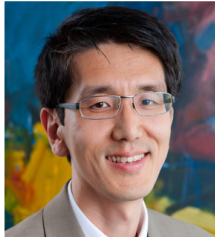


The Graduate School of Education 2015–16 RESEARCH OF DISTINCTION

[FROM THE DEAN]



Jaekyung Lee

UB's Graduate School of Education faculty pride themselves in their application of knowledge that is based in theory and informed by research. **Our experiences and active research help to instill an intellectual curiosity in our students and encourage critical inquiry.**

The research briefs described in this publication represent examples of the impactful research conducted by faculty in the Graduate School of Education at the University at Buffalo. Grounded in a variety of disciplines, these externally funded studies illustrate how our scholarly research can have a profound impact on educational practices.



Here

IS HOW SCHOLARLY
RESEARCH IS MAKING
A PROFOUND IMPACT



evaluating STEM PROGRAMS IN URBAN HIGH SCHOOLS

Science, technology, engineering and mathematics (STEM) curricula are currently a major emphasis in high schools. High quality STEM experiences are believed to help develop critical thinking skills, increase science literacy and encourage innovators. Lois Weis, SUNY Distinguished Professor, along with her colleagues are leading research studies funded by the National Science Foundation to investigate the following question:

How well are STEM programs serving non-selective urban high schools and their students?

Weis and her team examined non-selective STEM focused high schools versus comprehensive high schools that serve comparable low-income historically underrepresented minorities. The team conducted three-year participant observation research in classrooms and in-depth interviews with students, parents and educators. The research study also followed students beyond

high school to determine the impact of attending a STEM focused versus comprehensive school on STEM related outcomes such as college attendance and major.

Key findings: While educators and underrepresented minority students who attend non-selective high schools in large urban districts continue to value STEM-focused programs, the enthusiasm and effectiveness of these programs may wane over time. The factors impacting this decreasing enthusiasm and effectiveness include broad based federal and state accountability goals, class size and staffing requirements, competing reform agenda, and lack of availability of a range of key core mathematics and science courses. The findings further suggest that struggling urban schools considering a shift to a STEM-focused curriculum need to carefully consider how to navigate these intervening factors to maximize a successful transition to and sustainability of this curriculum.




Lois Weis, PhD
SUNY Distinguished
Professor, Educational
Leadership and Policy

More information about this research can be found in the following publications:

Weis, L., Eisenhart, M., Cipollone, K., Stich, A. E., Nikischer, A. B., Hanson, J., Liebrandt, S. O., Allen, C. D., & Dominguez, R. (2015). In the guise of STEM education reform: Opportunity structures and outcomes in inclusive STEM-focused high schools. *American Educational Research Journal*, 52, 1024-1059.

Eisenhart, M., Weis, L., Allen, C. D., Cipollone, K., Stich, A., & Dominguez, R. (2015). High school opportunities for STEM: Comparing inclusive STEM-focused and comprehensive high schools in two US cities. *Journal of Research in Science Teaching*, 52, 763-789.

 Hear more about this study from the researcher. Visit:

www.gse.buffalo.edu

A national study using data from the Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study-2 states:

THE RATE OF BULLY VICTIMIZATION FOR STUDENTS WITH DISABILITIES WAS:

25%
IN ELEMENTARY SCHOOL



34%
IN MIDDLE SCHOOL



27%
IN HIGH SCHOOL

bullying:

[bool-e-ing] - adj.

Any unwanted aggressive behavior(s) by another youth or group of youths who are not siblings or current dating partners that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated.

Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or education harm.

The Centers for Disease Control and Prevention (CDC) recently developed a uniform definition of bullying to gather comparable data across contexts.



protecting
THE MOST
VULNERABLE
FROM BULLYING

While bullying of youth has been described and discussed in the mainstream media for several years, little has been reported about individuals with intellectual and developmental disabilities who may be involved in bullying. A recent initiative led by the University at Buffalo's Alberti Center for Bullying Abuse Prevention director and UB Professor, Amanda Nickerson, aims to investigate this issue. Supported through a grant from the New York State Developmental Disabilities Council, Nickerson gathered information from multiple groups—parents, teachers and the students with disabilities to answer the following question:

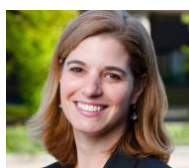
Are the issues of bullying and experiences of individuals with intellectual and developmental disabilities different from those individuals without disabilities?

