Youth Self-Efficacy and the Art Museum Open Studio

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Abstract

YOUTH SELF-EFFICACY & THE ART MUSEUM OPEN STUDIO

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As art museums continue to engage youth audiences, a new program model has emerged: the drop-in art studio. Research suggests that intensive teen programs in museums are a powerful tool for youth development and audience building alike, but less is known about the impacts of drop-in teen programs. The purpose of this study was to describe how open studio programs impact youth participants’ artistic self-efficacy beliefs. Questionnaires from 33 participants from three different art museum programs were analyzed, and interviews with 10 of the participants provided additional insights. Results suggest that participants perceived an increase in their self-efficacy beliefs in eight areas of artistic engagement: developing craft, engaging and persisting in their art work, envisioning further steps in their process, expressing feelings and ideas, observing the world around them, reflecting on their work and the work of others, stretching and exploring in the studio, and understanding the art community. Youth attributed the increase to specific aspects of the programs, including enactive attainment, modeling, verbal persuasion. These findings suggest that art museums may use artistic self-efficacy as an outcome for programs designed within this model.
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Chapter 1: Introduction

In March 2017, the New York Times published an article entitled, “Museums Tell Teenagers: We’re Here for You,” (Tugend, 2017) describing the emergence and impact of a variety of programs aimed at welcoming teen audiences into museums. As school field trips are declining, the article argues, “museums are seeking more novel ways to make themselves relevant to an adolescent audience.” While Tugend describes the trend as occurring in a range of museum types, history, the most salient examples in the article describe both established and emerging program models in art museums. These programs, including a drop-in art studio at Museum of Modern Art (MoMA), New York, for LGBTQ-identified teens, reflect the ways in which art museums are increasingly seeing themselves as integral components of the youth development infrastructure in their communities.

Over the past few decades, art museums have offered a variety of programs to engage teen audiences in leadership, vocational, and artistic development (Beane, 2000; Shelnut, 1994; Wyrick, 2014). From teen councils and boards, to artist-led workshops and classes, these programs overall are resource intensive and often only a small number of participants directly benefit. But for those who can participate, engagement in long-term intensive programs results in both short-term and long term benefits, including: “personal identity and self-knowledge, lifelong relationships to museums and culture, expanded career horizons, a worldview grounded in art, and community engagement and influence” (Linzer & Munley, 2015, p. 11).

To invite an alternative form of participation from teen audiences, several art museums have begun offering drop-in, or open-studio, programs which allow youth to engage with artistic processes and materials in an informal, learner-driven environment. For example, the Whitney Museum of Art, New York, offers a weekly Open Studio for Teens, every Friday from 4:00 to
6:00 in the evening. Youth are invited to “Bring your works-in-progress or create something entirely new. All supplies are provided and no previous art experience is required—everyone is welcome” (Open Studio for Teens | Whitney Museum of American Art,” Fall 2017). Ostensibly, these programs aim to create opportunities for youth to access the resources and mentorship available to intensive program participants, without the requisite application process or commitment.

Though there has been research into the impacts of intensive programs on both teen participants and the art museums themselves, there is a great deal that we do not know about the impact of more casual, drop-in engagement. Research suggests that in the case of intensive art museum teen programs, the combination of authentic work, supportive staff mentors, interactions with artists, peer diversity, and sustained engagement lead to the personal development of the youth who participate (Linzer and Munley, 2015). But can drop-in studio programs be similarly impactful on teens’ personal growth?

Efficacy, empowerment, and agency, in particular, have been touted as a potential outcome of teen programs in art museums (Butler, 2014; Hill & Douillette, 2014), but research hasn’t offered clear evidence to support these impacts, nor has it put forth measurable constructs for conceptualizing these impacts. Utilizing self-efficacy beliefs (Bandura, 1977) as a replicable measure of one component of personal growth towards agency in adolescence is a core concern of this research study.

**Purpose and Research Questions**

The purpose of this study is to describe teen participants’ perspectives on the impact of art museum drop-in studio programs on their self-efficacy towards artistic engagement. This research was guided by two questions:
1. How do teen participants perceive the program’s contribution to their artistic self-efficacy beliefs?

2. What aspects of drop-in studio programs do participants believe contribute most to their self-efficacy beliefs towards artistic engagement?

**Significance**

This study adds to a growing body of research describing the impact of youth engagement with the arts on personal growth, and continues to contextualize museum education within that literature. Results from this study could be used to inform teen program development and evaluation in the emerging model of art museum drop-in studio spaces, as well as similar programs in libraries, community centers, and other informal learning environments. Furthermore, the use of Bandura’s (1977) theory of self-efficacy provides a replicable measure of personal growth in adolescence that can be applied to future research in the field.
Chapter 2: Literature Review

An exploration of the role of art museum drop-in studio programs in teen participants’ self-efficacy beliefs demands a thorough understanding of several bodies of literature that address and contextualize this topic. This study was informed by three significant areas of the literature: a) the benefits of arts engagement for youth; b) teen audiences in museums; and c) self-efficacy beliefs in adolescence. Taken together, these bodies of literature reveal the potential of drop-in studios, as informal learning contexts, in fostering self-efficacy beliefs of teen participants.

Benefits of Visual Arts for Youth Development

When describing the impacts art museum programs have on teens, it is first essential to understand the broader landscape of arts education research on adolescent learners. Arts educators, researchers, and advocates have long struggled to describe the benefits of the visual arts, with varying success in empirically documenting the actual impact of art engagement on young people. From the relationship between arts education and academic achievement, to the attainment of artistic habits of mind, to the more general impact of arts on positive youth development, it is clear that scholars and practitioners alike are curious about the impact of arts engagement on the lives of young people.

What are the impact of arts education on academic achievement?

In a competitive funding landscape, the temptation to link the arts to other funding priorities like graduation rates, and achievement in literacy, led to a great deal of debate into the relationships between arts education and academic achievement. Catterall’s *The Arts and Achievement in At-Risk Youth: Findings from Four Longitudinal Studies* (2012) provides the most compelling evidence of a link between arts involvement and academic achievement. After
analyzing four large databases of longitudinal data from students of varying socio-economic status (SES), with students of low SES being considered “at-risk populations,” the researchers found three significant correlations in the data:

1. Socially and economically disadvantaged children and teenagers who have high levels of arts engagement or arts learning show more positive outcomes in a variety of areas than their low-arts-engaged peers.

2. At-risk teenagers or young adults with a history of intensive arts experiences show achievement levels closer to, and in some cases exceeding, the levels shown by the general population studied.

3. Most of the positive relationships between arts involvement and academic outcomes apply only to at-risk populations (low-SES). But positive relationships between arts and civic engagement are noted in high-SES groups as well” (p. 24).

Despite these statistical relationships, Catterall cautions against assuming a causal relationship between these positive academic outcomes and arts involvement, as many crucial variables impacting causality were not controlled for, including “gender, race, and ethnicity; of health and disability status, and a host of psychosocial factors” (p. 24).

While Winner, Goldstein, & Vincent-Lacrin (2013) argue there is little convincing evidence of the arts leading to overall academic improvement, select studies have found evidence of specific transferable skills. For example, Walker, Winner, Hetland, Simmons, & Goldsmith (2010 via Winner et. al, 2013) found that undergraduates who study the visual arts have stronger geometric spatial reasoning ability than those who do not study visual arts. Additionally, Elpus (2013) found that adolescents grades 7-12 who studied visual arts in school reported significantly higher levels of school attachment than did non-visual arts students, as measured by self-reported
feelings of safety, happiness, and belonging at school, closeness to classmates, fairness from teachers, and a lack of prejudice amongst classmates.

Winner, Goldstein, and Vincent-Lancrin (2013) argue that given the limited evidence for skill transfer from studio arts education to academic areas, the main justification for arts education should be the acquisition of habits of mind associated with the arts. In the case of visual arts, these habits of mind were first described in by Hetland, Winner, Veenema, & Sheridan (2007) in a study of teaching and learning practices in high school art classrooms. **What habits of mind are developed in a studio classroom?**

In the 2001-2002 school year, Hetland et. al. (2007) filmed 38 classes, in 5 classrooms in two Boston-area arts focused high schools: Boston Arts Academy and the Walnut Hill School. The 9th-12th grade students represented diversity of race, gender, and socioeconomic status, but all were admitted to their schools by portfolio review. In the end, 103.5 hours of classroom observations, teacher interviews, photos of student work, curriculum documents, and researchers’ field notes were analyzed within each teacher’s classes and across all five teachers.

This study resulted in two frameworks: Studio Structures and Studio Habits of Mind. Studio Structures refers to the settings observed across the classes, and include Demonstration-Lecture, Students-at-Work, Critique, and, in the 2nd Edition of the book, the researchers added a fourth Studio Structure: Exhibition (2013). The documentation of these instructional modalities provide powerful evidence of what many art educators already know - high quality teaching and learning in a studio takes many forms, and each of these Studio Structures contribute to the development of artistic habits of mind. The Studio Habits of Mind refer to eight behaviors or “dispositions” observed by Hetland, Winner, Veenema, & Sheridan across the studio
classrooms they studied. These include Develop Craft, Engage and Persist, Envision, Express, Observe, Reflect, Stretch and Explore, and Understand Art World.

