Title: Arts-Based Approaches for Enhancing Critical Thinking and Conflict Transformation Skills Among Undergraduate Students

Principle Investigator
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Funding Level Requested
Phase I

Duration of funding period
1 year
I – ABSTRACT

This research study is an extension of a previous SOTL study that involved understanding the impact of a General Education course in the Arts and Humanities: L210 Peace and Creative Conflict Transformation through the Arts. The course introduced different concepts of peace, processes of conflict transformation, and art interventions aimed at peacebuilding. Students learned these theoretical concepts and developed their own arts-based peacebuilding projects in a real community setting. Among the goals of this course, were to broaden students’ analytical and critical thinking skills for a deeper understanding of these concepts, and conflict transformation skills so they can apply these theoretical concepts in practical life settings. A unique aspect of this course was that it largely utilized arts-based approaches to teaching, learning and assessment. The previous study investigated the affordances and challenges of arts-based teaching and learning from an instructor and students’ perspectives; effectiveness of visual products in demonstrating student learning of disciplinary content and critical thinking skills, and effectiveness of arts-based assessment as an alternative to text-based approaches.

Among these research goals, the first study only partially analyzed students’ critical thinking and conflict transformation skills in practical life settings. One reason was the scale of data, as it had 21 students and second was a need for increased budget. This study thus seeks to investigate the following: one, how effective was an arts-based approach in enhancing students’ critical thinking skills, and two, how effective was the course in increasing students’ conflict transformation skills in practical life settings. It is hoped this study will contribute to scholarship on how visual methods can advance critical thinking and conflict transformation skills. In relation to SOTL scholarship, it hopes to extend existing research on promoting critical thinking skills and using visual methods in teaching and learning.
II - RESEARCH PROJECT DESCRIPTION

1. Purpose of the investigation and research objective

This research study is based on a General Education course in the Arts and Humanities: L210 Peace and Creative Conflict Transformation through the Arts. The research assistant of this study designed the course as part of her Independent Research Study in her PhD program, which was competitively selected by the Collins Living-Learning Center and taught in Fall 2015. The course introduced different concepts of peace, processes of conflict transformation, and art interventions from past and present cultures aimed at peacebuilding. Students learned these theoretical concepts to create their own arts-based peacebuilding projects in a real community setting. The course aimed at broadening students’ analytical and critical thinking skills for deeper understanding about these concepts, enable them to interpret the cultural, aesthetic, intellectual and historical contexts of art interventions for peacebuilding, and enable them to apply theoretical concepts in practical everyday life settings.

A unique aspect of this course is that it utilized arts-based approaches in teaching, learning and assessment. A previous SOTL study, investigated the affordances and challenges of arts-based teaching and learning, from an instructor and students’ perspectives; effectiveness of visual products in demonstrating student learning of disciplinary content and critical thinking skills, and effectiveness of arts-based assessment as an alternative to text-based approaches. The first study however, only partially analyzed students’ critical thinking and conflict transformation skills in practical life settings. One reason was the scale of data generated from this course, as it had 21 students and second was a need for increased budget. For example, investigating changes in students’ critical thinking skills required analyzing outcomes of an assignment on Image Analysis. This assignment required students to analyze 3 images given by the instructor using art-critiquing techniques, which provide a framework for looking and talking about art. This assignment thus yielded 63 image analyses and the first study analyzed 2 image analyses each from only 3 students. Preliminary findings of this examination reveal that applying art critiquing techniques broadened students’ curiosity, dispositions to engage with ambiguity, observational, analytical, and interpretive skills, and deductive reasoning. These initial findings were presented at the 2016 International Society for the Scholarship of Teaching and Learning conference and will be presented at the 2017 American Education Research Association conference. This promising result demonstrates a need for examining the remaining image analyses and finding changes in critical thinking skills at individual and collective levels.