A broad-based needs assessment and strategic planning effort was conducted in partnership with key stakeholders to address the needs and priorities of the New York State Developmental Disabilities Planning Council (NYS DDPC) in relation to the issue of bullying and individuals with intellectual and developmental disabilities. The project team identified several areas to investigate through surveys and focus groups. These included gathering detailed information

about bullying victimization and perpetration experiences, effects and coping, and asking stakeholders about their ideas for the types of activities that the NYS DDPC might initiate and fund to reduce bullying of and by individuals with developmental disabilities.

Key findings: There is a higher level of bullying toward individuals with disabilities as compared to individuals without disabilities. This bullying can likely be attributed to the perceived differences between those doing the bullying and those being bullied. Surprisingly, the research also suggests that bullying exists even within communities of individuals with disabilities, such as special education classrooms. On the positive side, individuals with disabilities who are bullied are empowered by the support that they receive from friends, families and teachers.

This information is key for helping the team within the Alberti Center for Bullying Abuse Prevention begin to generate solutions that address this problem and evaluate how well these changes work. This work is also having an immediate impact as the results have been shared with the New York Developmental Disabilities Council to help the state initiate changes in policy and practice that will reduce the negative effects of bullying on students with disabilities.



Amanda Nickerson, PhD
Director, Alberti Center for Bullying Abuse Prevention
Professor, Counseling, School, and Educational Psychology

More information about this research can be found in the following publications:

Cook, E. E., Nickerson, A. B., Werth, J. M., & Allen, K. P. (2016). Service providers' attributions about and responses to bullying of individuals with disabilities. *Journal of Intellectual Disabilities*. Advanced online publication. doi: 10.1177/1744629516650127

Nickerson, A. B., Allen, K. P., & Werth, J. M. (2014). *Bullying and individuals with disabilities: Needs assessment and strategic planning*. Final grant report for a study funded by the New York State Developmental Disabilities Planning Council. Available at <http://gse.buffalo.edu/gsefiles/documents/alberti/DDPC-Bullying-Prevention-Report.pdf>

Hear more about this study from the researcher. Visit:

creating STRATEGIES IN DIGITAL MUSIC PRESERVATION

The preservation of information is no longer limited to books—it includes all media such as images, sounds and video. The field of library science has responded to the changing digital age and is expanding while continuously updating its practices through research. Guillaume Boutard, assistant professor from the Department of Library and Information Sciences is studying the best way to document technology developed and used in musical compositions and performances by seeking answers to the following questions:

How does one document a professional activity in a context where boundaries are constantly challenged by technological obsolescence?

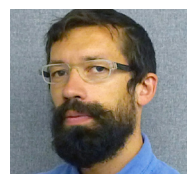
Which dimensions and strategies do performers use when transmitting and simultaneously constructing this expertise in a collaborative process?

And how does this expertise relate to other musical performances?

In his study funded by the Provincial Research Agency in Quebec, Boutard had musical performers all perform the same musical pieces involving digital technologies. The similarities and differences in the performances were then analyzed, with the goal of providing new collaborative documentation methods grounded in differences and similarities of technological uses.

Boutard's research is interdisciplinary, combining his expertise in information science with creative arts. The intended goals of Boutard's work are clear: improve collaborative methods of curation of complex digital objects. By working together across these two fields, this research may accelerate the impact of this work in the area of digital preservation and curation.

Key findings: This study provides us with a better understanding of the appropriation of live electronics by instrumentalists, the strategies for transmitting an expertise, and proposes theoretical and practical grounds for new frameworks for documenting and disseminating mixed music with live electronics. Future research in this area should investigate the convergence of qualitative and quantitative methods to help further disseminate the repertoire in relation to performance expertise, which is always in the process of co-construction.



Guillaume Boutard PhD
Assistant Professor,
Library and Information
Studies

Guillaume Boutard's research interests include digital curation and preservation; documentation methodologies for creative processes, in relation to arts and technology; and computer-supported collaborative work and learning. His interdisciplinary studies on the creative processes in contemporary music with live electronics or mixed-music have been funded by the Canadian Social Sciences and Humanities Research Council, the Quebec's Fonds de Recherche Société et Culture, as well as the Centre for Interdisciplinary Research in Music Media and Technology.

More information about this research can be found in the following publication:

Boutard, G. (2016). Solo works of mixed music with live electronics: A qualitative enquiry in timbre and gesture from the performer's perspective. *Musicae Scientiae*, 20(3), 361-391.