**Develop Craft** describes learning to use the materials and processes associated with artistic production, including tools, media, artistic conventions, as well as the studio space itself. When students **Engage and Persist**, they are learning to persevere through challenging tasks, developing focus for a sustained period of time, and embracing problems or issues relevant to themselves or the broader art world. Youth artists are developing their ability to **Envision**, when they picture mentally what cannot be directly observed or imagine possible next steps in an artistic project. The habit most commonly associated with artistic production, **Express**, takes the form of creating work that conveys meaning, including storytelling, ideas, and feelings. When students **Observe** in the studio, they are looking closely, noticing more than might be seen in a passing glance. As youth learn to **Reflect**, they develop the ability think about, talk about, and evaluate their artistic work or process. **Stretch and Explore** involves learning to reach beyond one’s current abilities, to play and create without a preconceived plan, and to learn from past mistakes. As youth begin to **Understand the Art World**, they begin to see their work within the context of art history and current artistic practices. While Develop Craft and Understand Art World, are unique to the discipline of visual arts, the other six disciplines present opportunities for the habits of mind to transfer into other areas of students’ lives.

The Studio Structures and Studio Habits of Mind provide models for curriculum design in school, community, and museum art classrooms, and serve as assessment frameworks (Hetland et. al., 2013). For example, Hunter-Doniger & Berlinsky (2016) utilize the Studio Habits of Mind to describe student outcomes of a pilot artist-in-residence program for 3rd-8th grade students. They argue that the Studio Thinking framework is a powerful advocacy tool, and
can “act as a Rosetta Stone for non-art stakeholders by deciphering the learning benefits of an arts-integrated lesson or program” (p. 20).

Though the Studio Habits of Mind are quite comprehensive, they do not describe the social benefits of arts engagement. Surely, if youth are engaged in making art in a classroom or shared studio, there are likely broader implications for the peer and adult relationships fostered in that setting.

**What is the role of the arts in Positive Youth Development?**

In an attempt to describe the behavioral and social benefits of teens’ engagement with visual art more broadly, several scholars have situated their research within the positive youth development movement. Positive Youth Development (PYD), described by Lerner et. al. (2005), is an asset-based approach to describing youth development which accounts for the dynamic and context specific factors influencing the young people’s growth and learning. Lerner et. al theorize that PYD consists of five characteristics of thriving teenagers known as the “Five C’s” - Competence, Confidence, Connection, Character, and Caring, which contribute to a sixth; Contribution.

To explore the relationship between art education and factors influencing positive youth development, Elpus (2013) quasi-experimentally compared a nationally representative sample of adolescents who did and did not study the arts on a variety of measures, including cognitive, behavioral, and social impacts. Elpus utilized data from the National Longitudinal Study of Adolescent Health and statistically controlled the analyses to account for “measurable pre-existing differences between those adolescents who do and do not choose to study the arts in schools,” (p.2) including sex, race, native English speaker status, scores on a standardized vocabulary test, ninth grade GPA, socioeconomic status, and score on a screening test for
depression. Studying the arts was found to be positively associated with reductions in school suspensions, post-secondary school attainment, and decreased likelihood of being arrested. However, visual arts students in particular were 29% more likely than non-visual arts students to have used marijuana as adolescents, and former visual art students were 50% more likely to have ever used other illicit substances than were adults with no visual arts coursework. Elpus’ study raises important questions about the self-selection bias of students who choose to take arts classes in school; are these students also predisposed for the positive outcomes identified in this study? The results suggest that more research is needed to determine if these outcomes have a causal relationship to arts education, rather than simply a correlational relationship.

Recognizing the importance of finding one’s purpose in adolescence and the potential of arts engagement to provide purpose, Malin (2015) conducted a grounded theory analysis of interviews with 53 youth to understand the motivation behind their arts participation. Later, Malin analyzed interviews of 29 youth over two years, and found that arts participation provided purpose for young people, “a way for adolescents to develop the capacity to connect with others through self-expression; to relate through sharing ideas, emotions, and observations of the world; and to build community through personally meaningful interaction” (p. 277).

Montgomery (2017) describes so-called “Creative Youth Development” (CYD) as a field of its own. Bridging arts education and youth development, CYD is “an intentional, holistic practice that combines hands-on artmaking and skill building in the arts with development of life skills to support young people in successfully participating in adolescence and navigating into adulthood” (p. 1). As museums study the impacts of teen programs, the field of CYD provides a valuable touchstone for thinking holistically about the role of arts engagement in the lives of young people.
**Summary**

While there is limited evidence to support claims of the benefits of arts engagement transferring to academic achievement, there are numerous documented impacts of arts education and engagement for young people. Engaging in high quality visual arts educational programs, in schools, museums, and community settings can play an essential role in the development of a variety of areas, including artistic habits of mind, healthy social relationships and behaviors, as well as supporting personal growth in areas like purpose, self-concept, and self-efficacy.

**Teens and Museums**

**How are museums engaging teen audiences?**

Beginning in the 1990’s, art museums across the United States increasingly reached out to teenagers as a distinct audience (Beane, 2000; Shelnut, 1994; Wyrick, 2014). By explicitly meeting adolescents’ developmental needs, teen programming in art museums has moved beyond primarily school-initiated group tours to provide access and engagement for teens in out of school time (Schwartz, 2005). These programs vary widely in their formatting, from teen docent corps, to summer workshops, to paid internships, to museum wide after-hours parties. The Association of Art Museum Directors (2014) highlighted a number of creative program models. For example, the Brooklyn Museum’s *Sackler Center Teen Leaders* is a paid internship that “empowers teens to develop and strengthen their voices through the exploration of visual art, artists’ voices, feminism, and the world around them, utilizing the museum’s special exhibitions and permanent collection” (p. 9). The Museum of Contemporary Art, Denver hosts the intriguingly named *Failure Lab*, an intensive leadership program whose participants go on to develop “a series of episodic large audience youth events” (p. 48) throughout their year.
Erickson and Hales (2014) conducted a survey of National Art Education Association Museum Education Division members whose museums offer multi-visit teen programs and received 16 responses, primarily from large institutions in major metropolitan areas. The survey respondents “reported a wide range of goals for teen programs: ‘reaching’ youth, and vocation and art history (equally frequently mentioned); creating audience; and art education (least frequently mentioned)” (p. 414). Through an additional analysis of U.S. art museum websites, the researchers identified 19 teen programs, demonstrating that while programs explicitly targeting teen audiences are widespread, they are far from ubiquitous in U.S. art museums. Furthermore, of those 19 programs, just 3 were identified as focusing on studio experiences. Due to this wide diversity of program models for engaging teen audiences, this literature review will include the literature around museum programs focused on critical inquiry and leadership development, in addition to those which center artistic production.

Despite a continued focus on teen audiences in prominent journals including the *Journal of Museum Education*, *Curator the Museum Journal*, and *Museum Management and Curatorship*, many of the published articles consist of opinion pieces and program descriptions, rather than empirical research. While these articles do not provide insight into the impacts of these programs, they do offer anecdotal evidence of the motivations of museum professionals working with teens in art museums. A 2014 issue of the Journal of Museum Education entitled “All Together Now: Teens and Museums” provides several prominent example of these kinds of articles.

Butler (2014) describes the evolution of the Yerba Buena Center for the Arts (YBCA) after school program into a paid, year-long “art-as-activism residency” for Bay Area teens. This pilot program, supported by the EMCArts Innovation Lab for Museums, used “artistic
development plans” to support youth artists in developing their own goals for an art as activism project. Additionally, YBCA staff and community partners were enlisted in mentorship roles to support youth artists. “Youth, like all of us,” writes Butler, “want to feel part of something bigger than themselves: a scene, a clique, a community, a context. Museum programs for teens are uniquely positioned to offer this context of affinity and identification” (p.73).

In the same journal issue, Hill and Douillette (2014), then practitioners from the Institute for Contemporary Art, Boston and Hirshhorn Museum and Sculpture Garden, respectively, describe two programs models that use media technology and contemporary art to connect with teen audiences. While the article fails to show any empirical evidence of the impacts or outcomes of these types of programs, it highlights the desires of museum professionals to provide an entry point to museums for teens who might not otherwise access it. The authors argue that these programs seek to shift the role of teens from consumer to creator and to hand over authority from the museum to young people. In the absence of research demonstrating the outcomes of these lofty goals, the reader is left with more questions than answers about the teen programming in the art museum. Do participants experience the impacts described by Hill and Douillette? What does it look like when teens shift from consumers of art to creators of art? What might indicate that teens have gained authority in the museum?

*What are the outcomes of teens’ participation in art museum programs?*

Evaluations and research studies provide insight into the potential outcomes of teens’ participation in art museum programs, including artistic development (Erickson & Hales, 2014), social opportunities with other art-interested peers (Hornby & Bobick, 2016), as well as long-term outcomes that include “personal identity and self-knowledge, lifelong relationships to
museums and culture, expanded career horizons, a worldview grounded in art, and community engagement and influence” (Linzer & Munley, 2015, p.13).

In 2014, researchers from Arizona State University partnered with the Scottsdale Museum of Contemporary Art to study the impacts of their Visions program on teen participants’ artistic metacognition (Erickson & Hales, 2014). Visions is a studio-focused, yearlong teen program, and the study aimed to identify and describe participants’ thinking about art through interviews, essays, journal activities, and post-program survey. Because all of the 42 participants were nominated by school art teachers from the six participating schools, all of the teens had previous art educational experiences. In addition to their regular school-based arts activities, each student attended 11 events hosted by the museum during the academic year, including curator- or artist-led gallery tours, studio visits and workshops, and the installation of the students’ exhibition. The museum encouraged the use of a special journal which included graphic organizers and activities which were designed to “stimulate students’ metacognition” (p. 417).

The researchers found that participants had a significant change in their metacognition from discussing traditional art educational content such as “elements and principles, originality, and truth to materials” to discussing “expression of feelings and ideas” (p. 423). What is more, the study found that some participants newfound focus on expression and meaning making was evident both in their reflections on looking at artwork and their own artmaking priorities, which led the researchers to conclude that “repeated, thoughtful encounters with contemporary art can escalate students' thinking about the importance of ideas and communication in their own artmaking” (p. 423).

