partnership,” AAHE National Conference, Atlanta, GA, March 1998.
- “College Park Scholars: A learning community for faculty and students,” Fifth Annual Conference on Residential Learning Communities, Tempe, AZ, April 1997.
- “Service Learning in University Writing Courses,” CCC Conference, Phoenix, AZ, March 1997.
- “Making the Big Store Small: The multiple roles of writing in the creation of learning communities,” CCC Conference, Phoenix, AZ, March 1997.
- “Transforming Communities: Making Our Way to New Living/Learning Environments,” American College Personnel Association (ACPA), Baltimore, MD, March 1996.
- “Annotated Syllabi and Assignments: Junior-Senior Faculty Pairs,” CCC Conference, Washington, D.C. March 1995.
- “Composition Pedagogy and Literary Studies: Learning to Teach and Teaching to Learn.” CCC Conference, Nashville, TN, March 1994.
- “Extending the Conversation about Faculty Roles and Rewards,” Second AAHE Annual Conference on Faculty Roles and Rewards, New Orleans, LA, January 1994.

- “Student Ethnographies of Professional Culture: Research as Writing Pedagogy,” Penn State Conference on Rhetoric and Composition, July 1993.
- “Community College Transfers: Are First-Year Students Receiving Equivalent Writing Courses?” CCC Conference, San Diego, CA, March 1993.
- “Using Scenarios in the Professional Development of Writing Teachers,” NCTE Annual Convention, Louisville, KY, November 1992.
- “Using Scenarios to Train Teachers of Composition,” Penn State Conference on Rhetoric and Composition, July 1992.
- “Uses and Abuses of Multicultural Readings in Composition Classes,” CCC Conference, Cincinnati, March 1992.
- “Using Multicultural Readers in Composition Classes,” Penn State Conference on Rhetoric and Composition, University Park, PA, July 1991.
- “Rereading Multicultural Readers: What Definition of Multicultural Are We Buying?” University of Hawaii Conference on Academic Literacies in Multicultural Higher Education, Honolulu, HI, April 1991.
- “Contextualizing Grammar,” Alliance of Undergraduate Education Writing Group, Chicago, IL, June 1990.
- “Planning a Longitudinal Study of the Development of Writing Abilities in College Students,” Penn State Conference on Rhetoric and Composition, University Park, PA, July 1990.
- “Program Evaluation, Assessment, and Accountability--Where Do We Go From Here?” CCC Conference, with Grant-Davie, K. Chicago, IL, March 1990.
- “Results of a Survey of On-the-Job Writing Practices of University of Maryland Graduates,” Third Annual President's Forum on Writing, UMBC, with Grant-Davie, K. Baltimore, MD, December 1988.
- “Teaching in Non-Academic Settings: The Cognitive Development of the Writing Teacher,” Penn State Conference on Rhetoric and Composition, University Park, PA, July 1987.
- “Curing the Nervous Tick: Reader-Based Response to Student Writing,” CCC Conference, with Grant-Davie, K. Atlanta, GA, March 1987.
- “What Does It Mean to Read Student Writing?” Penn State Conference on Rhetoric and Composition, with Grant-Davie, K. University Park, PA, July 1986.
- “Finding a Frame of Reference Toward an Analysis of Contextual Elaboration in College Student Writing,” CCC Conference, New Orleans, LA, March 1986.
- “Routines of Beginning Teachers: Relationships with Methodological Repertoire and Teaching Performance,” with McCaleb J. and Neagoy, M. AERA Conference, Chicago, IL, April 1985.
- “Rhetorical Maturity and Perry's Scheme of Cognitive Complexity,” CCC Conference, Minneapolis, MN, March 1985.
- “Rhetorical Maturity, Context Independence and Cognitive Development in College Student Writing,” Penn State Conference on Rhetoric and Composition, University Park, PA, July 1984.

OTHER PUBLICATIONS

C-Standard for English Composition, USM K-16 Work Group, Sponsored by the Pew Charitable Trusts, 1998.

College Park Scholars View Book, College Park Scholars, University of Maryland, 1994, 1995, 1996, 1997.

Freshman Writing Program TA Handbook, English Department, University of Maryland, 1992.

A Study of Graduates of Teacher Education Programs 1983-84. (with J. McCaleb) College of Education, University of Maryland, College Park, 1985.

Selected Entry Level Training—Business and Technical Writing, Participant Manual. United States General Accounting Office, Washington D C, 1987.

CONSULTATIONS

Office of Science and Technology Policy (OSTP), White House, April 2016, Washington, DC.

APLU, NSEC (Network of STEM Education Centers), External Evaluator (2016-2019), Washington, DC.

National Academy of Sciences, Improving the Undergraduate STEM Experience, (2014), Washington, DC.

College Board, Advocacy and Policy Center Affinity Network (2011-2013), Washington, DC.

APLU, Science Mathematics Teacher Initiative: Analytic Framework Evaluator (2008-9), Washington, DC.

Louisiana Governor's Blue Ribbon Education Commission, Invited Presenter, April 10, 2008, Baton Rouge.

Geneticist-Educator Network of Alliances (GENA) Advisory Board, March 31, 2008, Bethesda, Maryland.

Learning Communities Research and Practice, Evergreen College (Editorial Board member)

NASULGC, Science and Mathematics Teacher Initiative, Advisory Board, June 7, 2007, Washington, DC.

University of Buffalo, Undergraduate Education Reform Strategic Planning, January 2006.

National Science Foundation, Site Visit Evaluation Team, University of Wisconsin, Madison (2003); Math Science Partnership Evaluation Conference, (2004).

National Academies of Science: Math Science Partnership Workshops, 2003-4.

Louisiana State Board of Regents, Expert Testimony on Associate of Arts of Teaching, November 2003

NCATE Board of Examiners Accreditation Reviews: California State University, Los Angeles (2004); Winthrop University, Rock Hill, SC (2003); University of Massachusetts, Amherst, (2001).

Consultant, National Science Foundation Math Science Partnerships Workshop, Columbus, Ohio, October 2003.

Consultant, Learning Communities Workshops, Gallaudet University, September 2003; Carroll Community College, April 2003; Montgomery College January 2003.

New Mexico State Legislature, Education Committee, Expert Testimony on K-16 Partnerships, November 2001.

“Addressing Policy Changes in Teacher Preparation from the Ground Up,” American Council on Education (ACE), Toolkit Meeting for Campus Leaders, April 2001.

University of Illinois, Urbana Champaign, Leader of External Review Team Study of Campus-wide Learning Communities, April 18-20, 2001.

ACE Task Force on Teacher Education, Washington DC, March 2001.

Education Commission of the States (ECS), Consultant, Philadelphia, PA; Little Rock, AK, Austin, TX. 2000-01.

“Learning Communities: Creating a Union of Students, Teachers, and Disciplines,” Workshop at AAHE National Conference, Anaheim, CA, March 2000.

Wright State University, Consultant for Learning Communities Campus Workshop, February 2000.

Southwest Missouri State University, Teacher Education Consultant, October 1999.

“Rethinking Teacher Education,” Center for Creative Leadership, Durham, NC, February 1998.

“Disseminating Discovery Projects,” Workshops supported by FIPSE, June 1998.

University of Iowa, Consultant to Vice President for Student Affairs, Five-year Review Team, November 1997.

University of Pittsburgh, Consultant to Vice Chancellor for Student Affairs, Creating a Residential Living Learning Center, 1996.

“Using Service Learning as a Model for Experiential Education,” UMCP Center for Teaching Excellence, 1996.

“Creating Discovery Projects across the Disciplines,” UMCP Center for Teaching Excellence, UMCP Workshops 1996-97.

“Teaching as Revision: A Workshop on Teaching Portfolios,” CCCC, Washington, DC, March 1995.

Consultant to Ecuador Higher Education Center for Teaching Excellence, Using Textbooks in Translation: Active Learning Strategies, 1994.

“The Discourse of Reflection: Using Teaching Portfolios to Improve and Assess Instruction,” NCTE Workshop, National Council of Teachers of English Conference, Orlando, FL, November 1994.

“Writing in CORE Courses”, Workshop for American Studies, April 1994.

“Incorporating Writing into Large Lecture Classes,” Center for Teaching Excellence, UMCP, Workshop, March 1994.

“Responding to Student Writing: Coaching or Judging?” Center for Teaching Excellence, UMCP Workshop, April 1993.

United States Government General Accounting Office (GAO) *Producing Organized Writing and Effective Reviewing (POWER), and Selected Entry Level Training (SELT)*, Washington, DC. 1986-87.

SERVICE AT UNIVERSITY OF MARYLAND AND UNIVERSITY SYSTEM

TLPL Search Committee (multiple positions)

Towson University Education Dean Search Committee, External Advisory Group

Chair, Advisory Council for Kirwan Center for Academic Innovation, University System of Maryland

Academic Affairs Advisory Council, University System of Maryland

Vice Chancellor Search Committee, University System of Maryland

Presidential Search Committee, Salisbury State University

Steering Committee, Student Affairs Conference, Office of Vice President of Student Affairs

Advisory Council to Dean of Undergraduate Studies

Advisory Committee on Learning Communities, Dean of Undergraduate Studies

Retention 2000 Campus Conference

Freedom Seder Coordinator, Black Student Union/Hillel

Service Learning Task Force

Career Center Task Force

Professional Development Committee, Undergraduate Studies
 Search Committee, Resident Life Coordinator of Living/Learning, Office of Student Affairs
 English Department Liaison to Montgomery County School System
 Faculty Undergraduate Advisor for Letters and Sciences
 University Volunteer Speakers Bureau
 University Honors 100 Orientation
 College of Arts and Humanities MHEC Internal Review Committee, English Department
 Portfolio Project, Center for Teaching Excellence Faculty Roles/Rewards Project
 Committee on Assessment of Learning Outcomes, MHEC Middle States Review Coordinating Committee, faculty-governing committee of the English Department
 Editor, *Writing Matters*, Freshman Writing Newsletter
 English Department Teaching Committee

DISSERTATION COMMITTEES

Hall, Stephanie Michelle. *Public and Private Sector Influence on Brazilian Teacher Policy*, Dissertation Proposal, University of Maryland College Park, April, 2017.