Hear more about this study from the researcher. Visit:

Office of the Dean
 367 Baldy Hall
 Buffalo, NY 14260-1660

RETURN SERVICE REQUESTED

**[research
 NUMBERS THAT COUNT]**

1,037

JOURNAL CITATIONS
2010-2014

53

**LOCAL K-12
 SCHOOLS
 IMPACTED**

\$3,475,229

2015-16 RESEARCH EXPENDITURES

75

**REFEREED
 ARTICLES
 PUBLISHED**

**BUFFALO
 PUBLIC
 SCHOOLS**

- Bennett High School #200
- Bennett Park Montessori #32
- Buffalo Academy for Visual and Performing Arts #192
- Build Academy #91
- Burgard High School # 301
- Dr. Charles R. Drew Science #59
- Dr. Lydia T. Wright School of Excellence #89
- East High School #307
- Emerson School of Hospitality #302
- Frederick Law Olmsted #64
- Harriet Ross Tubman School #31
- Herman Badillo Bilingual Academy #76
- Houghton Academy #69
- Hutchinson Central Technical School #304
- International School #45
- Lafayette High School #204
- Leonardo DaVinci High School #212
- Lorraine Elementary #72
- Martin Luther King Multicultural Institute #39
- Marva J. Daniel Futures Preparatory School #37
- Math Science Technology Preparatory School #197
- McKinley High School #305
- Middle Early College High School #415
- Native American Magnet School #19
- PFC. William J. Grabiarz School of Excellence #79
- Riverside Institute of Technology #205
- South Park High School #206
- Southside Elementary #93
- The International Preparatory School #198
- West Hertel Academy #94

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**HONORIFIC
 AWARDS**

- National Science Foundation Data Consortium Fellow**
Awardee: Samuel Abramovich, Assistant Professor
- Deborah A. Arundale Award for Leadership**
 New York Mental Health Counselors Association
Awardee: Kathleen Conroy, Clinical Assistant Professor
- National Academy of Education/ Spencer Postdoctoral Fellowship**
Awardee: Alexandra Dimick, Assistant Professor
- Anthony J. Papalia Award for Outstanding Article in a State or National Foreign Language Education Publication**
 New York State Association of Foreign Language Teachers
Awardee: Erin Kearney, Associate Professor
- Reviewer of the Year**
 Journal of School Psychology
Awardee: Amanda Nickerson, Professor

7

**BOOKS/
 MONOGRAPHS
 PUBLISHED**

- Mindfulness and Yoga for Self-regulation: A Primer for Mental Health Professionals**
by: Catherine Cook-Cottone, Associate Professor
- Intercultural Learning in Modern Language Education: Expanding Meaning-making Potentials**
by: Erin Kearney, Associate Professor
- The Anatomy of Achievement Gaps: Why and How American Education is Losing (but can still Win) the War on Underachievement**
by: Jaekyung Lee, Dean and Professor
- Exploring Diversity Through Multimodality, Narrative, and Dialogue: A Framework for Teacher Reflection**
by: Mary McVee, Associate Professor and Fenice Boyd, Associate Professor
- School Crisis Prevention and Intervention: The PREPaRE Model (2nd ed.)**
by: Amanda Nickerson (co-author), Professor
- Neoliberal Education Reform: Gendered Notions in Global and Local Contexts**
by: Sarah Robert, Associate Professor
- Generational Identity, Educational Change, and School Leadership**
by: Corrie Stone-Johnson, Associate Professor

**CHARTER
 SCHOOLS**

- Buffalo Maritime Center
- Buffalo United Charter School
- Charter School for Applied Technologies
- Community Charter School
- Elmwood Village Charter School
- Enterprise Charter School
- Health Sciences Charter School
- Immaculata Academy
- Oracle Charter School
- Tapestry Charter High School

**WESTERN NEW
 YORK SCHOOL
 DISTRICTS**

- Depew Elementary School
- Depew Middle School
- Depew High School
- (Sweet Home) Heritage Heights Elementary School
- (Tonawanda) Fletcher Elementary School
- (Tonawanda) Mullen Elementary School
- (Tonawanda) Riverview Elementary School
- North Tonawanda Middle/ High School

**CATTARAUGUS
 AND ALLEGANY
 SCHOOL
 DISTRICTS**

- Allegheny-Limestone High School
- Cuba-Rushford High School
- Fillmore High School
- Olean High School
- Whitesville High School