However, this type of empirical evidence of the impacts of teen programs is relatively sparse. In an interview with two former art museum teen program participants, who have gone
on to pursue careers in art museum education with youth audiences, Flores, Wyrick, and Zwicky (2014) emphasized the plethora of anecdotal evidence of teen program success in art museums, and called for field-wide program documentation and research into impacts.

This call was answered, in part, by the landmark Institute of Museum and Library Services (IMLS)-funded study, *Room to Rise: The Lasting Impact of Intensive Teen Programs in Art Museums* (Linzer & Munley, 2015). In a multi-year collaboration, Linzer and Munley investigated the long-term impacts of four art museum teen programs that have been running since the early 1990’s: Youth Insights at the Whitney Museum of American Art, Walker Art Center Teen Arts Council (WACTAC) the Walker Art Center, Minneapolis, CAMH Teen Council at the Contemporary Arts Museum Houston, and MOCA teen program at The Museum of Contemporary Art, Los Angeles. Through a large-scale survey of program alumni from across three decades, the researchers collected the bulk of their data, which was supplemented by more in depth qualitative methods: focus groups, Photo Journals, Journey Maps, and interviews.

Linzer and Munley describe the study as tracing “a relationship between high impact engagement strategies, short-term outcomes, and long-lasting impacts for alumni” (“Room to Rise,” n.d.). Strategies include “supportive staff mentors, authentic work, sustained engagement, interactions with artists, and peer diversity” (p. 11), which contribute to short term benefits, such as “personal development, artistic and cultural literacy, arts participation, social capital, and leadership,” as well as the long term benefits of “personal identity and self-knowledge, lifelong relationships to museums and culture, expanded career horizons, a worldview grounded in art, and community engagement and influence” (p. 13).

Hornby and Bobick (2016) reported the results of an evaluation of Memphis Brooks Museum of Art’s teen program. Specifically, they describe findings from post-program
questionnaires of ten teen participants, as well as seven parents of participants, noting that the teens enjoyed building relationships with other art-interested peers, who they otherwise may not have the opportunity to meet, among other outcomes. While these types of evaluations are minimally beneficial to the field at large, due to their focus on a single program model and single method of data collection, the authors do utilize their publication platform to provide advice for other practitioners hoping to conduct research with teen audiences, which is reflective of field-wide desire for documented impacts and practitioner-led research.

In an effort to explore standardizing the language practitioners and evaluators use to describe the impact of teen programs in museums, Luke, Stein, Kessler, & Dierking (2007) proposed mapping these programs to The Six C’s. Borrowed from the literature in Positive Youth Development, the Six C’s refers to competence, confidence, connection, character, caring/compassion, and contribution. Luke et. al analyzed three previous studies of the impacts of teen programs, including the National Gallery of Art’s High School Seminar Program, for evidence of the Six C’s, and found significant overlap, suggesting that

“The Six Cs framework can 1) serve as a viable tool for practitioners to design and refine youth programs to achieve specific outcomes, particularly those that move beyond content-based knowledge and skills and approach young people as holistic beings with strengths and expertise to share; 2) offer museum professionals a clear, grounded framework and common language with which to articulate results often known intuitively and/or anecdotally but not formalized; and 3) provide museums with a way to clearly convey to funders and other stakeholders the value of their programs in the lives of young people” (p. 431).

**Summary**

A review of recent literature on teen audiences in art museums reveals that many museums are playing a vital role in youth development in their communities. Through a variety of programs designed to meet teen’s developmental needs, museums are making a difference in
the lives of young people, and are in turn being slowly transformed by the perspectives of the diverse groups of youth who engage in these programs. *Room to Rise*, along with other studies, provide insight into benefits of intensive teen programs, but there exists a broader demand for further research and evaluation (Flores, Wyrick & Zwicky, 2014; Hornby & Bobick, 2016), as well as the use of a grounded framework or standardized language to describe the impact of art museum learning for teens (Luke et al, 2007). As museums explore new ways of engaging teenagers, it is essential that new models, such as drop-in art studios, undergo the same level of evaluative scrutiny afforded to intensive programs to determine the impacts of these programs.

**Self-Efficacy and Adolescence**

Personal growth arises again and again in the literature as a positive impact of teens’ engagement with the arts, whether that be through museum programming or formal arts education. However, the nature of this growth or change goes by many names: self-efficacy, self-confidence, and identity development, just to name a few. For the purposes of this study, change in self-efficacy beliefs, one measure of personal growth, will be considered. Self-efficacy beliefs have been studied extensively in adolescents, and are considered an essential component of motivation, learning, self-regulation, and accomplishment (Pajares & Urdan, 2006). Additionally, changes in self-efficacy beliefs are often used as measures in studies related to art education (Garvis & Garvis, 2011; Groenendijk, Janssen, Rijlaarsdam, & van den Bergh, 2013; Snyder & Snyder, 2016), design education (Gaffney, 2011), makerspaces (Papavlasopoulou, Giannakos, & Jaccheri, 2017), and drop-in art therapeutic studios (Kaimal & Ray, 2017).

**What is self-efficacy?**

Self-efficacy was first described by Albert Bandura (1977) as “belief in one’s agentive capabilities, that one can produce given levels of attainment” (p. 382). While self-efficacy is
considered a type of cognition, a review of the literature shows that both theory and research support the notion that self-efficacy contributes to social, emotional, and behavioral development.

Rather than measuring an individual’s personal, psychological, or physical qualities, self-efficacy measures focus on an individual’s performance capabilities on given tasks (Zimmerman, 2000). Self-efficacy is multidimensional and task specific, and cannot be generalized to the nature of an individual. For example, in a study of athletic self-efficacy, participants may be asked to judge if they are capable of throwing a baseball to a teammate, or if they believe they can successfully run a five kilometer race, but measures of self-efficacy would not ask participants to judge themselves as athletic. Similarly, self-efficacy is domain specific. In our example, this means that self-efficacy beliefs for baseball throwing ability may differ from beliefs about running ability.

In understanding self-efficacy beliefs, it is essential to differentiate them from several related constructs: outcome expectations, self-concept, perceived control, and confidence. Outcome expectations, one’s estimation of the likelihood that a specific behavior will be followed by specific consequences, has been shown to have an impact on motivation, like self-efficacy. However, empirical research into the relationship between self-efficacy and outcome expectancy beliefs showed that, in the case of reading and writing, self-efficacy is a stronger predictor of reading achievement, and that self-efficacy, not outcome expectations, account for variation in writing achievement (Shell, Murphy, and Bruning, 1989 via Zimmerman, 2000).

Self-concept consists of an individual’s beliefs about themselves, including personal identity and group membership, personal attributes, and self-esteem or self-worth. Measures of self-concept tend to measure broad self-evaluative questions, like “How athletic are you?” rather
than the task specific performance expectations found in self-efficacy measures, such as “How certain are you that you can run five kilometers without stopping?” (Zimmerman, 2000).

Perceived control refers to general beliefs about whether one can determine one’s own internal states and behavior, influence one’s environment, and/or bring about desired outcomes. Because perceived control is neither task nor domain specific, scholars have questioned by value of measuring these beliefs which will most likely vary across tasks and contexts (Bandura, 1986, via Zimmerman, 2000).

Self-efficacy beliefs are often confused with the colloquial term confidence, which is further complicated by the term being used in measures of self-efficacy. Bandura (1997) writes “Confidence is a nondescript term that refers to strength of belief but does not necessarily specify what the certainty is about. I can be supremely confident that I will fail at an endeavor. Perceived self-efficacy refers to belief in one’s agentive capabilities, that one can produce given levels of attainment. A self-efficacy assessment, therefore, includes both an affirmation of a capability level and the strength of that belief. Confidence is a catchword rather than a construct embedded in a theoretical system." (p. 382)

**What is the importance of self-efficacy in adolescence?**

Adolescence, the developmental stage often described as a transition between childhood and adulthood, is a time of intense physical, psychological, and social change. Social cognitive theory proposes that individuals are active agents in this change, employing various personal resources in order to navigate this tumultuous time (Bandura, 2006a). Foremost among these resources is self-efficacy, which is an essential tool in successful adaptation and resilience as adolescents face transitions like puberty, changing social roles, entering the workforce, and increased academic expectations.

Several empirical studies have shown increases in adolescents’ self-efficacy beliefs to be correlated with improved academic achievement, career attainment, and healthy behaviors (Zimmerman, 2000). Self-efficacy is linked to participation, effort, persistence, and ability to
emotionally cope with difficulties (Bandura, 1997). Highly self-efficacious students have been shown to readily accept difficult tasks, such as a student choosing to engage with a more challenging math problem (Bandura & Schunk, 1981, via Zimmerman, 2000).

**What influences self-efficacy attainment?**

Adolescents’ self-efficacy beliefs come from a wide variety of sources, and these beliefs serve both as causes and effects of functioning as well as decision making (Zimmerman & Cleary, 2006). Self-efficacy is believed to be influenced by four types of experiences: enactive attainment, vicarious experience, verbal persuasion, and physiological states (Zimmerman, 2000):

- **Enactive attainment**, the individual’s first-hand experience of mastery, is considered the most influential source of self-efficacy. If an individual has mastered a task, or failed at a task, previous, this will have major implications for their self-efficacy related to that task.

- **Vicarious experiences**, those attainments which the individual observes in a model but does not directly experience, also contribute to self-efficacy, but they rely on the individual’s judgements of and personal comparisons to the model. For example, an individual may observe a peer running a race, but the individual’s judgement of their peer’s abilities, as well as their self-comparison to the peer, will influence the self-efficacy of the individual.