Drummond, Lori M. *The Impact of Race to the Top on P-20 Coordination*. Dissertation Proposal, University of Maryland Baltimore County. July 31, 2014.

Frank, Jennifer V. *Expanding the Role of Maryland Community Colleges in K-12 Teacher Preparation: Benefits and Costs of Implementing the Associate of Arts in Teaching (AAT) Degree*. Doctoral Dissertation, University of Maryland, June 2014.

Lee, Zakiya S. *Educational Plans Beyond High School: Narratives of Black Males' Postsecondary Decision-Making Processes*. Doctoral Dissertation, University of Maryland, 2008.

Cooper, Michelle A. *Exploring the Relationship between Early and Later Postsecondary Educational Aspirations among Racial/Ethnic Groups*. Doctoral Dissertation, University of Maryland, 2006.

Rowan, Heather. *Predictors of Delayed College Enrollment and the Impact of Socioeconomic Status*. Doctoral Dissertation, University of Maryland, 2005.

BOARDS, COMMISSIONS, AND TASK FORCE APPOINTMENTS

Advisory Board, *100Kin10*, Washington DC (2014-present)

Baltimore's Promise, Baltimore, MD (2016)

Greater Baltimore Committee, Education (2013-present)

Maryland State Department of Education Mathematics Advisory Council (2014-present)

P-20 Teacher Education Task Force (2013-2016)

Fielding Graduate Institute, Santa Clara, CA, Executive Board of Trustees (2003-present).

Emeritus Board Member (2014-present)

Chair, Academic Affairs Committee (2009-2014)

Secretary, Executive Committee of the Board (2006)

Chair, Presidential Search Committee (2007-2008)

Editorial Board, *Learning Communities Research and Practice* (Evergreen College)[e-Journal], (2012)

Geneticist-Educator Network of Alliances (GENA) Advisory Board (2007-2009)

Commission on University Science and Mathematics Teacher Education Association of Public Land Grant Universities (APLU), Washington, DC 2007-2009

National Center for Public Policy in Higher Education, Advisory Council, Aligning Standards and Assessments, San Jose, CA March 2007

Editorial Board, *Liberal Education*, AAC&U (2003-present).

U. S. Department of Education, Title II Grant Reviewer (2002-present).

Editorial Board, *Communication Education*, (2001-present).

National Commission on Accreditation of Teacher Education, NCATE Board of Examiners, (2000-present).

Fellow, National Learning Communities Board, (2000-present).

Fellow, Pew Forum on Undergraduate Learning, (2000- present).

Maryland State Department of Education Visioning Panel, (2001-2002).

Maryland State Department of Education K-12 Assessment Advisory Council, (2002-Present).

Governor's Task Force for College Readiness, Staff Director, Teacher Education Sub-committee, (2000).

Maryland Association of Departments of Teacher Education at Community Colleges (2000-present).

Maryland State Department of Education State Teacher Education Council, (2000-Present).

AASCU, Appointed member of Task Force on Teacher Preparation Accountability and Evaluation Commission (TPAEC) (1999- 2000).

Education Trust/National Association of Systems Heads K-16 Leaders Forums (1997-2003).

U. S. Department of Education, FIPSE, Grant Reviewer, (1996-1998).

NCTE/CCCC, Nominating Committee, (1996-1997).

CASE Awards, Washington, DC, Carnegie Teaching Awards Referee (1995-1996).

Journal of College Composition and Communication, Reviewer (1993-1997).

Maryland Higher Education Commission Middle States Association Periodic Review Student Learning Outcomes Assessment Committee (1992-1993).

Center for Teaching Excellence (CTE); Faculty Associate for Writing Across the Curriculum and Graduate Assistant Teacher Training at UMCP (1992-1994).

College Composition and Communication Conference (CCCC), Committee on Professional Standards, (1992-1994).

College Composition and Communication Conference (CCCC), Proposal reviewer (1991-96).

Alliance for Undergraduate Education; Co-chair. Penn State University (1991-1995).

Association of Teachers of Advanced Composition, Chair of Bylaws Committee (1988).

Institute on Writing, Meaning, and Higher Order Reasoning, University of Chicago, Workshop Evaluator (1984-1985).

HONORS AND AWARDS

Phi Beta Kappa, Magna Cum Laude, Brandeis University, 1969.

M. Ed. with Honors, University of Delaware, 1972.

Phi Kappa Phi, University of Maryland, 1984.

Pan-Hellenic Teaching Award Nomination, University of Maryland, 1993.

Institute for Women in Higher Education Administration, Bryn Mawr College, 1996.

Summer Institute for Women in Higher Education Administration (Bryn Mawr), 1996.

University of Maryland Parents Council Outstanding Teaching Award Nomination, 1997.

Leadership Maryland, Class of 2002.

Harry S. Levitan Education Prize, Brandeis University Alumni Association, 2004

August 2017

Angela K. Henneberger

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Education

- Ph.D. 2012 University of Virginia, Educational Psychology: Applied Developmental Science
Dissertation: The Ecology of Peer Influence: From Negative to Positive
- B.S. 2006 University of Maryland, Psychology and Criminology & Criminal Justice

Experience in Higher Education

- 2016—Present Director of Research
Maryland Longitudinal Data System Center
- 2015—Present Research Assistant Professor
University of Maryland, School of Social Work (SSW)
- 2013—2014 Postdoctoral Fellow, Prevention and Methodology Training Program
Pennsylvania State University, The Prevention Research Center and The
Methodology Center
- 2012—2013 Postdoctoral Fellow, Youth-Nex
University of Virginia, Curry School of Education
- 2009—2012 Mentor, Summer Undergraduate Research Program
University of Virginia, Curry School of Education
- 2008—2012 Predoctoral Fellow, Virginia Education Sciences Training Program
University of Virginia, Curry School of Education
- 2006—2008 Research Associate
University of Pittsburgh, Department of Psychiatry
- 2005—2006 Research Assistant
University of Maryland, Center for Addictions, Personality, and Emotion
Research
- 2004—2005 Undergraduate Teaching Assistant, Introduction to Psychology
University of Maryland
- 2004—2006 Research Assistant

University of Maryland, Laboratory of Emotion, Social Processes, and Psychopathology

Courses Taught:

Spring 2017	Human Behavior and the Social Environment (SSW; Master's)
Spring 2016	Human Behavior and the Social Environment (SSW; Master's)
Spring 2011	Adolescent Development (University of Virginia; Doctoral)

Experience in Other than Higher Education

2015—2017	JBS International, Program Evaluation Subject Matter Expert
2015—2016	Baltimore's Promise, Consultant for Landscape Analysis and Asset Maps
2014	Edvance Research, Inc., Aspire High School Success Initiative, Grant Proposal Review Consultant
2012	Center for the Advanced Study of Teaching and Learning, University of Virginia, Mixed Methods Consultant and Program Evaluator
2009	Center for Rural Development and Poverty Alleviation, University of Virginia, Quantitative Statistical Consultant
2006	Child Trends, Youth Development Research Area, Intern
2006	Brook Lane Health Services, Hagerstown, MD, Tutor for high school students diagnosed with an emotional disability

Honors Received

2013—2014	Postdoctoral Fellowship, Pennsylvania State University
2012—2013	Postdoctoral Fellowship, University of Virginia
2012	Outstanding Doctoral Student Award Nominee, University of Virginia
2011	Early Career Preventionist Network Award, Society for Prevention Research
2008—2012	Predocorial Fellowship, University of Virginia
2006	Magna Cum Laude, University of Maryland

Research Support

Principal Investigator:

2019—2020	Understanding and Addressing Contextual Influences on Long-Term Educational and Career Outcomes for Children in Poverty. National Institutes of Health Loan Repayment Program (submitted November 2018).
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- 2019—2020 What are the Risk and Protective Factors Associated with the Long-Term Effects of Poverty on College and Career Outcomes? Spencer Foundation, \$35,000 (submitted November 2018).
- 2019—2020 Long Term Effects of Poverty on Educational and Career Outcomes: Providing Evidence through Enhancements to Maryland’s State Longitudinal Data System. American Educational Research Association, \$25,000 (submitted October 2018).
- 2017—2020 Maryland Longitudinal Data System Center (MLDSC). State of Maryland. (SSW sub-contract for \$1.6 million).
- 2017—2019 School-Based Prevention and Intervention Science. University of Maryland School of Social Work, \$100,000 to support a postdoctoral fellow.
- 2017—2019 Exploring Peer Selection in Adolescence: Examining Prevention Program Content and Adolescent Perspectives, University of Maryland School of Social Work, \$30,500.

Co-Principal Investigator:

- 2019—2023 Infrastructure to Expand the STEM Research Capacity of Maryland’s State Longitudinal Data System, National Science Foundation, \$10 million, (planned submission February 2019; SSW sub-contract for \$2 million).
- 2019—2022 High School Determinants of STEM College and Career Outcomes, National Science Foundation, \$1.5 million (submitted January 2018; SSW sub-contract for \$256,000).
- 2019—2021 Quantity, Quality, and Diversity in Teaching: Collaborations to Examine the Teacher Pipeline in Maryland, Institute of Education Sciences, \$400,000 (submitted August 2018; SSW sub-contract for \$37,000).

Co-Investigator:

- 2018—2022 Promise Heights: A Promise Neighborhood in West Baltimore. United States Department of Education, \$30 million.
- 2016—2017 Maryland Longitudinal Data System Center (MLDSC). State of Maryland. (SSW sub-contract for \$318,000).
- 2015—2018 Expanding MLDS Data Access and Research Capacity with Synthetic Data. Maryland State Department of Education and the Institute of Education Sciences, \$2.6 million.

2015—2016 Maryland Longitudinal Data System Center (MLDSC). State of Maryland, \$1.7 million (SSW sub-contract for \$350,000).

Fellowships:

2013—2014 Prevention and Methodology Training Postdoctoral Fellowship. National Institute on Drug Abuse (PI: Mark Greenberg).

2008—2012 Virginia Education Sciences Training Predoctoral Fellowship. Institute of Education Sciences (PI: Robert Pianta).