This particular study therefore, seeks to investigate the following: one, how effective was the arts-based approach of using art critiquing methods for enhancing students’ critical thinking skills, and two, how effective was the course in advancing students’ conflict transformation skills in practical life settings. It is hoped this study will contribute to scholarship on how arts-based approaches can increase critical thinking and conflict resolution skills among undergraduate students. Additionally, it hopes to extend existing SOTL scholarship on promoting critical thinking and using visual methods for teaching and learning.
2. Previous Research and scholarship
There are several strands of research domains that influenced the goals of this course and are relevant to this particular research study. These include scholarship on critical thinking skills, including SOTL research on critical thinking, arts-based or arts-integrated learning and arts-based approaches to peace education.

One, Critical thinking: There are several definitions of critical thinking, (see for e.g. Ennis, 2011; Petress, 2004; Scriven, 2008), at a basic level, it can be understood as ‘reasonable reflective thinking focused on deciding what to believe or do’ (Ennis, n.d.). It involves the ability to understand and evaluate arguments, think about alternatives, and present one’s own arguments and inferences. Critical thinking is considered an important 21st century skills (Silva, 2009) that is a pervasively used construct in higher education (Halpern, 1999), and its promotion is considered one of the highest priorities of college education (Jones, & Ratcliff, 1993). Within the SOTL community, scholars have researched on various approaches to promoting critical thinking skills (see for e.g. Bahr, 2010; Mae, Cortez & Preiss, 2013; Osborne, Kriese, Tobey, & Johnson, 2009); however, arts-based approaches are less known in SOTL research and practice.

The theoretical basis for utilizing visual methods for promoting critical thinking, stems from Kuhn’s (1999) developmental model of critical thinking, Smith’s (2002) ideas of characteristics of critical thinkers, and how these ideas relate with arts engagement and art critiquing methods such as Visual Thinking Strategies (VTS). Smith (2002) for e.g. suggests, critical thinkers tolerate ambiguity and uncertainty, and the arts are a powerful medium for promoting dispositions to tolerate ambiguity and explore the uncertain (Eisner, 2002).

Two, Arts-integrated learning: Scholars increasingly advocate for the value of arts-centered curricula (Marshall and Donahue, 2014) and ‘education in the arts’ for promoting cognitive and social development skills (see e.g. Eisner, 2002; Efland, 2004; Catterall, 2002; Winner, Hetland, Veenema, Sheridan, Palmer & Locher, 2006). Research shows that art-centered learning that involves applying the thinking strategies of art to knowledge in other disciplines, allows learners to develop habits of mind, such as observing, questioning and posing problems etc. This is useful for learning across curriculum, and will also be critical to their development as future learners (Hetland, Winner, Veenema, & Sheridan, 2013, p.6). Art critiquing techniques such as VTS and other methods provide a framework for looking and talking about art. VTS has been shown to enhance critical think skills (Housen, 2003; Yenawine, 1997), as it starts a process of learning to think deeply, which transfers to other domains of learning across different disciplines. Such visual methods have however received marginal attention outside the field of Art Education, such as in General Education courses.

Three, Arts-based peace education: within this burgeoning field, research shows a need for not only developing pedagogy that promotes conflict resolution skills but also assessment techniques for assessing non-art skills (De, 2015) such as conflict resolution, infra- and interpersonal social and emotional skills. It is hoped this study will contribute to research in these domains, as well as extend existing SOTL scholarship on approaches for promoting and
teaching critical thinking skills in higher education, and using visual methods for teaching and learning (e.g. Cornell et al, 2007).

3. **Significance, Impact of the study, and outcomes that will contribute to undergraduate or graduate teaching, learning and assessment**

There are several aspects to this research that can significantly contribute to teaching, learning and assessment at undergraduate and graduate levels. **One**, a study of the effectiveness of using arts-based approaches such as art critiquing methods for promoting critical thinking skills can contribute to the development of alternatives to text-based approaches, especially in courses in which critical thinking is a central outcome. **Two**, this study will provide an evidence-based example of using an arts-based approach for teaching and learning that can extend existing SOTL scholarship in this domain. It can potentially promote collaborative research and practice between SOTL and arts-based teaching communities. More specifically, by presenting the results in SOTL events, this study will provide a concrete example of using art critiquing techniques for promoting critical thinking skills to the SOTL community. **Three**, a study on the effectiveness of using arts-based approach for teaching conflict transformation skills will significantly contribute to the domain of arts-based peace education, where assessment of non-art skills such as intra- and interpersonal skills needed for conflict resolution are severely lacking.