- **Verbal persuasion**, refers to experiences where expected attainments are simply described to the individual by others. Verbal persuasion has limited impact on self-efficacy beliefs because attainment is not observed in the self or in a model, and rely on the individual’s judgement of credibility of the persuader.
• **Physiological states** refer to the physical and emotional factors that impact self-efficacy, such as stress, pain, or fatigue. For example, individuals with low self-efficacy for running a race, may attribute normal muscle fatigue to their own lack of ability.

**How is self-efficacy measured?**

Bandura (2006b) cautions against a “one measure fits all” approach to measuring self-efficacy, due to the domain and context specificity of the construct. In order to insure content validity, scales should phrase tasks as “can do” (a judgement of capability) rather than will do (a statement of intention). Similarly, it is essential that scales not confuse self-efficacy with the related concepts described above: self-concept, perceived control, and outcome expectancies. The construction of self-efficacy scales also requires a thorough understanding of the specific domain and context to be measured. Each task on the scale must be linked to factors which reflect “quality functioning in the domain of interest” (p. 311) to assure that the research may show a relationship between self-efficacy beliefs and the desired behaviors. Bandura also proposes the inclusion of gradations of challenge or impediments within the scales to insure that there is differentiation between activities which are easily performable, and those which are not.

In the literature, there exists a standard quantitative methodology for measuring self-efficacy beliefs. Participants are provided items describing domain specific tasks of varying challenge, and asked to rate their degree of confidence in their own ability complete each task. Participants use a unipolar 0-100 point scale with 10-unit intervals, or a 0-10 point scale with one unit intervals. In these scales, a score of 0 indicates the belief “Cannot do at all”, a score of 50 (or 5) indicates “Moderately certain can do,” and a score of 100 (or 10) indicates “Highly certain can do.” Perhaps most importantly, it is essential that participants are asked to judge their capability for each task as of now, rather than in the future, because, as Bandura notes “It is easy
for people to imagine themselves to be fully efficacious in some hypothetical future” (2006b, p. 313). However, Bandura makes no comment on the utility of retrospective measures of self-efficacy, that is asking participants to reflect on their beliefs at a time in the past. Additionally, it is common for measures of self-efficacy to include practice items to familiarize participants with the scale, such as judging one’s own ability to lift objects of various weights.

A variety of qualitative measures have also been used to study self-efficacy (Tsang, Hui, & Law, 2012). These diverse methods include ethnography, classroom observations, interviews, and self-reports on recalled reasons for self-efficacy judgments. To capture the complexity of both objective and subjective aspects of self-efficacy beliefs, scholars recommend using semi-structured interviews.

**How have measures of self-efficacy beliefs been used in related research?**

While self-efficacy has only occasionally been used as a measure of personal growth in the context of art museum learning (Catterall & Peppler, 2007), there are several examples of empirical studies in related fields. In researching student learning in design studios and critiques, Gaffney (2011) attempted to develop and validate scales to measure students’ self-efficacy beliefs for design communication. In a review of 43 peer-reviewed articles on the Maker Movement from 2011-2015, Papavlasopoulou, Giannakos, and Jaccheri (2017) revealed the growing trend of utilizing of self-efficacy beliefs in describing the impacts of makerspaces on participant learning.

In art therapeutic settings, interventions utilizing art making have been used as a tool for enhancing self-efficacy beliefs in both adolescents (Walsh & Hardin, 1994) and adults (Kaimal & Ray, 2017). In a quasi-experimental study of healthy adults, Kaimal and Ray (2017) measured the impact of individual art making facilitated by an art therapist on participants affect and
general self-efficacy beliefs. The researchers found that just one 45-60 minute session in an open studio improved both positive affect and self-efficacy, with “no difference between groups based on prior experience with art-making, gender, age, or race/ethnicity” (p. 154), though over 50% of participants reported at least some previous experience with art making.

Despite differing goals for participant outcomes, the open studio format constructed for Kaimal and Ray’s research echoes many of the characteristics of museum open studios designed for teen audiences. Participants elect to participate, are offered a variety of media to choose from, and are given minimal instruction: “The participants were told that there were no expectations about creating artwork to fulfill any external esthetic criteria, that their work was not going to be judged for artistic qualities, and that they were free to work with the materials however they chose” (p. 157). In both settings, the facilitator, whether they be a museum educator, teaching artist, or art therapist, is charged with “creating an environment for safety, curiosity, openness and non-judgmental open self-expression” (p. 154). These open studio structures differ primarily in the role of peer-to-peer interactions. In the art therapeutic setting, participants are secluded in the studio, with only the option of interacting with the art therapist at their table, whereas in the museum open studio, teen participants are surrounded by peers, with nearly limitless opportunities for social interaction, artistic collaboration, and co-creation. What is more, participants in museum drop-in studios have the option of returning week after week, potentially increasing the positive impact of these experiences on self-efficacy over time.

Summary

When measured appropriately, change in self-efficacy beliefs serve as a powerful indicator of personal growth and potential future achievement of young people. As Pajares (2006) reminds us, as adolescents begin shaping their own life paths, they will “surely select
tasks and activities they believe are within their capabilities and avoid those that they believe are beyond their perceived confidence” (p. 339). For art museums seeking to develop artistic and personal agency in young artists, designers, and art lovers, social cognitive theory suggests that developing teens self-efficacy beliefs is foundational to that work.
Chapter 3: Methods

The purpose of this study was to describe teen participants’ perspectives on the impact of art museum drop-in studio programs on their self-efficacy towards artistic engagement. This research was guided by two questions:

1. How do teen participants perceive the program’s contribution to their artistic self-efficacy beliefs?

2. What aspects of drop-in studio programs do participants believe contribute most to their self-efficacy beliefs towards artistic engagement?

This chapter describes the three museum youth programs where data were collected, and explains the criteria by which they were chosen for this study. It also describes participant sampling methods, the study participants’ demographics, data collection methods, and data analysis. Finally, this chapter addresses potential limitations to the study.

Art Museum Drop-in Studio Programs for Teens

Research sites for this study were selected to insure that the three sites would be representative of the emerging program model of art museum drop-in studio programs for teens. These sites were selected based on the online program descriptions’ alignment with three primary criteria:

1. Programs included art making opportunities just for teen audiences.

2. Programs were drop-in in nature. This ruled out any programs that required an application process or registration before the first visit.

3. Programs emphasized youth driven approaches and open-choice nature of the work over the role of teaching artists or museum educators.
Following the initial identification of potential sites, the researcher selected three programs that represented different geographic regions within the United States. To improve chances of securing a significant sample of participants, sites which held their drop-in hours at least weekly were prioritized.

Teen Art Collective, Nelson-Atkins Museum of Art

The Nelson-Atkins Museum of Art, located in Kansas City, Missouri, is home to the Teen Art Collective. A weekly, drop-in studio program held on Thursdays, 4-6pm, the Nelson-Atkins’ website reads: “Create something new and be inspired by our galleries and exhibitions. Supplies provided!”

Art & Design Lab, RISD Museum

As the name suggests, the RISD Museum is situated on the campus of the Rhode Island School of Design, and art and design college in downtown Providence, Rhode Island. Art and Design Lab is a weekly, drop-in studio program held Fridays, 3-5pm. At the time of data collection, the program staff was considering changing the name to “Friday Arts & Snacks” to better reflect the informal nature of the program. “Unwind at the end of the week by exploring the Museum and making art,” the RISD Museum’s website reads, “Each week offers new gallery adventures, different materials and techniques to play with.”

Teen Art Studio, Columbus Museum of Art

The Columbus Museum of Art, located in Columbus, Ohio, belongs to a city-wide collaborative of youth-serving organizations called SURGE Columbus. Founded in 2012 and based on connected learning theories (Ito et. al, 2013), SURGE organizations offer a variety of programs and events to engage youth in opportunities to develop skills in critical thinking, civic engagement, media literacy, media production, and creative expression. The Columbus Museum
of Art’s SURGE Teen Open Studio offers a space to experiment with audio, photographic, and music technologies, as well a variety of visual art supplies, or just to hang out with friends. Teen Open Studio drop-in hours are 4-8pm on Thursdays, and 2-5pm on Fridays throughout the year.

Despite some distinct differences, each of the programs share notable characteristics beyond those which were predetermined as criteria. First, in addition to the programs being free of charge to attend, all three programs sampled provide free art supplies for use during the program. Second, all three programs were staffed by professional educators as well as undergraduate student mentors. In some cases, these mentors were program alumni, but more commonly they were enrolled in local art and design college: Rhode Island School of Design, Columbus College of Art and Design, and the Kansas City Art Institute. The relationship between these institutional neighbors, art and design colleges and the art museum next door, may prove to be an opportunity for further study.

**Sampling**

This study explored the perspectives of current teen participants in each of the three selected programs: Teen Art Collective at the Nelson-Atkins Museum of Art, Teen Art Studio at the Columbus Museum of Art, and Art & Design Lab at the RISD Museum. In advance of the data collection period, program staff at each museum distributed information about the study and contact information about the researcher to potential participants. For potential participants under the age of 18, consent information was distributed to guardians explaining that parents could choose to opt-out of the study by contacting the researcher via email or telephone. If the researcher was not contacted by the parent/guardian to opt-out, passive consent was obtained.

In February and March 2018, the researcher traveled to each site to recruit teen participants. During normal program hours, the researcher offered all teens present the
opportunity to participate voluntarily in the questionnaire that day, informing them of the phone
interview portion of the study, assuring them that they could ask questions and choose to leave
the study at any point in the research.