Publications

Articles in Refereed Journals:

Henneberger, A. K., Gest, S. D., & Zadzora, K. (in press). Preventing adolescent substance use: A content analysis of peer processes targeted within universal school-based programs. *Journal of Primary Prevention*.

Henneberger, A. K., Coffman, D. L., & Gest, S. D. (2017). The effect of having aggressive friends on aggressive behavior in childhood: Using propensity scores to strengthen causal inference. *Social Development, 26*(2), 295-309.

Henneberger, A. K., Varga, S. M., Moudy, A., & Tolan, P. H. (2016). Family functioning and high risk adolescents' aggressive behavior: Examining effects by ethnicity. *Journal of Youth and Adolescence, 45* (1), 145-155. NIHMSID: 643768

Deutsch, N. L., Reitz-Krueger, C., **Henneberger, A. K.**, Futch, V., & Lawrence, E. C. (2016). "It gave me ways to solve problems and ways to talk to people": Outcomes from a combined group and one-on-one mentoring program for early adolescent girls. *Journal of Adolescent Research*. Advance online publication. doi: 10.1177/0743558416630813.

Henneberger, A. K., Tolan, P. H., Hipwell, A. E., & Keenan, K. (2014). Delinquency in adolescent girls: Using a confluence approach to understand the influences of parents and peers. *Criminal Justice and Behavior, 41* (11), 1327-1337. doi: 10.1177/0093854814538624 PMID: PMC4235527

Henneberger, A. K., Oudekerk, B. A., Reppucci, N. D., & Odgers, C. L. (2014). Differential subtypes of offending among adolescent girls predict health and criminality in adulthood. *Criminal Justice and Behavior, 41* (2), 181-195. doi: 10.1177/0093854813500957

Keenan, K., Hipwell A. E., Babinski, D. E., Bortner, J., **Henneberger, A.**, Hinze, A. E., Klostermann, S., Rischall, M., & Sapotichne, B. (2013). Examining the developmental interface of cortisol and depression symptoms in young adolescent girls. *Psychoneuroendocrinology, 38* (10), 2291-2299. doi: 10.1016/j.psyneuen.2013.04.017 PMID: PMC3776001

- Henneberger, A. K.**, Durkee, M. I., Truong, N. N., Atkins, A. M., & Tolan, P. H. (2013). The longitudinal relationship between peer violence and popularity and delinquency in adolescent boys: Examining effects by family functioning. *Journal of Youth and Adolescence*, 42, 1651-1660. doi: 10.1007/s10964-012-9859-3 PMID: PMC4122220
- Henneberger, A. K.**, Deutsch, N. L., Lawrence, E. C., & Sovik-Johnston, A. (2013). The Young Women Leaders Program: A mentoring program targeted toward adolescent girls. *School Mental Health*, 5, 132-143. doi: 10.1007/s12310-012-9093-x
- Deutsch, N. L., Wiggins, A. Y., **Henneberger, A. K.**, & Lawrence, E. C. (2012). Combining mentoring with structured group activities: A potential after-school context for fostering relationships between girls and mentors. *The Journal of Early Adolescence*, 33(1), 44-76. doi: 10.1177/0272431612458037
- Leyton-Armakan, J., Lawrence, E., Deutsch, N., Williams, J. L., & **Henneberger, A.** (2012). Effective youth mentors: The relationship between initial characteristics of college women mentors and mentee satisfaction and outcome. *Journal of Community Psychology*, 40(8), 906-920. doi: 10.1002/jcop.21491
- Keenan, K., Hipwell, A. E., Feng, X., Rischall, M., **Henneberger, A.**, & Klostermann, S. (2010). Lack of assertion, peer victimization and risk for depression in girls: Testing a diathesis-stress model. *Journal of Adolescent Health*, 47(5), 526-528. doi: 10.1016/j.jadohealth.2010.03.01 PMID: PMC2965047
- Feng, X., Keenan, K., Hipwell, A. E., **Henneberger, A. K.**, Rischall, M. S., Butch, J., Coyne, C., & Boeldt, D., Hinze, A., & Babinski, D. (2009). Longitudinal associations between emotion regulation and depression in preadolescent girls: Moderation by the caregiving environment. *Developmental Psychology*, 45(3), 798-808. doi: 10.1037/a0014617 PMID: PMC2679182
- Keenan, K., Hipwell, A., Feng, X., Hinze, A. E., Babinski, D., Hinze, A., Rischall, M. & **Henneberger, A.** (2008). Subthreshold symptoms of depression in preadolescent girls are stable and predictive of depressive disorders. *American Academy of Child and Adolescent Psychiatry*, 47(12), 1433-1442. doi: 10.1097/CHI.0b013e3181886ab PMID: PMC2694956

Articles Under Review in Refereed Journals:

- Henneberger, A.K.**, Witzgen, H., & Preston, A. (2018). What is the causal effect of dual enrollment in improving long-term college and workforce outcomes and do effects vary for under-represented students? Manuscript submitted for publication.
- Henneberger, A.K.**, Futch, V.A., Lovegrove, P., Hafen, C.A., Maier, M., Larsen, R., & Tolan, P.H. (2018). Peer substance use norms and substance use in adolescence: The moderating role of internal assets. Manuscript submitted for publication.

Bloomfield, A., Rose, B. A., Preston, A. M., & **Henneberger, A. K.** (2018). Brain drain in Maryland: Exploring student movement from high school to postsecondary education and the workforce. Manuscript submitted for publication.

Bonnery, D., Feng, Y., **Henneberger, A.K.**, Johnson, T., Rose, B., Shaw, T., Stapleton, L.M., Woolley, M.E, & Zheng, Y. (2018). The promise and limitations of synthetic data as a strategy to expand access to state-level multi-agency longitudinal data. Manuscript submitted for publication.

Mushonga, D.R. & **Henneberger, A.K.** (2018). Protective factors associated with positive mental health among traditional and non-traditional black college students. Manuscript submitted for publication.

Mushonga, D.R. & **Henneberger, A.K.** (2018). Why peer processes matter: Promoting healthy youth development across contexts through racial/ethnic socialization. Manuscript submitted for publication.

Mushonga, D.R. & **Henneberger, A.K.** (2018). A strengths based approach to understanding positive mental health in college students. Manuscript submitted for publication.

Uretsky, M.C., Shipe, S., & **Henneberger, A.K.** (2018). Upstream predictors of the need for developmental education among first-year community college students. Manuscript submitted for publication.

Articles in Progress for Refereed Journals:

Henneberger, A.K., Mushonga, D., & Quito, E. (2018). Peer selection and adolescent substance use: A review of the social network analytic research. Manuscript in progress.

Henneberger, A.K., Mushonga, D., & Quito, E. (2018). Targeting peer selection in universal school based prevention programs: Current approaches and future directions. Manuscript in progress.

Henneberger, A.K., Rose, B., Zheng, Y., Feng, Y., Johnson, T., & Stapleton, L.M. (2018). Prevalence of multiple membership in a statewide longitudinal data system. Manuscript in progress.

Henneberger, A.K., Mushonga, D., & Quito, E. (2018). I Am College Ready Solutions: A qualitative study of a peer mentoring program to improve college and career outcomes. Manuscript in progress.

Henneberger, A.K., Rose, B., Mushonga, D., & Preston, A. (2018). Student and school-level poverty: What are the long-term consequences for college and workforce outcomes? Manuscript in progress.

Uretsky, M.C., & **Henneberger, A.K.** (2018). Persisting past non-completion: Fifth year outcomes for high school persisters and dropouts. Manuscript in progress.

Book Chapters:

Henneberger, A.K. (2017). Friends and peers. In K. Peppler (Ed.), *The encyclopedia of out-of-school learning*. Thousand Oaks, CA: Sage Publications.

Deutsch, N. L., Lawrence, E., & **Henneberger, A.** (2013). Social class. In D. DuBois & M. Karcher (Eds.), *The handbook of youth mentoring* (2nd ed.), pp. 175-189. Thousand Oaks, CA: Sage Publications.

Policy Reports:

Henneberger, A.K., Rose, B., Mushonga, D., Nam, B., & Preston, A. (forthcoming). Student and school-level concentrated poverty in Maryland: What are the long-term consequences for high school, college, and workforce outcomes? Baltimore, MD: Maryland Longitudinal Data System Center.

Henneberger, A.K., Uretsky, M., Preston, A., & Shipe, S. (2018). Remedial coursework in Maryland community colleges: Disentangling individual and high school level predictors. Baltimore, MD: Maryland Longitudinal Data System Center.

Henneberger, A.K., Witzten, H., & Preston, A. (2018). Dual enrollment in Maryland: What are the causal effects on college and workforce outcomes and do effects vary by student subgroup? Baltimore, MD: Maryland Longitudinal Data System Center.

Bloomfield, A., Rose, B.A., Preston, A.M., & **Henneberger, A.K.** (2018). Brain drain in Maryland: Exploring student movement from high school to postsecondary education and the workforce. Baltimore, MD: Maryland Longitudinal Data System Center.

Shaw, T.V., Klumpner, S., & **Henneberger, A.K.** (2017). Workforce outcomes in Maryland for students who do not attend college: Patterns among students who earn a high school diploma, certificate of completion, diploma via GED, and high school non-completers. Baltimore, MD: Maryland Longitudinal Data System Center.

Henneberger, A.K., Cohen, M.K., Shipe, S.L., & Shaw, T.V. (2016). Dual Enrollment in Maryland: A Report to the General Assembly and Governor Larry Hogan. Baltimore, MD: Maryland Longitudinal Data System Center.

Henneberger, A.K., Uretsky, M. C., Klumpner, S., & Woolley, M.E. (2016). Remedial Coursework in Maryland: Examining Trends, High School Predictors, and College Outcomes. Baltimore, MD: Maryland Longitudinal Data System Center.

Uretsky, M.C., **Henneberger, A.K.**, & Woolley, M.E. (2016). High School Persisters: An Examination of College and Workforce Outcomes. Baltimore, MD: Maryland Longitudinal Data System Center.

Klein, E.L., Zheng, X., Sunderman, G.L., **Henneberger, A.K.**, Stapleton, L.M., & Woolley, M. E. (2016). Preparation and Retention of the Early Childhood Care and Education Workforce in Maryland. Baltimore, MD: Maryland Longitudinal Data System Center.