4. **Research Methodology**

This study was designed as an action research project, where the practitioner (instructor) took on the dual role of a researcher, seeking to improve the quality of teaching by intervention. In this case, by (1) teaching critical thinking skills in a novel way using art critiquing methods and (2) conflict transformation skills through arts-based approaches. Through this study, the researcher hopes to translate academic findings into everyday teaching practice. Additionally, the study relies on critical reflective practice that include (1) reflecting-in-action (Schön, 1991), i.e. continuously introspecting the teaching process, monitoring its intended learning impact to further modify or improvise with effective strategies; (2) reflection-for-action (e.g. Eraut 1994 and Usher et al 1997), i.e. when actions or decisions are rapid limiting the scope of reflection, it is reserved for future action; and (3) reflection-on-action, i.e. analyzing and evaluating the effectiveness of pedagogical and instructional frameworks after each class, and the course retrospectively.

*Methodological Framework of this study - One* - For examining students’ increase in critical thinking skills, two assignments will be analyzed. The first assignment required students to describe images based on their first impressions. The second assignment on Image Analysis required students to apply art-critiquing methods such as Visual Thinking Strategies and interrogative questioning to interpret the image, and then reflect how they can apply the knowledge learned from their analysis in other life settings. The difference between students’ first impression descriptions, and their analysis and interpretation provides an evidence of change in knowledge, critical thinking and interpretive skills. Further examination of students’
Image Analyses will provide contextual information on their ability to weigh evidence, analyze, make arguments and infer. Two – For examining changes in students’ conflict transformation skills, their assignments on conflict transformation will be analyzed. Additionally, a pre- and post-course measurement of social and emotional skills using Bar-On’s emotional quotient (EQi 2.0) will be analyzed to understand changes in skills learned after the course.

**Data Collection and Analysis** - This study will utilize the following textual and visual data. These include: (1) Instructor’s reflective logs written after class that are specifically relevant to the research questions; (2) Students’ Image Analyses (21 students x 3 images each – a total of 63 image analyses); (3) Students’ assignments on conflict transformation that reflect students’ acquisition of social and emotional skills needed for conflict resolution/ transformation; (4) Students’ reflections, anecdotal evidence and class discussions on the Image Analysis assignment; and (5) pre- and post-course EQi 2.0 measures of emotional and social skills that will demonstrate change in such skills (needed for conflict resolution) learned after the course.

Students’ analyses will be coded using open, axial and selective coding. These codes will be categorized into emergent themes, which will be further analyzed based on students’ prior engagement with arts, limited experience with arts, and the diverse issues students addressed including but not limited to issues of peace and conflict. A second round of analysis will focus on how students anticipate applying the analytical and critical thinking skills learned through the assignment in their everyday life situations, and how they ‘connect this learning to other real world issues’. It is the latter part, which will be a significant contribution of this study, apart from demonstrating the effective use of arts-based approaches for promoting critical thinking.

5. **Means by which you will measure the success of your project**
The following means will showcase the success of this research project: At curricular and instructional level - One, difference in students’ casual description of images (Assignment 1) versus a reasoned analysis and interpretation of images (Assignment 2) will provide evidence of increased visual thinking (observation, questioning & interpretation) and critical thinking skills (weighing evidence, making arguments, analyzing and inferring) that was learned through the art critiquing techniques. Two, assignments on conflict transformation should reflect approaches to transform conflicts, that would reflect a change in their critical thinking, as well as their intra- and interpersonal (emotional and social skills) needed to resolve conflicts. Three, in the EQi test measures, it would be considered successful if post-course tests, compared to pre-course tests evidence statistically significant benefits (p ≤ .05) on at least half of the assessed outcomes in social and emotional domains, evidencing students’ increase in skills to manage conflicts in real life settings. Four, at a research level: (1) a proposal accepted in the peer reviewed American Education Research Association conference - as judgment of peers on research analysis would evidence scholarly success; and (2) a proposal accepted and presented at the peer reviewed ISSOTL conference would not only evidence scholarly success but also make a contribution to the SOTL community and SOTL research by extending discourses on promoting critical thinking skills and using visual methods for teaching and learning.
6. **Manner in which results will be disseminated**