After going through this recruitment process with all three sites, 33 individuals
participated in the questionnaire, with 12 expressing willingness to participate in the phone
interview by providing their contact information. Of the 12 willing participants, 10 scheduled a
time for a phone interview. Across all three sites, 10 youth under the age of 18 and 22 adults
(ages 18-20) participated in the study, with one participant failing to complete the demographic
portion of the questionnaire. The major consent/assent points were then discussed again at the
beginning of the phone appointment, and they were asked to provide verbal consent/assent.

Participants

The participants in this study ranged in age from 14 to 20 years. Eighteen out of 33 total
participants identified as female, with 13 identifying as male, and 2 choosing not to identify their
gender. When asked to provide their race and/or ethnicity, 10 participants listed white,
Caucasian, or European American, 11 identified themselves as African American or Black, and
eight identified another race or ethnicity including Asian, Hispanic, Native American, Middle
Eastern, Jewish. Four participants listed two identity groups or identified as “mixed,” and five
provided no response to the question.

Participants in this study varied in how often they attended their program, with some
visiting just twice in the past twelve months, and others visiting as many as 100 times in the
same period. Likewise, there was variation in how long participants had been attending the
programs, with some reporting their first visit as happening in February 2018, just before the
collection period in February/March 2018, and others first attending as far back as September, 2015.

*What does participation look like?*

Because of the drop-in, open choice nature of this program, understanding the nature of participation among participants is essential to describing the sample of this study. On the questionnaire [Appendix B], youth were asked “In the past 12 months, how have you been involved within this studio program? Please check ALL that apply.” Table 1, below, shows the number of participants who reported being involved in various programmatic activities within the open-studio in the previous 12 months.

Table 1: Youth reported involvement with program activities in the previous 12 months.

<table>
<thead>
<tr>
<th>Youth involvement in program activities in the previous 12 months</th>
<th>Number of individuals who reported behavior (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worked on art projects alone</td>
<td>24</td>
</tr>
<tr>
<td>Worked on art projects with peers</td>
<td>23</td>
</tr>
<tr>
<td>Worked on projects with adult artists or museum staff</td>
<td>14</td>
</tr>
<tr>
<td>Explored the museum’s exhibitions or galleries</td>
<td>23</td>
</tr>
<tr>
<td>Talked about works of art in the museum</td>
<td>22</td>
</tr>
<tr>
<td>Socialized with other teens</td>
<td>27</td>
</tr>
<tr>
<td>Worked on homework or other non-art projects</td>
<td>9</td>
</tr>
</tbody>
</table>
Additionally, participants were asked to report any additional arts involvement outside of the art museum drop-in studio program. Table 2, below, shows the number of youth who reported participating in various art activities outside of the program in the previous 12 months.

Table 2: Youth reported involvement with art activities outside of the program in the previous 12 months.

<table>
<thead>
<tr>
<th>Youth involvement in art outside the program in the previous 12 months</th>
<th>Number of individuals who reported behavior (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working on art projects as homework</td>
<td>17</td>
</tr>
<tr>
<td>Working on self-directed art projects</td>
<td>24</td>
</tr>
<tr>
<td>Visiting an art museum with your friends or family</td>
<td>24</td>
</tr>
<tr>
<td>Visiting an art museum on your own</td>
<td>17</td>
</tr>
<tr>
<td>Taking an art class at school</td>
<td>16</td>
</tr>
<tr>
<td>Taking an art class outside of school</td>
<td>6</td>
</tr>
<tr>
<td>Working at a job or internship related to art</td>
<td>10</td>
</tr>
</tbody>
</table>

Data Collection

Data were collected using two methods: (1) a pencil-on-paper questionnaire; and (2) a semi-structured phone interview. Scaled items on the questionnaire were designed according to Bandura’s (2006) recommendations for creating domain-specific self-efficacy scales (see Appendix A for the questionnaire). In this study, the domain being investigated was artistic engagement. To develop scales which reflect the context and complexity of artistic engagement, examples of tasks were modeled off of the eight Studio Habits of Mind (Hetland, et. al, 2007, 2013): (1) Develop Craft; (2) Engage and Persist; (3) Envision; (4) Express; (5) Observe; (6) Reflect; (7) Stretch and Explore; and (8) Understand Art Community. The questionnaire also
included basic questions about age, race/ethnicity, gender, and the frequency and nature of their participation in the teen studio program.

The questionnaire was administered to participants in-person during normal program hours and instructions were explained in writing and verbally before the student to completed the questionnaire. The questionnaire took between 5 and 15 minutes to complete. At the end of the questionnaire, participants were asked to provide their contact information, the contact information of their parents/guardians if under the age of 18, and their availability for a phone interview if they chose to continue.

Semi-structured Interview

Of the 33 total participants, 10 participants were interviewed to identify the aspects of the program that they felt had an impact on their feelings about their abilities to engage with art (see Appendix B for the interview guide). Interview questions were designed to ask participants about their general perceptions of the program’s impact on their self-efficacy beliefs toward artistic engagement, their relationship with art, and their personal growth more broadly. Interviews lasted between 7 and 18 minutes and were audio recorded for future analysis.

Data Analysis

Quantitative data from the questionnaire were analyzed using descriptive and inferential statistics. Youth’s self-efficacy ratings of “before the program” and “today” were analyzed using a paired samples t-test. Qualitative data from the interviews were analyzed to answers each research question, using an emergent coding rubric (see Appendix C). For RQ1, interviews were reviewed a priori to for evidence to support the quantitative findings from the questionnaire, as well as emergently to reveal additional changes in self-efficacy beliefs beyond the Studio Habits
of Mind Framework. For RQ2, interview data was analyzed to identify emergent trends and patterns. All demographic data were utilized solely to describe the sample.

**Limitations**

A significant limitation of this study is that the scaled items on the questionnaire required participants to recall their self-efficacy beliefs at a time in the past. In an ideal scenario, the unreliability of recollection would be circumvented by collecting data from participants before and after their engagement with the drop-in studio program. However, due to the timeline of this research, such practices were not feasible, and participants instead were asked to reflect on and rate how they might have felt at a time before their participation in the program, and then asked to rate how they feel today.

Another potential limitation is the tendency for participants to experience social pressure to express positive change in the questionnaire. Because the questionnaire asked youth to provide self-efficacy ratings from “before attending the program” and “today,” this could be perceived as an expectation of positive change. In an effort to minimize social satisficing, after the consent/assent talking points were addressed (Appendix D), the researcher left participants to complete the questionnaire privately.
Chapter 4: Results and Discussion

This study investigated the perspectives of 33 current participants of art museum drop-in studio programs for teens. It examined (1) how teens perceive the influence of the program on their self-efficacy beliefs towards artistic engagement; and (2) what ways teens felt that programs contribute to their self-efficacy beliefs towards artistic engagement. This chapter presents major findings within each of these research questions.

RQ1: How do teen participants perceive the program’s contribution to their artistic self-efficacy beliefs?

First defined by Bandura (1977), self-efficacy is defined as an individual’s agentive capability to perform on given tasks. For the purposes of this study, artistic self-efficacy was defined as individual’s agentive capability to perform a variety of tasks and behaviors associated with the eight Studio Habits of Mind (Hetland et al., 2007): 1) developing craft; 2) engaging and persisting; 3) envisioning; 4) expressing; 5) observing; 6) reflecting; 7) stretching and exploring; and 8) understanding the art world.

Both quantitative questionnaire data and qualitative interview data were used to describe youth perspectives on the drop-in studio program’s impact on their artistic self-efficacy. Findings are organized by the Studio Habits of Mind framework, including participants’ quotes indicating specific artistic behaviors, as well as examples of moments in the interviews when participants referenced a change in self-efficacy related to that behavior.

1) Developing Craft

Hetland et al. (2007) define developing craft as learning to use tools, materials, artistic conventions, and learning to care for tools, materials, and space. On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in developing craft that day,
and before they started participating in the program. Table 3 below shows participants’ average ratings for their confidence in activities related to the development or refinement of artistic craft.

Table 3: Youth’s average confidence ratings for activities related to the development of artistic craft.

<table>
<thead>
<tr>
<th>Activities related to developing artistic craft</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use art tools/materials you used in this program</td>
<td>33</td>
<td>5.55</td>
<td>7.88</td>
<td>0.000</td>
</tr>
<tr>
<td>Use art techniques you used in this program</td>
<td>33</td>
<td>5.00</td>
<td>7.88</td>
<td>0.000</td>
</tr>
<tr>
<td>Find a way of working with tools, material and techniques that enables you to succeed at your goals</td>
<td>31</td>
<td>5.06</td>
<td>8.35</td>
<td>0.000</td>
</tr>
</tbody>
</table>

When asked in interviews about the open-studio program’s overall contribution to the role of art in their life, several participants referred to their experience developing craft, noting a change in the types of materials used and frequency of engaging with their artistic process:

“Before I was sketching in my journal and not really using anything but pencil. But [since participating in the program] I've used clay, I've been using paints more...and I'm actually making art projects.” Another participant specifically described the opportunity to use materials and techniques they did not have access to outside of the program:

“I actually think that going to this [program] helped me experiment with other mediums...Before I went to this program, I tended to used standardized mediums like charcoal or paint….so I think that is how it has helped me in terms of my artistic ability.”

In the same interview, when asked how the program contributed to their confidence in their own artmaking process, the participant described their increased self-efficacy:

“At first when I started, I was not really confident, or I didn't think highly of my art, but now going there, going around the [museum] seeing art, and seeing what other people did helped with my confidence. I learned new techniques and it was really amazing.”

In response to the same question, another participant described the impact of learning from their
peers in developing their craft:

“It's helped me a lot, because when I first came, I was only going to make beats. I wasn't going to write or rap or anything. Then I came, and I was trying to get people to show me how to do it a little bit.”