Zheng, X., Stapleton, L.M., **Henneberger, A.K.**, & Woolley, M.E. (2016). Assessing the Workforce Outcomes of Maryland Science, Technology, Engineering, and Math (STEM) Postsecondary Graduates. Baltimore, MD: Maryland Longitudinal Data System Center.

Henneberger, A.K., Shaw, T.V., Uretsky, M.C. & Woolley, M.E. (2015). Dual Enrollment in Maryland: A Report to the General Assembly and Governor Lawrence J. Hogan. Baltimore, MD: Maryland Longitudinal Data System Center.

Presentations

International Refereed Paper Presentations:

Henneberger, A.K., Feng, Y., Johnson, T., Zheng, Y., Rose, B., & Stapleton, L. (2019, April). Prevalence of multiple membership in a statewide longitudinal data system. Paper accepted for presentation in *Studies Addressing Issues Related to the Modeling of Multiple Membership Data*, annual meeting of the American Educational Research Association, Toronto.

Uretsky, M., Shipe, S., & **Henneberger, A.K.** (2019, January). Prevalence and upstream predictors of remedial education in Maryland community colleges. Oral paper presented at the annual meeting of the Society for Social Work and Research, San Francisco, CA.

Mushonga, D., Rose, B., & **Henneberger, A.K.** (2019, January). Using longitudinal data to assess long-term outcomes associated with poverty in Maryland students. Oral paper presented at the annual meeting of the Society for Social Work and Research, San Francisco, CA.

Henneberger, A.K. (2018, October). Using propensity score methods with statewide administrative data to inform education and workforce policy in Maryland. In J. Jager (Chair), *Program evaluation and identifying intervention targets via secondary data*. Paper presented at the meeting of the Society for Research on Child Development, Use of Secondary and Open Source Data conference, Phoenix, Arizona.

Lachowicz, M., Bonner, D., Feng, Y., **Henneberger, A.**, Johnson, T., Rose, B., Shaw, T., Stapleton, L., Woolley, M., & Zheng, Y. (2018, July). MLDS synthetic data project: An evaluation. In K. Thompson (Chair), *Developing multi-purpose imputed or synthetic data for official statistics*. Paper presented at the meeting of the Joint Statistical Meeting, Denver, Colorado.

Henneberger, A.K., Witzen, H., & Preston, A. (2018, May). Facilitating prevention science in education settings: An example using statewide linked longitudinal data from Maryland's education system and the workforce. In **A.K. Henneberger** (Chair), *Leveraging linked state administrative data to optimize prevention science*. Paper presented at the annual meeting of the Society for Prevention Research, Washington, DC.

Henneberger, A.K., Witzen, H., & Preston, A. (2018, April). Easing the transition from high school to college: Using statewide longitudinal data to evaluate dual enrollment

programs. In **A.K. Henneberger** (Chair), *Leveraging secondary data analysis to strengthen education interventions, practice, and policy for adolescents*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Minneapolis, Minnesota.

Uretsky, M., **Henneberger, A.K.**, & Woolley, M. (2018, January). Graduates, dropouts, and persisters: A novel approach to understanding the correlates and consequences of on-time graduation. Oral paper presented at the annual meeting of the Society for Social Work and Research, Washington, DC.

Henneberger, A.K., Klumpner, S., Uretsky, M., & Woolley, M. (2016, March). Successful transition from high school to postsecondary: Targeting policy and practice to prevent the need for remedial coursework. In **A.K. Henneberger** (Chair), *Successful transitions for at risk adolescents: Using research to inform education, child welfare, and juvenile justice policy*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Baltimore, Maryland.

Henneberger, A.K., Zheng, Y., & Coffman, D.L. (2015, March). Alcohol use as a mechanism for criminal justice involvement from adolescence into adulthood: Strengthening causal interpretations. In **A.K. Henneberger** (Chair), *Advanced longitudinal methods for the study of adolescent development: Developmental applications and practical challenges*. Paper presented at the biennial meeting of the Society for Research on Child Development, Philadelphia, Pennsylvania.

Henneberger, A.K., Gest, S.D., & Zadzora, K. (2014, May). Peer processes targeted within universal school-based substance use prevention programs. In S.D. Gest (Chair), *Applications of social network analysis to substance use prevention program development, program impact evaluation, and diffusion analysis*. Paper presented at the annual meeting of the Society for Prevention Research, Washington, DC.

Henneberger, A.K., Gest, S. D., & Coffman, D. L. (2014, May). Peer socialization of aggressive behavior in elementary school: Using propensity scores to strengthen causal inference. In **A. K. Henneberger** (Chair), *Preventing risky behavior across development: Applying innovative longitudinal methods to strengthen prevention science*. Paper presented at the annual meeting of the Society for Prevention Research, Washington, DC.

Henneberger, A. K., Gest, S. D., & Coffman, D. L. (2014, March). Peer influence on aggressive behavior in early adolescence: Strengthening causal inference. In **A. K. Henneberger** (Chair), *The development of risky behavior in adolescence: Applying innovative longitudinal methods to strengthen research and practice*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Austin, Texas.

Henneberger, A. K., Lovegrove, P., Futch, V., Maier, M., Larsen, R., & Hafen, C. as part of the team Youth-Nex Promotion Scientists. (2012, May). *De-polarizing prevention and promotion: Positive youth development and substance use in adolescence*. Paper

presented at the Society for Prevention Research Sloboda and Bukoski Cup Competition, Washington, DC.

Henneberger, A. K., Keenan, K., Tolan, P. H., & Hipwell, A. (2012, March). Delinquency in adolescent girls: Testing a confluence approach. In N. L. Deutsch (Chair), *Peers, parents, and "others": Sources and outcomes of social support in adolescence*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Vancouver, BC.

Henneberger, A. K., Lovegrove, P., Deutsch, N. L., & Futch, V. (2012, March). First line social support in adolescence. In N. L. Deutsch (Chair), *Peers, Parents, and "Others": Sources and Outcomes of Social Support in Adolescence*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Vancouver, BC.

Deutsch, N. L., Williams, J. L., **Henneberger, A. K.**, Lawrence, E., & Futch, F. (2012, March). Young women leaders: Outcomes of a group and one-on-one mentoring intervention for girls. In P. H. Tolan (Chair), *Early adolescence: Developmental opportunity for prevention of social and behavior problems*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Vancouver, BC.

Henneberger, A. K., Lovegrove, P., Jamil, F., Maier, M., & Clarke, E. as part of the team Youth-Nex Prevention Scientists. (2011, May). *Can examination of victimization help to direct prevention of suicide? A mediation model*. Paper presented at the Society for Prevention Research Sloboda and Bukoski Cup competition, Washington, DC.

Henneberger, A. K., Oudekerk, B. A., Odgers, C. L., Reppucci, N. D., & Moretti, M. M. (2011, February). *Subtypes of female offenders in adolescence: Testing the predictive validity*. In N. D. Reppucci (Chair), *Mapping heterogeneity and the transition to young adulthood among high risk girls*. Paper presented at the American Psychology-Law Society International Congress on Psychology and Law, Miami, FL.

Deutsch, N. L., **Henneberger, A.**, Wiggins, A. Y., & Lawrence, E. (2010, March). Fostering connection: mentoring groups as a context for relational development for adolescent girls and their mentors. In N. L. Deutsch (Chair), *Strength in numbers: The potential of group mentoring as an intervention for adolescents*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Philadelphia, PA.

Local Refereed Paper Presentations:

Henneberger, A.K. (2018, June). *Program evaluation in the absence of randomization: How can propensity score methods help?* Presented at the Maryland Connections Summit, Towson, MD.

Rose, B., **Henneberger, A.K.**, & Mushonga, D. (2018, June). *Making the most of FARMS data to explore effects of student and school poverty*. Presented at the Maryland Connections Summit, Towson, MD.

Henneberger, A.K. & Preston, A. (2017, August). *Dual enrollment in Maryland: Using propensity scores to strengthen program evaluation with state longitudinal data*.

Presented at the 2017 meeting of the National Center for Education Statistics Stats-DC Data Conference.

Henneberger, A.K. (2016, November). *Remedial coursework in Maryland colleges: Examining high school predictors and college outcomes*. Presented at the meeting of the Maryland Association for Institutional Research annual conference, Baltimore, MD.

Henneberger, A.K., Klumpner, S., Uretsky, M., & Woolley, M.E. (2016, June). *High school predictors of needing remedial coursework in college*. Presented at the Maryland State Department of Education Data Summit, Ellicott City, MD.

Klumpner, S., Shaw, T., & **Henneberger, A.K.** (2016, June). *Workforce outcomes in Maryland: Patterns among students by achievement level*. Presented at the Maryland State Department of Education Data Summit, Ellicott City, MD.

Uretsky, M.C., **Henneberger, A.K.**, & Woolley, M.E. (2016, June). *Correlates and consequences of on-time graduation*. Presented at the Maryland State Department of Education Data Summit, Ellicott City, MD.

Zheng, X., Woolley, M.E., **Henneberger, A.K.**, & Stapleton, L. (2016, June). *Characteristics of employment outcomes of postsecondary STEM graduates in Maryland*. Presented at the Maryland State Department of Education Data Summit, Ellicott City, MD.

Henneberger, A.K., Tolan, P.H., & Deutsch, N.L. (2012, January). *Beyond pathology: A positive youth development approach to peer influence*. Presented at the annual meeting of the Curry Research Conference, Charlottesville, VA.

Deutsch, N. L., **Henneberger, A. K.**, & Wiggins, A. Y. (2010, January). *Mixed methods madness: The theory and practice of combining quantitative and qualitative data*. Presented at the annual meeting of the Curry Research Conference, Charlottesville, VA.

International Refereed Poster Presentations:

Henneberger, A.K., Feng, Y., Johnson, T., Zheng, Y., Rose, B., & Stapleton, L. (2019, March). *Estimating attrition in school-based evaluation studies: Guidance from state longitudinal data in Maryland*. Poster accepted for presentation at the annual meeting of the Society for Research on Educational Effectiveness, Washington, DC.