Findings from this study will be disseminated in the following ways to demonstrate the significance of this research in three academic circles. **One**, within Indiana University, research findings will be shared in SOTL forums and SOTL events. **Two**, within the SoTL community outside our university, a proposal will be submitted to the 2017 ISSOTL conference (Oct 11-14) in Calgary, Canada, which is themed “Reaching New Heights”. It seems relevant, given that there are no SOTL studies on arts-based approaches for promoting conflict transformation and critical thinking skills. **Three**, within the interdisciplinary field of arts-integrated learning, a proposal would be submitted to the Arts and Learning Special Interest Group at the 2018 *American Educational Research Association* Annual Meeting, (Apr 13-17), New York, NY. **Four**, based on feedback from the SOTL events and conferences, a manuscript will be written up and submitted to the *International Journal of Education and the Arts*.

7. **Reflective teaching practices**

Three reflective practice strategies were applied for teaching this course: **One**, a reflective log was maintained after each class that documented best practices in teaching and learning, challenges faced by the instructor and students, and approaches that need re-thinking and improvement in future. For e.g., it was noticed that students with prior arts background showed greater abilities in Visual Thinking Strategies compared to students with no arts background. This led to the development of a new art critiquing method, and Interrogative Questioning Approach, designed especially for students with little or no arts background. In another example, it was noticed that teaching the new strategy served as a good scaffolding process for students to learn about VTS. **Two**, reflections were also maintained on expectations and pedagogical assumptions regarding affordances and challenges of arts-based teaching, learning and assessment. For e.g., reflecting on class discussions, it was found that students with no or little arts background found the Image Analysis assignment challenging, although they ‘outperformed’ students with prior arts background. Further discussions based from this reflection led to a class discussion on the assignment and students revealed that although they were familiar with critical thinking and appreciated the assignment, they were resistant because it was “new” and also “hard” for them. It seems, students are conditioned to a degree that they are resistant to change, despite knowing the benefits. **Three**, ongoing reflections on the overall design of the curriculum and assessments are also maintained that will influence the development of any new course on related subjects.

8. **References**


Halpern, D. F. (1999). Teaching for critical thinking: Helping college students develop the skills and dispositions of a critical thinker. *New Directions for Teaching and Learning, 80*, pp.69-74


Mason, R. (2012). Teaching about controversial issues through art education. In CySEA Board (Eds.), *11th InSEA European Regional Congress: Arts Education at the Crossroad of Cultures (pp. 223-250).* Lemesos, Cyprus, Cyprus Society for Education through Art.

III - BUDGET NARRATIVE

In conducting this research study, a cost of $2000 or more is anticipated. There is no additional funding from any internal or external sources for this project. These costs primarily include: One, funding to meet the costs of EQi-2.0 tests assessment services from Multi-Health Systems (MHS), an estimated $882, as mentioned in the table below. Two, travel cost to the 2017 ISSOTL conference (Oct 11-14) in Calgary, an estimated $1440, as mentioned below. Total estimated cost = $2,322

<table>
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<tr>
<th>Purpose</th>
<th>Cost</th>
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| EQi 2.0 Test Analysis from Multi-Health Systems ($882) | • Raw Scores ($10) + Report (Higher Education) ($20) = $30 each.  
• Total Cost: $30 x 21 students (Pre-Test) + 21 (Post-Test) = $630 + $630 = $1260  
• Final cost after 30% Research & Training Discount = $441 + $ 441 = $882 |
| 2017 ISSOTL Conference, Calgary, Canada ($1440) | • Registration Fee ($200) (based on 2016 ISSOTL Conference)  
• Estimated Flight costs ($500-$600) (based on Orbitz site)  
• Shuttle from Bloomington to Indianapolis Airport ($40)  
• Estimated Housing costs ($600) (estimated $150/night 4 nights) (based on Orbitz site). |
| Estimated Total                               | $2,322                                                               |
IV - RESEARCH PLAN AND TIMELINE