For them, the program improved their self-efficacy to use the tools and techniques they learned about in the studio to achieve their artistic goals: “Before I knew I was creative, I didn't know how to go about it and how to execute it. And now that I've been going here I know exactly what to do.”

2) Engaging and Persisting

Hetland et al. (2007) define engaging and persisting as learning to embrace relevant problems and developing mental states conducive to persevering at artistic tasks. On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in several activities related to engaging and persisting that day, and before they started participating in the program. Table 4 below shows participants’ average ratings for their confidence in activities related to the engaging and persisting in the studio.

Table 4: Youth’s average confidence ratings for activities related to artistic engagement and persistence.

<table>
<thead>
<tr>
<th>Activities relating to artistic engagement and persistence</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commit to try new things until you find something that works for your artistic project</td>
<td>31</td>
<td>5.90</td>
<td>8.16</td>
<td>0.000</td>
</tr>
<tr>
<td>Follow through on completing an artistic project</td>
<td>31</td>
<td>5.97</td>
<td>8.29</td>
<td>0.000</td>
</tr>
<tr>
<td>Struggle through a difficult task in the studio</td>
<td>32</td>
<td>5.47</td>
<td>7.41</td>
<td>0.000</td>
</tr>
</tbody>
</table>

For some teens, the experience of participating in their local teen open-studio program contributed to their confidence in their ability to engage and persist through difficult tasks in
studio. When asked about the impact of participating in the program on their confidence in their art making process, one participant noted:

“It has made me more confident in what I do, especially in front of other people...my ability to create art and not being worried if it is not as good as other people who are creating the art with me.”

When asked the same question, another participant described the accepting culture of the teen program in supporting their engagement and persistence:

“It has allowed me to be kind of like "this isn't perfect, but whatever - it is the best I can do and I'm working on it. I'm growing as an artist, and that is a really exciting thing.”

3) Reflecting

Hetland et al. (2007) define artistic reflection as twofold: 1) Questioning and explaining, which involves learning to think and talk with others about aspects one’s artwork or artistic process; and 2) Evaluating, which involves learning to judge one’s own work, process, and the work and processes of others by broader standards of artistic practice. On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in reflecting that day, and before they started participating in the program. Table 5 below shows participants’ average ratings for their confidence in activities related to artistic reflection.

Table 5: Youth’s average confidence ratings for activities related to artistic reflection.

<table>
<thead>
<tr>
<th>Activities related to artistic reflection</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask questions about your own artwork</td>
<td>31</td>
<td>5.35</td>
<td>7.16</td>
<td>0.000</td>
</tr>
<tr>
<td>Describe your artistic process</td>
<td>32</td>
<td>5.19</td>
<td>7.34</td>
<td>0.000</td>
</tr>
<tr>
<td>Explain your artistic decisions</td>
<td>33</td>
<td>4.94</td>
<td>7.52</td>
<td>0.000</td>
</tr>
<tr>
<td>Judge if an art piece you made was successful</td>
<td>32</td>
<td>5.75</td>
<td>8.00</td>
<td>0.000</td>
</tr>
<tr>
<td>Participate in a group critique of your own work</td>
<td>32</td>
<td>4.38</td>
<td>6.28</td>
<td>0.000</td>
</tr>
<tr>
<td>Participate in a group critique of the work of your peers</td>
<td>30</td>
<td>4.97</td>
<td>6.43</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Several teens discussed the impact of informal exchanges within the context of the program that contributed towards their artistic self-efficacy. When asked specifically about the program’s contribution to their confidence, one participant described the impact of the program on their ability to assess her work in comparison to their peers:

“I used to be really competitive and if someone was better than me, I got discouraged. I was really frustrated when I wasn't as good as someone else. Now I think I can learn from it a little bit better, that I'm not as "judge-y" about myself.”

Another participant remarked on their increased self-efficacy as it related to sharing their artistic process:

“It has helped me to share my art a lot more. I normally don't like to show other people what I draw, or how I do it, because I don't think I do it very well. But it's helped me to be able to show how I do it.”

Yet another interview participant described the role of peer relationships in establishing a comfortable environment to reflect and share their processes:

“At first, I didn't want to show people the stuff because I didn't think it was that good, but then I've been going for so long and I feel like I just know everybody there. So now I'm more confident in showing people what I've done...I'm very open about sharing my stuff now.”

4) **Stretching & Exploring**

Hetland et al. (2007) define stretching and exploring as learning to reach beyond one’s current capacities. This involves both embracing mistakes and accidents as opportunities to learn, as well as exploring playfully without a preconceived plan. On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in stretching and exploring that day, and before they started participating in the program. Table 6 below shows participants’ average ratings for their confidence in activities related to stretching and exploring in the studio.
Table 6: Youth’s average confidence ratings for activities related to stretching and exploring in the studio.

<table>
<thead>
<tr>
<th>Activities related to stretching and exploring in the studio</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play with new art materials, tools, or techniques</td>
<td>31</td>
<td>6.06</td>
<td>8.71</td>
<td>0.000</td>
</tr>
<tr>
<td>Not worry about how an artistic project will turn out</td>
<td>33</td>
<td>5.36</td>
<td>7.67</td>
<td>0.000</td>
</tr>
<tr>
<td>Experiment with ways of making art that are new to you</td>
<td>32</td>
<td>5.72</td>
<td>8.50</td>
<td>0.000</td>
</tr>
<tr>
<td>Create something after learning from your old mistakes</td>
<td>31</td>
<td>6.58</td>
<td>8.68</td>
<td>0.000</td>
</tr>
</tbody>
</table>

During participant interviews, teens emphasized the role of the drop-in studio program related to their self-efficacy to stretch and explore in their art making process. For some, this took the form of playing with new materials, tools, or techniques: “I never went outside the box and did completely different unconventional materials to make art, and I started realizing that while I was there, I started that. And I find the beauty in that now.”

For others, the opportunity to experiment with ways of making led to deeper insights into the role of stretching and exploring as part of an artistic practice. When asked to discuss how the program may have contributed to the role of art in their life, one participant explained:

“It showed me that there is not just one way to do art - that there is not just one strict path that you have to follow. Painters aren't just painters, and sculptors aren't just sculptors. Normally, I just try and draw with pencil on paper. I never do anything else other than that, but I think it was at the clay session a few weeks ago. We made little sculptures and that was when I realized that you don't have to limit yourself to one way of thinking.”

For another teen artist, participating in the open studio allowed for a type of risk taking that contributed to their self-efficacy to take artistic risks across settings:

“I used to be a little bit of a perfectionist and I used to spend a lot of time thinking about what I wanted to do and sticking to safer things, but even in school art classes I've found that I am taking a lot more risks and I am a lot more open to failing a little bit.”
5) Understanding the Art Community

Hetland et al. (2007) define understanding the art community as twofold: 1) Domain, which refers to learning about art history and contemporary artistic practice; and 2) Communities, which involves learning to interact “as an artist with other artists (i.e., in classrooms, in local arts organizations, and across the art field) and within the broader society” (p. 6). On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in understanding the art world that day, and before they started participating in the program. Table 7 below shows participants’ average ratings for their confidence in activities related to understanding the art world.

Table 7: Youth’s average confidence ratings for activities related to understanding the Art Community.

<table>
<thead>
<tr>
<th>Activities related to Understanding the Art Community</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create works of art that reflect your understanding of the art world, including art history</td>
<td>32</td>
<td>5.44</td>
<td>6.97</td>
<td>0.000</td>
</tr>
<tr>
<td>Make connections to adults in the art world</td>
<td>29</td>
<td>5.10</td>
<td>7.28</td>
<td>0.000</td>
</tr>
<tr>
<td>Make connections to art-interested peers</td>
<td>31</td>
<td>6.06</td>
<td>8.45</td>
<td>0.000</td>
</tr>
<tr>
<td>Visit an art museum with friends or family</td>
<td>32</td>
<td>6.06</td>
<td>8.19</td>
<td>0.000</td>
</tr>
<tr>
<td>Use art related vocabulary to communicate</td>
<td>31</td>
<td>5.29</td>
<td>7.23</td>
<td>0.000</td>
</tr>
<tr>
<td>Get an art related job or internship</td>
<td>31</td>
<td>4.68</td>
<td>6.32</td>
<td>0.000</td>
</tr>
<tr>
<td>Find further opportunities to be part of the art world</td>
<td>31</td>
<td>4.87</td>
<td>7.55</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Behaviors and activities related to understanding the art world were most commonly discussed in participant interviews. From self-efficacy related to understanding art made by others, to participation in art related activities outside of the museum, many teen open-studio participants reportedly gained confidence in the program related to their understanding of the art world.
Understanding artwork made by others

Given the museum context of these drop-in open studio programs for teens, special attention was paid to the impact of participation on teens’ self-efficacy as it relates to understanding works of art made by others. Participants were asked to rate how much they think the teen program impacted their confidence in their ability to understand art made by other people, on a scale of 1 (being not at all) to 5 (being very much), and considering art made by others broadly, including both the work of their peers in the studio, as well as art on view in the museum. Of the 10 participants interviewed, one rated 5 (very much), five rated 4 (somewhat), and four rated 3 (undecided or neutral). While elaborations on those ratings were not solicited from participants, a few unsolicited comments provide insight into the diverse perspectives behind these ratings. For example, one youth artist who rated their confidence a 3 (undecided or neutral), described the complexity of interpretation:

“I'm still kind of trying to understand other people's art and I know it is different for every person. I'm still learning how to interpret art because I know it is completely different when you are looking at someone else's.”