Henneberger, A.K., Rose, B., & Mushonga, D. (2018, October). *Growing up in poverty: Leveraging statewide linked administrative data to examine long-term college and workforce outcomes*. Poster presented at the meeting of the Society for Research on Child Development, Use of Secondary and Open Source Data conference, Phoenix, Arizona.

Henneberger, A.K., Futch Ehrlich, V.A., Hafen, C.A., Maier, M.F., Lovegrove, P.J., Larsen, R.A., & Tolan, P. (2016, March). *Peer substance use norms and substance use in adolescence: The moderating role of internal assets*. Poster presented at the biennial meeting of the Society for Research on Adolescence, Baltimore, Maryland.

Henneberger, A.K. & Gest, S.D. (2015, May). *Targeting multiple sources of peer influence in prevention programs: A social network analytic approach*. Poster presented at the annual meeting of the Society for Prevention Research, Washington, DC.

Henneberger, A.K. & Gest, S.D. (2015, March). *Peer influence on children's academic achievement and prosocial behavior: Examining multiple sources of influence*. Poster presented at the biennial meeting of the Society for Research on Child Development, Philadelphia, Pennsylvania.

Henneberger, A. K., Coffman, D. L., & Gest, S. D. (2014, March). *The causal effect of peer socialization on prosocial behavior in early adolescence*. Poster presented at the biennial meeting of the Society for Research on Adolescence, Austin, Texas.

Henneberger, A. K., Varga, S., Moudy, A., & Tolan, P. H. (2013, May). *Targeting family-focused prevention: Examining the effect of demographic characteristics on the longitudinal relation between family functioning and aggression by high risk adolescents*. Poster presented at the annual meeting of the Society for Prevention Research, San Francisco, CA.

Henneberger, A. K., Durkee, M. I., Atkins, A., Truong, N., & Tolan, P. H. (2013, March). *Examining the moderating effects of family functioning on the relation between peer violence and popularity on boys' delinquency*. Poster presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.

Moudy, A., Varga, S. M., **Henneberger, A. K.**, & Tolan, P. H. (2011, July). *Longitudinal relation between parental monitoring and physical aggression in adolescents: Moderation by family characteristics*. Poster presented at the annual meeting of the Leadership Alliance National Symposium, Greenwich, CT.

Varga, S. M., Moudy, A., **Henneberger, A. K.**, & Tolan, P. H. (2011, July). *Longitudinal relation of family cohesion and physical aggression in adolescents: Moderation by socioeconomic status and ethnicity*. Poster presented at the annual meeting of the Leadership Alliance National Symposium, Greenwich, CT.

Henneberger, A. K., Durkee, M. I., Truong, N. N., Atkins, A. M., & Tolan, P. H. (2011, May). *Longitudinal effects of peer violence and popularity on delinquency in adolescent males: Moderation by family functioning*. Poster presented at the annual meeting of the Society for Prevention Research, Washington, DC. **Winner:** Early Career Preventionist Network Student Poster Contest.

Germain, L. J., **Henneberger, A. K.**, Lawrence, E. C., & Deutsch, N. L. (2011, April). *Risky reports: A comparison of multiple methods of labeling academic "risk" in adolescent girls*. Poster presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Atkins, A. M., Truong, N. N., **Henneberger, A. K.**, Durkee, M. I., & Tolan, P. H. (2010, July). *Longitudinal effects of family characteristics and peer delinquency on adolescent male*

delinquency. Poster presented at the annual meeting of The Leadership Alliance National Conference, East Brunswick, NJ.

Truong, N. N., Atkins, A. M., **Henneberger, A. K.**, Durkee, M. I., & Tolan, P. H. (2010, July). *Longitudinal effect of family type and popularity on adolescent male delinquency*. . Poster presented at the annual meeting of The Leadership Alliance National Conference, East Brunswick, NJ.

Henneberger, A. K. & Deutsch, N. L. (2010, June). *Promoting the social development of adolescent girls: Moderation of program effects by initial risk status*. Poster presented at the annual meeting of the Institute for Education Sciences, National Harbor, MD.

Henneberger, A. K. & Deutsch, N. L. (2010, March). *Relationship development in the context of a small mentoring group*. Poster presented at the biennial meeting of the Society for Research on Adolescence, Philadelphia, PA.

Klostermann, S., **Henneberger, A.**, Rischall, M., & Keenan, K. (2008, November). *Preadolescent precursors of suicidality in girls*. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.

Klostermann, S., Rischall, M., **Henneberger, A.**, & Keenan, K. (2008, May). *Psychosocial moderators of the effect of maternal depression on preadolescent depression*. Poster presented at the annual meeting of the Association for Psychological Science, Chicago, IL.

Feng, X., Keenan, K., Hipwell, A. E., Butch, J., **Henneberger, A. K.**, & Rischall, M. S. (2008, March). *Depression in preadolescent girls: Associations with emotionality, emotion regulation, and parenting*. Paper presented at the biennial meeting of the Society for Research on Adolescence, Chicago, IL.

Henneberger, A. K., Rischall, M. S., & Keenan, K. (2007, November). *Comorbidity of depression and anxiety symptoms in preadolescent girls*. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.

Henneberger, A. K., Rischall, M. S., & Keenan, K. (2007, August). *Parent child interactions and depression in preadolescent girls*. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Mann, M. C., **Henneberger, A. K.**, Thompson, R. T., & Blanchard, J. J. (2007, May). *Understanding affect in social anhedonia: An examination of facial expression and language*. Poster presented at the annual meeting of the Association for Psychological Science, Washington, DC.

Rischall, M. S., **Henneberger, A. K.**, Hinze, A. K., & Keenan, K. (2007, May). *Comorbidity of depression and conduct disorder symptoms in preadolescent girls*. Poster presented at the annual meeting of the Association for Psychological Science, Washington, DC.

Carreño, J. T., **Henneberger, A.**, Lank, A., Calahan, M., Leung, W., Lieth, J., Cohen, A., & Blanchard, J. J. (2006, May). *Dimensions of schizotypy and the expression of emotion: An examination of sex differences*. Poster presented at the annual meeting of the Association for Psychological Science, New York, NY.

Carreño, J. T., **Henneberger, A. K.**, & Blanchard, J. J. (2005, May). *Racial differences in schizophrenia-spectrum disorder characteristics within social anhedonics*. Poster presented at the annual meeting of the Association for Psychological Science, Los Angeles, CA.

Mann, M., **Henneberger, A.**, Thompson, R., & Blanchard, J. (2005, October). *Verbal and nonverbal expressions as indicators of social and emotional functioning among social anhedonics*. Poster presented at the annual meeting of the Society for Research in Psychopathology, Coral Gables, FL.

Legislative Testimony:

Henneberger, A.K. & Rose, B.A. (2018, August). *Poverty and long-term educational outcomes: Variation by level of school poverty, student poverty, and local school system*. Invited presentation for the Commission on Innovation and Excellence in Education, Annapolis, MD.

Henneberger, A.K. & Rose, B.A. (2018, July). *The role of concentrated poverty and race in long-term academic outcomes*. Invited presentation for the Commission on Innovation and Excellence in Education, Annapolis, MD.

Invited Presentations:

Uretsky, M.C. & **Henneberger, A.K.** (2018, November). *Remedial coursework in Maryland community colleges: Disentangling student and high school level predictors*. Invited presentation for the MLDS research series, University of Maryland School of Social Work.

Rose, B.A., Nam, B., Mushonga, D. & **Henneberger, A.K.** (2018, October). *Disentangling student and school poverty: Examining long-term educational and career outcomes in Maryland*. Invited presentation for the Ruth Young Center Research Day, University of Maryland School of Social Work.

Rose, B.A., Mushonga, D.R., & **Henneberger, A.K.** (2018, May). *Poverty and student outcomes: Disentangling the effects of student and school poverty*. Invited presentation for the MLDS research series, University of Maryland School of Social Work.

Henneberger, A.K. (2018, March). *Using propensity score methods with administrative data: An example from the Maryland Longitudinal Data System*. Invited presentation for the Morgan State Center for Excellence in Teaching and Learning, Morgan State University.

Henneberger, A.K. & Witzen, H. (2017, October). *Applying causal inference techniques to strengthen dual enrollment program evaluation research in Maryland*. Invited

presentation for the MLDS research series, University of Maryland School of Social Work.

Henneberger, A.K. (2017, February). *Dual enrollment in Maryland: Highlights from the 2016 dual enrollment report*. Invited presentation for the MLDS research series, University of Maryland School of Social Work.

Shaw, T.V., Klumpner, S., & **Henneberger A.** (2016, December). *Workforce outcomes in Maryland: Patterns among students by achievement type*. Invited presentation for the MLDS research series, University of Maryland School of Social Work.

Henneberger, A.K. (2016, October). *Remedial coursework in Maryland colleges: Examining high school predictors and college outcomes*. Invited presentation for the MLDS research series, University of Maryland School of Social Work.

Henneberger, A.K. (2016, February). *Dual enrollment in Maryland: Using data from the Maryland Longitudinal Data System to examine trends, demographics, and outcomes*. Invited presentation for the MLDS research series, University of Maryland School of Social Work.