The following is an estimated timeline for this research study.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Early Summer</td>
<td>• Submission of proposal for ISSoTL 2017</td>
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<tr>
<td>Late Summer &amp; Fall 2017</td>
<td>• Analysis of data (Qualitative data)</td>
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<td></td>
<td>• Analysis of measurement tests (EQi-2.0)</td>
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<td></td>
<td>• Write up of results</td>
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<td></td>
<td>• Submission of proposal for AERA conference</td>
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<tr>
<td>Spring 2018</td>
<td>• Submission of manuscript to Teachers College Record</td>
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V CURRICULUM VITAE OF INVESTIGATORS (4 PAGES MAX)
Attached in this email.

VI NOMITATING LETTER
To be emailed by Chair of Department
Marjorie Cohee Manifold Ph. D.
Associate Professor, Art Education and Curriculum Studies
Indiana University

Education
Ph. D. in Curriculum & Instruction, Art Education
Indiana University, Bloomington 1999

Academic Appointments
Associate Professor of Art Education (Curriculum & Instruction)
Indiana University, School of Education, Bloomington 2009 - Present
Assistant Professor of Art Education (Curriculum & Instruction)
Indiana University, School of Education, Bloomington 2003 – 2009
Assistant Professor of Art Education
Virginia Commonwealth University, School of the Arts 1999 – 2003

Publications
S=Service, R=Research, T=Teaching, * = Refereed

1. Journal Publications since 2008

2. Chapters [* indicates refereed publication]
VA: National Art Education Association with United States Society for Education Through Art and International Society for Education through Art.


3. Edited Books


4. Textbooks


Professional Presentations

S=Service, R=Research, T=Teaching, *=Refereed

International Presentations since 2010


R* (2008). *The spontaneous, fan-based art making of contemporary adolescents and young adults in local and global contexts*. 32nd InSEA World Congress, Osaka, Japan.

2. National Presentations

R* (2015). With Allan Richards and Steve Willis. *Nurturing Cultural Appreciation and Mutual Respect through Art*. Chair of Panel to be presented at the annual conference of the National Art Education Association (NAEA), New Orleans, LA.

R* (2014) *What teens tell us they know or want to know about art making*. Paper presented at the National Art Education Association Annual Convention, San Diego, CA.


stronger ties: Advocating for regional, national and international arts education collaborations. Panel presented at the annual meeting of the National Art Education Association (NAEA). Fort Worth, TX.

R* (2013). With Steve Willis, Culturally sensitive art educational practices in local and global communities. Paper presented at the annual meeting of the National Art Education Association (NAEA). Fort Worth, TX.


R* (2012). Where, what & with whom are adolescents voluntarily learning about art & the world? Paper presented at the biennial meeting of the United States Society for Education through Art, Indianapolis, IN.


Awards & Recognition (recent)

National Kenneth Marantz Fellow for Multicultural Research in Art Education, United States Society for Education through Art 2015

National Edwin Ziegfeld International Award for Multicultural Research. United States Society for Education through Art. (Nominated) 2012

National Mary J. Rouse Award for Teaching, Research, and Service. Awarded by the National Art Education Association Women’s Caucus 2009

Professional Affiliations

Council for Policy Studies In Art Education, (CSPAE)

Elected for life, 2014

International Society for Education through Art (InSEA) – Affiliate of UNESCO

North American Councilor (2008-2014)

Vice-President (2014-Present)

National Art Education Association (NAEA)

Seminar for Research in Art Education (SRAE)

Women’s Caucus

United States Society for Education Through Art (USSEA)

President (2009-2011)

Executive Secretary (2011-2013)

Editorial Boards

Art Education

British Association for International and Comparative Education

International Journal of Education through Art

Journal of Cultural Research in Art Education

Journal of Social Theory in Art Education

Studies in Art Education

Visual Arts Research
MOUSUMI DE
Associate Instructor, Art Education, Department of Curriculum & Instruction,
School of Education, Indiana University