For another interviewee, the subject of increased self-efficacy in understanding art made by others arose when asked about the overall impact of the program on the role of art in their life:

“It's helped me to appreciate the way modern art works. Because everyone always talks about how easy it is to make modern art, but they never talk about if it is easy to think of it and to create something symbolic. I think the classic example is just blank white painting, and people would talk about ‘Oh, wow that's so easy. Why don't I just be a modern artist?’ But they [program staff] explained that it’s not just about what the painting is but also kind of what it represents to that specific artist and how it impacts them, and how other people interpret it.”

Find further opportunities to be part of the art world

Some youth expressed increased confidence in their ability to participate in the art world beyond the museum open-studio. In one case, a participant’s increased artistic self-efficacy was described as a sort of catalyst for further involvement in the art world. When prompted to rate the
impact of the program on their confidence in their ability to successfully make art, this participant said,

“Going to the [open-studio program] really helped me in the way that I started going to other programs...trying to find other visual arts programs or internships. I think that it was like a spark, because it changed everything for me.”

For one participant, the confidence gained in the open studio program led to a deepened connection to the institution itself:

“I am more willing to participate in other art like events... If I see a cool event at [museum] that is specifically for one medium, I go to it even if it is not my thing - like knitting - I don't like knitting at all, but if it is at [the museum] I know it will be good, so I will go.”

6) Expressing

Hetland et al. (2007) define expressing as learning to create works of art that convey ideas, feelings, or other personal meaning. On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in expressing that day, and before they started participating in the program. Table 8 below shows participants’ average ratings for their confidence in activities related to artistic expression.

Table 8: Youth’s average confidence ratings for activities related to artistic expression.

<table>
<thead>
<tr>
<th>Activities related to artistic expression</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate your ideas through art</td>
<td>32</td>
<td>5.63</td>
<td>7.59</td>
<td>0.000</td>
</tr>
<tr>
<td>Show your feelings through art</td>
<td>32</td>
<td>6.13</td>
<td>8.25</td>
<td>0.000</td>
</tr>
<tr>
<td>Tell stories using art</td>
<td>32</td>
<td>5.69</td>
<td>7.59</td>
<td>0.000</td>
</tr>
</tbody>
</table>

7) Envisioning

Hetland et al. (2007) define envisioning as learning to picture mentally what cannot be directly observed, as well as imagining next steps in an artistic project. On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in envisioning that
day, and before they started participating in the program. Table 9 below shows participants’ average ratings for their confidence in activities related to artistic envisioning.

Table 9: Youth’s average confidence ratings for activities related to artistic envisioning.

<table>
<thead>
<tr>
<th>Activities related to artistic envisioning</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create an artwork from your imagination</td>
<td>30</td>
<td>6.43</td>
<td>8.27</td>
<td>0.001</td>
</tr>
<tr>
<td>Develop a plan for a new artistic project</td>
<td>33</td>
<td>5.70</td>
<td>7.70</td>
<td>0.000</td>
</tr>
</tbody>
</table>

8) Observing

Hetland et al. (2007) define observing as learning to see what might not otherwise be seen by attending to visual contexts more closely than ordinary “looking.” On a scale from 1-10, where 1 was low and 10 was high, youth were asked to rate their confidence in observing that day, and before they started participating in the program. Table 10 below shows participants’ average ratings for their confidence in activities related to observation.

Table 10: Youth’s average confidence ratings for activities related to artistic observation.

<table>
<thead>
<tr>
<th>Activities related to artistic observation</th>
<th>(n=)</th>
<th>&quot;Before Program&quot; Mean</th>
<th>&quot;Today&quot; Mean</th>
<th>Statistical Significance (p&lt;0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look closely at an artwork to learn more</td>
<td>33</td>
<td>6.18</td>
<td>8.30</td>
<td>0.000</td>
</tr>
<tr>
<td>Understand an artwork by taking your time to observe it closely</td>
<td>33</td>
<td>6.24</td>
<td>8.39</td>
<td>0.000</td>
</tr>
<tr>
<td>Create an artwork by referencing something outside of your own imagination, like an image or another work of art</td>
<td>33</td>
<td>6.39</td>
<td>8.52</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Despite significant increases in self-efficacy beliefs on activities associated with expressing, envisioning, and observing, none of the interview participants specifically discussed these Studio Habits in relation to their confidence in their art making process, ability to make art, or ability to understand art made by others.
Artistic Self-Efficacy Beyond the Studio

For several participants in the interviews, the impacts of these programs on artistic self-efficacy stretched outside of the framework of the Studio Habits of Mind. A common theme among the interviews was a stated improvement in their self-efficacy to share their work beyond the walls of the studio. For one youth musician, regular access to a recording studio provided not only the tools to produce their music, but the confidence to share their work beyond the museum: “Now, I'm putting out my own music and I'm getting more fans and everything. And it has put me out there where I can perform and grow my fan base.” For a teen visual artist, increased self-efficacy in their ability to share work beyond the studio manifested on the program’s website: “When [the program staff] are asking to take photos of my work to put on their website, I always check yes because I know [my artwork] is going to be somewhat decent with their help.”

For another interview participant, their increased confidence in sharing their work with friends beyond the museum translated into a generalized sense of self-efficacy:

“It has given me a lot more confidence in my day-to-day life, knowing that we made books. This an example: we made these little books last week and the week before, we actually bound little books and I carried them around with me at school, and I was showing my friends. And they were like, ‘Whoa, that's so cool.’ I don't think teenagers really think about binding books as a hobby or anything like that. And even though they weren’t perfect or anything like that, it made me feel really excited about what I was doing, in ways that I hadn't felt excited before.”

RQ2: What aspects of drop-in studio programs do participants believe contribute to their self-efficacy for artistic engagement?

The second research question asked what aspects of the drop-in studio program models youth participants describe as contributing to their self-efficacy for artistic engagement. Interviews were analyzed using emergent qualitative coding to identify trends and patterns that provided insights into this question. Two main aspects of the program model were identified: 1)
experience of artistic practices; and 2) program culture.

**Experience with Artistic Practices**

For some of the youth interviewed in this study, the experience of simply engaging in artistic practices in the open-studio programs contributed to their self-efficacy beliefs around artistic engagement: “I think the more I do I become a little bit more confident in my art making process,” said one teen, “I think just having the opportunity to do art every week is good.”

For another participant, engaging in informal critiques or other exchanges in the studio provided the opportunity to build confidence in sharing their work with others: “I'm more confident in showing people what I've done, because that's what we do there. We make stuff and share it with each other. I'm very open about sharing my stuff now.” That same participant, when asked to rate their confidence in their ability to interpret art made by others, said, “I guess going here has helped me interpret a lot of different types of art, just from getting firsthand experience and seeing how people make it and being able to relate to it by being there with them.”

When asked about the program’s contribution to their confidence in their art making process, two interview participants specifically discussed the relationship between their participation in the museum open-studio and their experience of formal art classes at their high school. While both acknowledged that their increased confidence in their process may have been impacted by their school art classes, they felt that the museum open-studio provided a different kind of experience of artistic practice: “I think having a weekly outlet to take my stress and all of that and put it into this very free-form, free art experience has given me a lot more confidence in my day to day life.”

**Program Culture**

Within the category of program culture, three sub-themes were identified: 1) non-
judgmental culture; 2) verbal encouragement; and 3) models of artistic engagement.

**Non-Judgmental Culture**

Interview participants described the non-judgmental culture of the program in contributing to their self-efficacy beliefs about artistic engagement. For one young person, the limited time frame and the atmosphere of the program allowed them to develop a sort of growth-mindset towards art making:

“Before I was worried what people were going to say, but I know that with [this open-studio program], it only lasts about two hours. So, you only have two hours to make this piece of art. It doesn't have to be perfect, it just has to be what it is.”

Another participant, when asked what specifically about the program contributed to their increased confidence in their ability to judge their own artwork, said: “Everyone there is on the same wavelength...there are some people who are artsy, but not really into art, and they’re learning. I’m artsy and do art, and I’m still learning.” For them, being part of a like-minded community of learners allowed them to approach work in the studio as an opportunity to grow, rather than a competition among peers.

**Verbal Encouragement**

While some interview participants more broadly described the non-judgmental culture of the programs, others specifically described the role of verbal affirmations from peers and adult mentors as contributing to their self-efficacy. When asked in what ways the open studio program contributed to their confidence in their art making process, one participant described the supportive culture amongst teen participants: “We all really encourage each other and say like ‘Oh, how did you do that? How did you come up with that?’” The act of receiving this verbal encouragement could be as simple as a peer saying “This is cool.” This was described further by another youth artist: “I feel more confident...When you're looking at [your own artwork] you
think it doesn't look that great, but someone else in the program says it is. Then it helps a lot.”

One participant specifically described the role of verbal encouragement from adults when struggling through a difficult task in the studio:

“The teachers, they were very patient with me, especially with the bookbinding, which took forever to do. They still made it fun – ‘You know, it's okay, not everyone gets it.’ They're always saying, ‘Everybody makes mistakes’ and stuff.”

**Models of Artistic Engagement**

In addition to the supportive environment created through verbal affirmations from others, several participants described the impact of exchanges with peers and adult mentors in the museum. For these youth, the experience of sharing a studio space with other youth artists, professional artists, and experiencing art in the museum contributed to their artistic self-efficacy. One participant said it quite simply: “Going there [to the studio], going around the museum seeing art, and seeing what other people did helped with my confidence.” Another elaborated further, specifically noting the impact on the development of their creative process:

“I think with the opportunities of being able to go around the [museum] and the different exhibits and that kind of thing, it helped me learn about other artists and so I'd be able to apply those things to my artistic mind, you know? To be able to not only see, and we've had guest artists come in as well, and to be able to hear their stories and to hear where they came from and hearing the teenagers and the artists’ creative processes, that helps you develop your own.”