Professional Activities

Professional Associations:

Society for Prevention Research
Society for Research on Adolescence
Society for Research on Child Development
American Educational Research Association
Society for Research on Educational Effectiveness
Society for the Teaching of Psychology
Longitudinal Data Use Research Alliance

Advisory Boards:

2018—Current	Methods for Leveraging Big Data in Prevention Science Taskforce Society for Prevention Research
2015—2016	Early Career Preventionists Network (ECPN) Steering Committee; Society for Prevention Research

Manuscript Reviews:

American Journal of Preventive Medicine; Children and Youth Services Review; Criminal Justice and Behavior; Educational Research; International Journal of Psychology; Journal of Adolescence; Journal of Social and Personal Relationships; Journal of Primary Prevention; Journal of Educational and Developmental Psychology; Prevention Science

Conference Abstract Review:

Society for Prevention Research; Abstract & Research, Policy, and Practice Thematic Review

Society for Research on Child Development; Development and Psychopathology Panel
American Educational Research Association; Out of School Time SIG
American Educational Research Association; Adolescence and Youth Development SIG
Society for Research on Adolescence; Gender and Sexuality Panel
Curry Research Conference, University of Virginia

Service

School of Social Work Service:

2017—Present Contractual and Fixed Term Faculty Review Committee
2015—2018 Social Committee

Community Service:

2015—2017 Baltimore's Promise Data Analysis Workgroup, Baltimore, MD
2013—2014 Rotary Club of State College, State College, PA
2013—2014 Rotary Youth Leadership Awards Committee, State College, PA
2008—2012 Big Brothers Big Sisters of the Central Blue Ridge, Charlottesville, VA
Big sister to a high school student; Fundraising committee
2010—2012 American Association of University Women (AAUW), Charlottesville,
VA, Founding Member; Director of Communications and Outreach; Elect
Her Campaign
2009—2012 National Eating Disorders Association Fundraising Committee,
Charlottesville, VA
2008—2009 Charlottesville/Albemarle Commission on Children and Families reading
development program, Charlottesville, VA

Advanced Statistics and Methodological Trainings Attended

2016 Synthetic Data: Balancing Confidentiality and Quality in Public Use Files,
Bureau of Labor Statistics
2015 Hierarchical Linear Models for Causal Inference, Carnegie Foundation at
Stanford University
2015 Survival Analysis, Event History Modeling, and Duration Analysis,
Berkeley, CA, ICPSR
2014 Cross-Classified and Multiple Membership Models, University of
Maryland College Park
2014 SIENA for Statistical Analysis of Social Networks: An Advanced Course,
Pennsylvania State University
2013 Intensive Longitudinal Data Analysis, Pennsylvania State University
2013 Social Network Analysis: A Second Course, Ann Arbor, MI, ICPSR
2013 Social Network Analysis: An Introduction, Ann Arbor, MI, ICPSR
2013 Missing data analysis workshop, San Francisco, CA, Society for
Prevention Research
2012 Social Network Analysis, Tampa, FL, Society for Research on Child
Development

2012 Growth Mixture Modeling Workshop, Tampa, FL, Society for Research
on Child Development
2011 What Works Clearing House Certification Training, Charlottesville, VA
2011 Missing Data Analysis, Charlottesville, VA, Institute of Education
Sciences
2011 Mixed Methods, Charlottesville, VA, Institute of Education Sciences
2011 Growth Modeling, Miami, FL, Institute of Education Sciences
2010 Cluster-Randomized Control Trials, Charlottesville, VA, Institute of
Education Sciences
2009 Data Management, Charlottesville, VA, Institute of Education Sciences

Althea

CURRICULUM VITAE

JANE ARNOLD LINCOVE

EDUCATION

Ph.D 2005 University of Southern California, Public Policy
MPP 2001 UCLA, Public Policy
BS 1995 Northwestern University, Speech

Experience in Higher Education

2016-present UMBBC, Associate Professor, Public Policy
2016-present Research Fellow, Tulane University, Economics
2014-2016 Tulane University, Associate Center Director, Economics
2014-2016 Tulane University, Research Assistant Professor, Economics
2006-2014 University of Texas at Austin, Assistant Professor, Public Policy
2005-2006 University of Texas at Austin, Postdoctoral Fellow, Public Policy

Experience in Other than Higher Education

2003-2005 Los Angeles Child Care Alliance, Policy Advisor
2001-2002 Public Works Inc., Program Coordinator
1996-1998 Development Coordinator, Para Los Niños

Honors Received

2015 Newcomb Research Fellow, Tulane University
2014 Most Helpful Professor Award
2009 Most Useful Class Award
2007 LBJ School Best New Faculty
2005 New Scholars Seminar, American Political Science Association

Research Support and/or Fellowships

2016-present \$1,000,000, Lyle Spencer Award, Researcher
2014-present \$3,000,000, Laura and John Arnold Foundation, Co-PI
2014-2015 \$10,000, Educate Texas, PI
2013-2105 \$800,000, US Department of Labor, Researcher
2012-2015 \$225,000, US Dept. of Education Investing in Innovation(i3) Fund, PI
2013-2014 \$50,000, Texas Higher Education Coordinating Board, PI
2010-2012 \$2,500,000, Texas Education Agency, PI
2010-2014 \$16,000, Stephen H. Spurr Centennial Fellow, PI
2010-2012 \$45,000, Spencer Foundation/Nat'l Academy of Education, Postdoc Fellow
2007-2009 \$15,000, Univ. of Texas Policy Research Institute, PI
2007-2008 \$1,000, New Faculty Fellowship, PI
2005-2008 \$25,000, Texas Health and Human Services Commission, Co-PI
2005-2008 \$750,000, Texas Health and Human Services Commission, Co-PI
2005-2006 \$5,000, UT Policy Research Institute, PI

PhD Students

Erin Stauder (in progress), PhD Public Policy, member
Beth Arman (in progress), PhD Public Policy, chair
Anthony Lane (in progress), PhD Public Policy, member
Delana Gregg (PhD comps), PhD LLC, member
Anne Kellogg (committee forming), PhD Public Policy, chair
Amanda Koch (committee forming), PhD Public Policy, chair
David Sears (committee forming), PhD Public Policy, member
Whitney Ruble, 2016, PhD economics, member, Tulane University
Matt Farber, 2016, PhD economics, member, UT-Austin
Greg Cumpton, 2016, PhD public policy, chair, UT-Austin
Jenna Cullinane, 2016, PhD public policy, chair, UT-Austin
Kelty Garbee, 2016, PhD educational administration, member, UT-Austin
Elizabeth Barkowski, 2012, PhD education policy, member, UT-Austin
Gloria Lenoir, 2011, PhD education policy, member, UT-Austin
Shannon Stackhouse, 2009, PhD education policy, chair, UT-Austin
John Gasko, 2008, PhD education policy, member, UT-Austin

Masters Students

Shelby Carvalho, 2015, MPP, chair, UT-Austin
William Atkins, 2014, MPP, chair, UT-Austin
Michael Franco, 2013, MPP, chair, UT-Austin
Katherine Dochen, 2012, MPP, chair, UT-Austin
Greg Pardo, 2012, MPP, chair, UT-Austin
Bonnie Doty, 2012, MPP, chair, UT-Austin
Martha Bloem, 2011, MPP, chair, UT-Austin
Katherine Rodriguez, 2010, MPP, UT-Austin
Rachel Veron, 2010, MPP, chair, UT-Austin
Jenna Cullinane, 2010, MPP, chair, UT-Austin
Abbey Goldstein, 2009, MPP, chair, UT-Austin
Susannah Hansen, 2009, MPP, chair UT-Austin
Lindsay Perlmutter, 2009, MPP, chair, UT-Austin
Priscilla Aquino-Garza, 2008, MPP, chair, UT-Austin
John Dooley, 2007, MPP, chair, UT-Austin

Undergraduate Students

Shelby Carvalho, departmental honors thesis, 2010-2011, chair, UT Austin
Daniel Tesfay, departmental honors thesis, 2008-2009, chair, UT Austin

PUBLICATIONS, PRESENTATIONS, AND CREATIVE WORKS**Publications****Peer-reviewed works**

Lincove, Jane Arnold, Barrett, Nathan, and Strunk, Katharine O. (accepted for publication) Lessons from Hurricane Katrina: The Employment Effects of the Mass Dismissal of New Orleans Teachers. *Educational Researcher*.

Walsh, Julie A., Bush-Mecenas, Susan, Strunk, Katharine O., **Lincove, Jane Arnold**, and Huguet, Alice (accepted for publication & available on-line). Evaluating Teachers in the Big Easy: How Organizational Context Shapes Policy Responses in New Orleans. *Educational Evaluation and Policy Analysis*.

Lincove, Jane Arnold, Cowen, Joshua, and Imbrogno, Jason (accepted for publication & available on-line). What's in Your Portfolio? How Parents Rank Traditional Public, Private, and Charter Schools in Post-Katrina New Orleans' Citywide System of School Choice. *Education Finance and Policy*.

Von Hippel, Paul, Osborne Cynthia, **Lincove, Jane Arnold**, Mills, Nicholas, and Bellows, Laura (2016). Teacher Quality Difference between Teacher Preparation Programs: How Big? How Reliable? Which Programs are Different? *Economics of Education Review*, 53(1), 31-45.

Black, Sandra, Cortes, Kalena, and **Lincove, Jane Arnold** (alphabetic authorship) (2016). Efficacy vs. Equity: What Happens when States Tinker with College Admissions in a Race-Blind Era? *Educational Evaluation and Policy Analysis*, 38(2), 336-363.

Lincove, Jane Arnold & Parker, Adam (2016). The Influence of Conditional Cash Transfers on Eligible Children and Their Siblings. *Education Economics*, 24(4), 352-373.

Lincove, Jane Arnold, Osborne, Cynthia, Mills, Nick, and Bellows, Laura (2015). Teacher Preparation for Profit or Prestige: Analysis of a Diverse Market for Teacher Preparation Programs. *Journal of Teacher Education*, 66(5), 415-434.

Black, Sandra, **Lincove, Jane Arnold**, Cullinane, Jenna, & Veron, Rachel (2015). Can You Leave High School Behind? *Economics of Education Review*, 46(2), 52-63.

Lincove, Jane Arnold (2015). Improving Identification of Demand-side Obstacles to Schooling: Findings from Revealed and Stated Preference Models in Two SSA Countries, *World Development*, 66(1), 69-83.

Lincove, Jane Arnold, Osborne, Cynthia, Mills, Nick, & Dillon, Amanda (2014). The Politics and Statistics of Value-Added Modeling for Accountability of Teacher Preparation Programs, *Journal of Teacher Education*, 65(1), 24-38.

Lincove, Jane Arnold (2012). The Influence of Price on School Enrollment under Uganda's Policy of Free Primary Education, *Economics of Education Review*, 31(5), 799-811.

Barczyk, Amanda N. & **Lincove, Jane Arnold** (alphabetical authorship) (2010). Cash and Counseling: A Model for Self-directed Care Programs to Empower Individuals with Serious Mental Illnesses. *Social Work in Mental Health*, 8(3), 209-224.

Lincove, Jane Arnold (2009). Determinants of Schooling for Boys and Girls in Nigeria under a Policy of Free Primary Education. *Economics Education Review*, 28(40), 474-484.