EDUCATION

2017-18 Ph.D. (anticipated) Curriculum & Instruction, Indiana University, USA
2009 M.Phil. Media Studies, Coventry University, U.K
2003 M.A. Design & Digital Media, Coventry University, U.K
1998 B.A. English, Economics, History & Hindi, University of Delhi, India
1995 Certificate Fashion Design & Clothing Technology, National Institute of
Fashion Technology (New Delhi), India

PUBLICATIONS


Altman, R., & De, M. (2010). Expanding possibilities for underserved and marginalized youth using Freire’s critical pedagogy of active and reflective arts practice: Three case studies from Bronx (USA), Coventry (UK) and New Delhi (India). UNESCO Observatory e-Journal Vol1 Issue 5. (Joint first authorship)


CONFERENCE PROCEEDINGS (Since 2011)


and protagonism, Proceedings of Comunicación, Cultura e Esferas de Poder XIII IBERCOM, Santiago de Compostela, Spain.


PEER REVIEWED CONFERENCE PRESENTATIONS (Since 2015)

De, M. & Wagner, E. (2017, August Accepted). Art education for sustainable development and peace: Revisiting the Seoul Agenda in South Korea. Paper to be presented at the 35th International Society for Education through Art World Congress, Daegu, South Korea.

De, M., Teles, P., Camargo, L., Craw, R., Ferreira, C., Letsiou, M., Ollaniyi, S., Thomas, B. (2017, August Accepted). Addressing the challenges of digitally imbued art education practice: A project for students and teachers where the digital and traditional coexist and create spiritually transformative experiences. Paper to be presented at the 35th International Society for Education through Art World Congress, Daegu, South Korea.

Burkhauser, B. & De, M. (2017, August Accepted). Nepalese and American Children’s Drawings in Response to a Natural Disaster in Nepal. Paper to be presented at the 35th International Society for Education through Art World Congress, Daegu, South Korea.


**TEACHING EXPERIENCE (Selected)**

- **Associate Instructor**, Art Education, Department of Curriculum & Instruction, School of Education, Indiana University (Since Fall 2010)
- **Associate Instructor**, College of Arts & Science, Indiana University (Fall 2015)
- **Online Learning Support Assistant**, Department of Languages, (Jan.07 – Mar. 07) School of International Studies & Social Sciences, Coventry University, Coventry
- **Adjunct Lecturer**, Department of Apparel Merchandising and Marketing (July 1998 – July1999), National Institute of Fashion Technology, New Delhi
EDITORIAL SERVICE

2016 - Date  Editorial Board Member, Teaching & Learning Inquiry, International Society for the Scholarship of Teaching and Learning (ISSOTL)
2014 - Date  Editorial Board Member, IMAG E-Magazine, International Society for Education through Art
2010 - Date  Editorial Board Member, International Journal for Education through Art
2010 - 2014 Editor, Newsletter, International Society for Education through Art

Reviewer (Selected)

2016 - Date  Teaching and Learning Inquiry: The ISSOTL Journal
2010 - Date  International Journal for Education through Art

GRANTS

2015 - 2016  Scholarship of Teaching and Learning Research Grant, Indiana University
2014 - 2014  International Peace Research Association Accommodation Grant
2008 - 2008  Indian Council for Cultural Relations Grant, Government of India
2006 - 2006  Coventry Peace Month Small Grants, Coventry City Council, UK

ACADEMIC HONORS AND AWARDS (Since 2010)

•  Best Student Presentation Award, International Society for the Scholarship of Teaching and Learning - 2016
•  Emerging Scholars Fund Award, International Society for the Scholarship of Teaching and Learning - 2016
•  Finalist, John H. Edwards Fellowship, Indiana University – 2016; 2014
•  Curriculum & Instruction Graduate Student Travel Award, Indiana University – 2016; 2015; 2014; 2013; 2012; 2011; 2010
•  Lowell Family Scholarship Teaching Award, Indiana University – 2015; 2012; 2011
•  Nominated, Associate Instructor Teaching Award, Indiana University – 2015; 2014

PROFESSIONAL MEMBERSHIPS (Selected)

2016 - Date  International Society for the Scholarship of Teaching and Learning
2015 - Date  International Network for Research in Arts Education
2012 - Date  American Education Research Association
2010 - Date  National Art Education Association