Lincove, Jane Arnold (2009). Are Markets Good for Girls? The World Bank and Neoliberal Education Reforms in Developing Countries. *Whitehead Journal of Diplomacy*, 10(1), 59-76.

Lincove, Jane Arnold (2008). Growth, Girls' Education, and Female Labor: A Longitudinal Analysis, *Journal of Developing Areas*, 41(2), 45-68.

Lincove, Jane Arnold (2006). Efficiency, Equity and Girls' Education, *Public Administration and Development*, 26, 339-357.

Lincove, Jane Arnold & Painter, Gary (alphabetical authorship). (2006) Does the Age that Children Start Kindergarten Matter? Evidence of Long-Term Educational and Social Outcomes. *Educational Evaluation and Policy Analysis*, 28(2), 153-179.

Non-peer-reviewed works

Cortes, Kalena and Lincove, Jane Arnold (alphabetical authorship) (2016). Can Admissions Percent Plans Lead to Better Collegiate Fit for Minority Students? *American Economic Review: Papers & Proceedings*, 106(5): 348-354

Lincove, Jane Arnold and Cortes, Kalena (2016). Match or Mismatch? Automatic Admissions and College Preferences of Low- and High-Income Students. NBER Working Paper #22559. National Bureau of Economic Research.

Black, Sandra, Cortes, Kalena, and **Lincove, Jane Arnold** (alphabetical authorship) (2015). Academic Undermatching of High-Achieving Minority Students: Evidence from "Race-Neutral" and Holistic Admissions Policies. *American Economic Review: Papers & Proceedings*, 105(5), 604-610.

Arce-Trigatti, Paula, Harris, Doug, Jabbar, Huriya, and **Lincove, Jane Arnold** (2015). Many Options in New Orleans Choice System. *Education Next*, 15(4).

Black, Sandra E., Cortes, Kalena, and **Lincove, Jane Arnold** (alphabetical authorship) (2015). Apply Yourself: Racial Differences in College Application Behavior. NBER Working Paper #21368. National Bureau of Economic Research.

Lincove, Jane Arnold (2014). Access to Education. In *Encyclopedia of Education Economics and Finance*. Dominic Brewer and Lawrence Picus (Eds.) Thousand Oaks, California: SAGE Publications.

Lincove, Jane Arnold (2014). Demand for Education. In *Encyclopedia of Education Economics and Finance*. Dominic Brewer and Lawrence Picus (Eds.) Thousand Oaks, California: SAGE Publications.

Black, Sandra E., Cortes, Kalena, and **Lincove, Jane Arnold** (alphabetical authorship) (2014). Efficacy vs. Equity: What Happens When States Tinker with College Admissions in a Race-Blind Era? NBER Working Paper #20804. National Bureau of Economic Research.

Black, Sandra E., **Lincove, Jane Arnold**, Cullinane, Jenna, and Veron, Rachel (2014). Can You Leave High School Behind? NBER Working Paper #1982. National Bureau of Economic Research.

Cullinane, Jenna (primary author) & Lincove, Jane Arnold (2014). The Effect of Institutional Inputs on Time to Degree for Traditional and Non-traditional College Students. Texas Workforce Data Quality Initiative Working Paper. Ray Marshall Center, University of Texas at Austin.

Osborne, Cynthia, **Lincove, Jane Arnold.**, et.al. (2012). Technical Report: Educator Preparation Programs' Influence on Student Achievement in Texas. PEEQ Working Paper. Project on Educator Effectiveness and Quality, University of Texas at Austin.

Osborne, Cynthia, **Lincove, Jane Arnold.**, et.al. (2012). The Texas Report: Educator Preparation Programs' Influence on Student Achievement in Texas. PEEQ Working Paper. Project on Educator Effectiveness and Quality, University of Texas at Austin.

Lincove, Jane Arnold (2012). Can Teacher Incentive Pay Improve Student Performance? Evidence from a Diverse Implementation. PEEQ Working Paper. Project on Educator Effectiveness and Quality, University of Texas at Austin.

Lincove, Jane Arnold (2011). Risk Aversion and the Design of Teacher Incentive Pay. PEEQ Working Paper. Project on Educator Effectiveness and Quality, University of Texas at Austin.

Lincove, Jane Arnold (2007). Do Private Markets improve the quality or quantity of primary schooling in Sub-Saharan Africa? Occasional Paper No. 136. National Center for the Study of Privatization in Education. New York, NY.

Lincove, Jane Arnold (2007). Do Private Markets improve the quality or quantity of primary schooling in Sub-Saharan Africa? USAID EdData Working Paper.

Lincove, Jane Arnold (2006). The Effect of Costs on Primary Schooling for Boys and Girls in Nigeria. USAID EdData Working Paper.

Works submitted or in preparation

Lincove, Jane Arnold, Valant, Jon, and Cowen Joshua M. You Can't Always Get What You Want: Capacity Constraints in a Choice-Based School System (submitted)

Black, Sandra, Cortes, Kalena, and Lincove, Jane. Apply Yourself: Racial Differences in College Application Behavior (submitted)

Strunk, Katharine, Barrett, Nathan, and Lincove, Jane Arnold. When Tenure Ends: The Short-run Effects of the Elimination of Louisiana's Teacher Employment Protections on Teach Exit and Retirement (submitted)

Arce-Trigatti, Paula, Lincove, Jane, Harris, Doug, and Jabbar, Huriya. Is There Choice in School Choice? (submitted)

Lincove, Jane Arnold and Cortes, Kalena. Match or Mismatch? Automatic Admissions and College Preferences of Low- and High-Income Students (submitted)

Lincove, Jane Arnold, Barrett, Nathan, and Strunk, Katharine. Revisiting the Hedonic Wage Function for Teachers: Evidence from Non-Unionized Charter Schools (in preparation)

Lincove, Jane Arnold, Barrett, Nathan, and Strunk, Katharine. Overworked or Underpaid: Principal Compensation in Charter Schools (in preparation)

Lincove, Jane Arnold, Carlson, Deven, and Barrett, Nathan. System-Wide Effects of Decentralization on School Staffing: Evidence from New Orleans (in preparation)

Presentations**Conference/Poster Presentations (juried)**

"System-Wide Effects of Decentralization on School Staffing: Evidence from New Orleans," APPAM, Chicago, Illinois, November 2017 (accepted for presentation).

"Transportation in School Choice Cities" AEFPP, Washington, D.C., March 2017.

"Overworked or Underpaid: Principal Pay in Charter Schools" AEFPP, Washington, D.C., March 2017.

"Overworked or Underpaid: A Longitudinal Analysis of Principal Compensation in a Context of Increasing School Autonomy" APPAM, Washington, DC., November 2016.

"When Tenure Ends: The Short-run Effects of the Elimination of Louisiana's Teacher Employment Protections on Teacher Exit and Retirement" APPAM, Washington, DC., November 2016.

"Revisiting a Hedonic Wage Function for Teachers: Charter Schools and Compensating Differentials." AEFPP, Denver, Colorado, March 2016.

“Match or Mismatch: The Role of College Readiness, High School Peers, and Admissions Uncertainty in College Application and Enrollment Behavior.” APPAM, Miami, Florida, November 2015.

“Revisiting a Hedonic Wage Function for Teachers: Charter Schools and Compensating Differentials.” APPAM, Miami, Florida, November 2015.

“Revisiting a Hedonic Wage Function for Teachers: Charter Schools and Compensating Differentials.” SEA, New Orleans, Louisiana, November 2015.

“You Have to Apply Yourself: Racial and Ethnic Differences in College Application.” AEFPP, Washington, DC, February 2015.

“Is There Choice in School Choice? Differences and Similarities in New Orleans Charter Schools.” International Conference on School Choice Research, Ft. Lauderdale, Florida, January 2015.

“You Have to Apply Yourself: Racial and Ethnic Differences in College Application” SEA, Atlanta, Georgia, 2014

“You Have to Apply Yourself: Racial and Ethnic Differences in College Application.” APPAM, Albuquerque, New Mexico, November 2014

“Tests, Courses, or High Schools: Predicting College Success with College Readiness Measures.” AEFPP, San Antonio, Texas, March 2014

“Training Teachers for Profit or Prestige.” AEFPP, San Antonio, Texas, March 2014.

“The Bumpy Path to College Graduation.” APPAM, Washington, DC, November 2013.

“Can You Leave High School Behind?” AERA, San Francisco, California, April 2013.

“The Politics and Statistics of Value-added Modeling for Accountability.” AEFPP, New Orleans, Louisiana, March 2013.

“District Choices for Teacher Incentive Pay and the Implications for Equity and Achievement.” APPAM, Baltimore, MD, November 2012

“Can Teacher Incentive Pay Improve Student Performance on Standardized Tests?” AEFPP, Boston, MA, March 2012.

“Can Teacher Incentive Pay Improve Student Performance on Standardized Tests?” APPAM, Washington, DC, November 2011.

“Designing Teacher Incentive Pay Contracts: Evidence from the Texas DATE Program.” AERA, New Orleans, Louisiana, April 2011.

“Risk Aversion and the Design of Teacher Incentive Pay.” AERA, Denver, Colorado, April 2010.

“School District Preferences and Teacher Incentive Pay.” APPAM, Washington, DC, November 2009.

“Why are Children out of School Under Free Primary Education Policies: A Comparison of Two SSA Countries.” CIES, Charleston, South Carolina, October 2009.

“The Distributional Effects of Free Primary Education in Uganda.” APPAM, Washington, DC, November 2007.

“Private Education Markets and Universal Primary Education Policy in Four SSA Countries.” APPAM, Madison, Wisconsin, November 2006.

Conference/Poster Presentations (invited, not juried)

“Explaining Racial Gaps in College Application Choices.” Federal Reserve Bank, Washington, DC, October 2015.

“Competition Between Public, Private, and Charter Schools.” The Urban Education Future: Lessons from New Orleans 10 Years after Hurricane Katrina, New Orleans, Louisiana, June 2015.

“Can Teacher Incentive Pay Improve Student Performance on Standardized Tests?” National Academy of Education, Washington, D.C., November 2010

“Lessons from Teacher Incentive Pay in Texas.” SEDL, Austin, Texas, August 2010

Other Professional Presentations

Invited Seminars and Colloquia

“The Teaching Profession in the Era of School Reform,” Tulane University. Invited panelist. June 2017.

“Match or Mismatch?” UMBC School of Psychology Doctoral Seminar, Baltimore, MD, April 2017.

“Overworked or Underpaid: How Charter Schools Compensate Principals.” UMBC Economics and Policy Seminar Series, Baltimore, MD, December 2016.

“Revisiting a Hedonic Wage Function for Teachers: Charter Schools and Compensating Differentials.” Murphy Institute Policy Working Group Seminar, December 2015.

“A 10-year Follow-up on Pre-Katrina Teachers’ Employment Outcomes.” Education Research Alliance for New Orleans, Policy Brown Bag, December 2015.

“Training Teachers for Profit or Prestige.” University of Houston, Education Policy Seminar, Houston, Texas, March 2015.

“Is There Choice in School Choice? Differences and Similarities in New Orleans Charter Schools.” Education Research Alliance for New Orleans, Policy Brown Bag, January 2015.

“Demand-side Obstacles to Education in Developing Countries.” IDEC – Hiroshima University, Hiroshima, Japan, January 2009

“LBJ’s Legacy in Contemporary Social Welfare Policy: Have We Come Full Circle?” LBJ Centennial Conference, Austin, Texas, October 2008.

“Women’s Education and Child Health in India.” Fulbright-Hays Seminar, Austin, Texas, June 2008.

“Is Free Equal? The Effect of Free Primary Education on Gender Parity in Nigeria and Uganda.” Women and Gender Studies New Faculty Seminar, Austin, Texas, February 2008.

SERVICE

Service at UMBC

Department

- 2017-18, member, Faculty Search Committee (health policy)
- 2016-present, member, PhD Examination Committee
- 2016-present, member, Ad Hoc Committee on Student Exam Policy
- 2016-present, member, Education Policy Track
- 2016-present, member, Evaluation Policy Track
- 2017-present, UMD School of Medicine Dual Degree Advisory Board

Service at Tulane University

University

- 2014-2016, trained faculty, Title IX Hearing Board
- 2014-2016, student mentor, Newcomb Faculty Fellows Program

Service at UT Austin

University

- 2008-2014, member, Student Fulbright Selection Committee
- 2008-2013, member, Faculty Grievance Committee
- 2011-2013, advisor, Top 10% Policy Implementation Group
- 2012-2014, member, Bridging Disciplines Program Curriculum Committee – Public Policy

Department

- 2013-2014, chair, IT Governance Committee Chair
- 2005-2015, member, Center for Health and Social Policy Executive Committee

2009-2014, chair, Specialization in Social and Economic Policy
2008, 2009, 2010, 2012, 2013, member, Graduate Admissions Committee
2010-2014, member, PhD Exam Committee
2006, 2008, member, Faculty Search Committee

Professional Service

2017-present, co-chair Human Capital and School Finance Section, *AERA*
2017-present, editorial board, *AERA Open*
2016-present, editorial board, *Educational Evaluation and Policy Analysis*
2016-present, APPAM Policy Relevance Committee
2017-present, member, Maryland Longitudinal Data System User Group
Multiple years, proposal reviewer, American Education Research Association, Division L
Multiple years, journal reviewer, Journal Review for *Journal of Labor Economics*, *Educational Evaluation and Policy Analysis*, *Sociology of Education*, *World Development*, *Economics of Education Review*, *Social Science Quarterly*, *Journal of Developing Areas*, *Public Administration and Development*, *Science*, and others

Community Service

2017-present, Parent Teacher Organizations, Mount Washington School (BCPS)
2015-present, steering committee, New Orleans Educational Equity Index
2012-2014, advisory board, Maplewood Elementary School
2012-2015, advisor, Texas Higher Education Coordinating Board
2010-2014, advisor, Texas Education Agency

DAVID BLAZAR

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Updated August 2017

EDUCATION

Harvard Graduate School of Education

Ed.D. in Quantitative Policy Analysis in Education (economics) 2016

Ed.M. in Education Policy and Management 2011

Harvard College

A.B. in History and Literature (Cum Laude) 2006

PROFESSIONAL EXPERIENCE

University of Maryland College Park

Assistant Professor of Education Policy and Economics, *College of Education* 2017 – present

Harvard University

Postdoctoral Research Fellow, *Graduate School of Education* 2016 – 2017

Lecturer in Education, *Graduate School of Education and Kennedy School of Government* 2016 – 2017

Teaching Fellow, *Graduate School of Education* 2012 – 2016

Advisor, *Teacher Education Program, Graduate School of Education* 2010 – 2011

Freshmen Proctor and Academic Advisor, *Harvard College* 2010 – 2017

High School for International Business and Finance, New York City Department of Education

9th – 12th grade English Language Arts 2006 – 2009

SELECTED AWARDS AND FELLOWSHIPS

Jean Flanigan Outstanding Dissertation Award, *Association for Education Finance and Policy* 2017

Dissertation Fellowship, *Mathematica Policy Research* 2015

Finalist for Spencer Dissertation Fellowship, *National Academy of Education* 2015

Emerging Education Policy Scholar, *Thomas B. Fordham Institute* 2015

Pforzheimer Fellowship for Public Service, *Harvard University* 2010, 2011

PUBLICATIONS

Peer-Reviewed Journal Articles

Kraft, M. A., & Blazar, D. (Forthcoming; online 2016). Improving teachers' practice across grades and subjects: Experimental evidence on individualized teacher coaching. *Educational Policy*.

- Blazar, D., Braslow, D., Charalambous, C. Y., & Hill, H. C. (2017). Attending to general and mathematics-specific dimensions of teaching: Exploring factors across two observation instruments. *Educational Assessment, 22*(2), 71-94.
- Blazar, D. & Kraft, M. A. (2017). Teacher and teaching effects on students' attitudes and behaviors. *Educational Evaluation and Policy Analysis, 39*(1), 146-170.
- Lynch, K., Chin, M., & Blazar, D. (2017). Relationship between observations of elementary teacher mathematics instruction and student achievement: Exploring variability across districts. *American Journal of Education, 123*(4), 615-646.
- Blazar, D., Litke, E., & Barmore, J. (2016). What does it mean to be ranked a "high" or "low" value-added teacher? Observing differences in instructional quality across districts. *American Educational Research Journal, 53*(2), 324-359.
- Blazar, D. (2015). Effective teaching in elementary mathematics: Identifying classroom practices that support student achievement. *Economics of Education Review, 48*, 16-29.
- Blazar, D. (2015). Grade assignments and the teacher pipeline: A low-cost lever to improve student achievement? *Educational Researcher, 44*(4), 213-227.
- Blazar, D., & Kraft, M. A. (2015). Exploring mechanisms of effective teacher coaching: A tale of two cohorts from a randomized experiment. *Educational Evaluation and Policy Analysis, 37*(4), 542-566.
- Hill, H. C., Blazar, D., & Lynch, K. (2015). Resources for teaching: Examining personal and institutional predictors of high-quality instruction. *AERA Open, 1*(4), 1-23.
- Hill, H. C., Charalambous, C. Y., Blazar, D., McGinn, D., Beisiegel, M., Humez, A., Kraft, M., Litke, E., & Lynch, K. (2012). Validating arguments for observational instruments: Attending to multiple sources of variation. *Educational Assessment, 17*(2-3), 88-106.
- Blazar, D. (2011). Using theatre to engage cultural identity: Implications for students and teachers. *English Education, 43*(3), 294-304.
- Blazar, D. (2009). Self-discovery through character connections: Opening up to gayness in *Angels in America*. *English Journal, 98*(4), 77-84.

Papers Under Review

- Blazar, D. Validating teacher effects on students' attitudes and behaviors: Evidence from random assignment of teachers to students (*Education Finance and Policy*, invited revise and resubmit).
- Blazar, D., Gilbert, B., Herlihy, C., Gogolen, C. Exploring the potential for video-based classroom observations.
- Blazar, D. & Pollard, C. Does test preparation mean low-quality instruction? (*Educational Researcher*, conditionally accepted).

Kraft, M. A., Blazar, D., & Hogan, D. The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. (*Review of Educational Research*, invited revise and resubmit).

Work in Progress

Blazar, D., Kane, T. J., & Thal, D. Does video technology improve the classroom observation process? Results from a randomized experiment.

Blazar, D., & Kraft, M. A. Teacher evaluation, instruction, and student achievement: Examining mechanisms to support school improvement.

Blazar, D., & Schueler, B. Why do districts matter? An interdisciplinary perspective.

Litke, E., Hill, H. C., Blazar, D., & Humez, A.. Examining high and low value-added mathematics instruction: Can expert observers tell the difference?

Other Articles

Blazar, D., & Kraft, M. A. (2016). Social and emotional skills in school: Pivoting from accountability to development. *Albert Shanker Institute Blog*.

RESEARCH FUNDING

Co-Principal Investigator. “Never Judge a Book by Its Cover,” Bill and Melinda Gates Foundation with Principal Investigator Thomas J. Kane (\$762,059; subcontract to University of Maryland \$30,588). 2016 – 2018

Principal Investigator. “Validating Teacher Effects on Non-Tested Outcomes,” Smith Richardson Foundation #20151018 with advisor Martin West (\$50,000). 2016 – 2018

Principal Investigator. “Teacher and Teaching Effects on Students’ Attitudes and Behaviors,” Albert Shanker Institute (\$2,000). 2015

Co-Principal Investigator. “Evaluating the MATCH Individualized Teacher Coaching Program,” New Schools for New Orleans with Principal Investigator Matthew A. Kraft (\$150,000). 2011 – 2015

CONFERENCE PRESENTATIONS

American Education Research Association (2013, 2014, 2015), *Association for Education Finance and Policy* (2013, 2014, 2015, 2016, 2017), *Association for Public Policy Analysis and Management* (2013, 2014, 2015, 2016), *Hawaii International Conference on Education* (2015), *Society for Research on Educational Effectiveness* (2015, 2017)

REFEREE SERVICE

AERA Open, American Educational Research Journal, Economics of Education Review, Educational Evaluation and Policy Analysis, Educational Researcher, Journal of Research on Educational Effectiveness