The impact of modeling from peers was described as contributing to self-efficacy towards participating in informal critiques as well:

“I has helped me to share my art a lot more. I normally don't like to show other people what I draw, or how I do it, because I don't think I do it very well. But it's helped me to be able to show how I do it, I guess. Other teen artists who could share their work with each other makes it easier for me to do so.”

Whether observing peers at work in the studio, meeting with visiting professional artists, or working alongside program facilitators, witnessing the artistic engagement of others proved to be a source of self-efficacy for teen participants.
Chapter 5: Conclusions and Implications

The purpose of this study was to explore how art museums’ drop-in studio programs for teens impact their artistic self-efficacy beliefs. More specifically, it looked at (1) how teen participants perceive the program’s impact on their artistic self-efficacy beliefs and (2) what aspects of these programs teen participants believe impacted their self-efficacy beliefs.

To accomplish this, questionnaires were administered to 33 teen participants from three art museum drop-in studio programs, and ten of those youth also participated in phone interviews to provide insights into aspects of the experience not addressed in the questionnaire. The findings from this study contribute to the literature documenting the impact of art museum programs for teens by proposing change in artistic self-efficacy beliefs as an indicator of personal growth and agency.

Conclusions

Teens Perceive Increased Artistic Self-Efficacy Beliefs

Since engaging in art museum open-studio programs, teen participants retrospectively reported an increase in self-efficacy beliefs towards a variety of artistic activities and behaviors. These statistically significant increases in self-efficacy beliefs were seen across all 31 tasks and activities on the questionnaire, reflecting the breadth and depth of the Studio Habits of Mind framework (Hetland et al., 2007): 1) developing craft, which included tasks like “Use art tools/materials you used in this program;” 2) engaging and persisting, which included tasks like “Commit to try new things until you find something that works for your artistic project;” 3) envisioning, which included tasks like “Develop a plan for a new artistic project;” 4) expressing, which included tasks like “Communicate your ideas through art;” 5) observing, which included tasks like “Understand an artwork by taking your time to observe it closely;” 6)
reflecting, which included tasks like “Judge if an art piece you made was successful;” 7) stretching and exploring, which included tasks like “Experiment with ways of making art that are new to you;” and 8) understanding the art world, which included tasks like “Find further opportunities to be part of the art world.” These findings were further reinforced by interview data, which illustrated teen participants’ reflections on the impact of the program on their personal growth more broadly. Additionally, some participants expressed increased confidence in their ability to successfully share their work with others in their community outside of the context of the studio.

While the specific domain of artistic self-efficacy has not yet been widely studied, these findings are supported by research in positive youth development that shows high quality youth programs have the potential to develop youth self-efficacy beliefs (Lerner et al., 2005). While Lerner et al. described generalized or globalized self-efficacy and confidence as an outcome of positive youth development, Luke et al. (2007) found that youth participants in a variety of museum programs felt that those programs had enhanced their confidence, in in domain specific ways such as knowledge, social and communication skills, and career development, as well as impacting their self-concept more broadly. This study delves deeper into the domain specific impacts of art museum programming for youth, showing that the informal environment of the drop-in studio is perceived by youth as a place to develop their artistic self-efficacy beliefs.

This study contributes to several bodies of research which explore change in self-efficacy beliefs as a measure of impact in similar informal learning contexts. Taken together, this study and large body of recent research addressing the impact of participating in maker spaces on self-efficacy beliefs (Papavlasopoulou et. al., 2016), suggests that these types of connected learning spaces, which allow for both independent and collaborative exploration of creative processes
have a significant influence on personal development. Like Gaffney (2011), who measured students self-efficacy towards communication in the design classroom, this study provides replicable measures of self-efficacy in the domain of art and design education. This study also expands on the study of open studios influence on self-efficacy and affect in a therapeutic setting (Kaimal and Ray, 2017), by asserting that youth participants believe that non-therapeutic open-studio settings contribute to change in self-efficacy beliefs.

Furthermore, by linking participation in art museum open-studio programs to perceived increases in self-efficacy, this study adds to a growing body of literature on Creative Youth Development (Montgomery, 2017), which argues that hands-on art making experiences are a crucial tool in helping youth to “build the personal, social, and intellectual capacities they need to succeed in school, career, and life” (Collective Action for Youth, 2014). While not all program participants may go on to be artists, the experiences provided by art museums can have a lasting impact on teens’ personal development, involvement in community, lifelong relationships to museums and culture, expanded career opportunities, and a worldview grounded in art (Linzer and Munley, 2015). This study shows that the drop-in teen studio, like intensive art museum teen programs, has the potential to use hands-on experiences to support the development of young people.

Drop-in Studio Programs Contribute to Teens’ Artistic Self-Efficacy in Several Ways

Youth interviewed for this study described several ways in which art museum drop-in studio programs contributed to their artistic self-efficacy beliefs. For many, the experience of engaging in artistic activities and behaviors in the studio led to increased self-efficacy towards related those same tasks. For example, several youth felt that participating in the art museum drop-in studio programs had impacted their self-efficacy towards stretching and exploring in the
studio, because the structure of the program had provided the opportunity to stretch and explore in a supported way. The risk taking and experimentation they experienced in the supportive environment of the studio not only were viewed as positive experiences, but they attributed those experiences to their beliefs they could be successful at those tasks and activities in the future. This phenomenon of gaining self-efficacy from successful participation in the domain in question is described by Bandura (1977) as “enactive attainment,” and referred to by Zimmerman & Cleary (2006) as “experiences of mastery.”

In addition to the experience of making art, youth participants spoke at length about the impact of the culture and community within drop-in studio programs in contributing to their self-efficacy beliefs. The sense of these studios being “judgement-free zones” gave youth artists a sense of security that they could take artistic risks without feeling that they were jeopardizing relationships within the program. Montgomery, Rogovin, & Persaud (2013) describe this “sense of belonging and acceptance” from peers and adult mentors as a crucial component of high-quality out-of-school time programs for adolescents.

Another aspect of this accepting environment contributing to self-efficacy is the verbal support described by program participants. Whether direct affirmations of the success of their artmaking by peers, or words of encouragement from adult mentors, the experience of gaining self-efficacy through what Bandura (1977) calls “verbal persuasion” was common for teens in this study. While verbal persuasion alone cannot develop self-efficacy beliefs, Bandura reminds us that:

“people who are socially persuaded that they possess the capabilities to master difficult situations and are provided with provisional aids for effective action are likely to mobilize greater effort than those who receive only the performance aids” (p. 198).
In the case of the art museum open-studio, it is likely both verbal encouragement and performance aids (such as high-quality tools and materials or instruction from adult and peer mentors) that contribute to teens’ beliefs that they can successfully accomplish artistic tasks and activities.

Finally, some youth described the importance of models of artistic engagement in developing their self-efficacy beliefs. This aligns with what Bandura (1977) described as “vicarious attainment.” Whether these models were peers, college-student mentors, museum educators, or professional artists, seeing others artistic processes and explorations contributed to teens’ beliefs that they too could successfully work towards a variety of artistic tasks in the studio.

**Implications**

**Implications for Practice**

The results of this study contribute to a growing body of literature describing the role of art museum programing in the movement for positive youth development. Like other studies describing the benefits of art museum programs, such as Linzer and Munley’s (2015) *Room to Rise*, this research study suggests that art museum programs designed to meet adolescents’ developmental needs can play a role in promoting personal growth. While personal growth is complex and multifaceted, this study proposes artistic self-efficacy as a measurable outcome of participation in art museum teen programs, particularly those which emphasize art making.

Hill & Douillette (2014) proposed that museums could frame teen programs as an opportunity to develop personal agency, and social cognitive theory asserts that self-efficacy is central to human agency. Bandura (1989) wrote, “Among the mechanisms of personal agency,
none is more central or pervasive than people's beliefs about their capabilities to exercise control over events that affect their lives.” So what does this mean for art museum educators?

For art museums seeking to engage teen audiences, drop-in studio programs provide an opportunity for youth to connect to an art museum by tapping into and fostering the agentive relationship that many teens already have with art - making it! By providing teens with the space, materials, and supportive environment to foster their own artistic development, drop-in studios foster a community of young people who are developing an agentive relationship with their own artistic practice, the museum, and the broader art world.

For art museums currently engaging teens in this way, change in artistic self-efficacy beliefs provides a framework for understanding the impact of drop-in studio programs on those who participate. In addition to proposing Bandura’s self-efficacy rating scale as a tool for evaluating change in artistic self-efficacy beliefs, this study provides insights into aspects of program design that impact participant’s artistic self-efficacy. The participants in this study emphasized that a wide variety of artistic experiences in the studio, the warm and accepting culture of the program, and supportive mentors who model artistic processes and behaviors were essential to their increase in artistic self-efficacy, and should be seen indicators of a successful program model.

**Implications for Future Research**

First and foremost, as this study aims to describe change in self-efficacy over time, further research could aim to measure artistic self-efficacy beliefs at the time that youth begin participating in the drop-in studio, with a follow up questionnaire to collect self-efficacy scores at points throughout their engagement in the program. This type of longitudinal research would
help to determine if the change in artistic self-efficacy found in this study is simply described retrospectively, or if it has a correlational relationship with length of participation.

Further research is needed to develop and validate measures of artistic self-efficacy. While this study presents one attempt at developing tasks and activities that reflect the Studio Habits of Mind for participants to rate their self-efficacy beliefs, it remains to be seen if ratings for these tasks translate into actual behaviors and achievements for youth who report changes in self-efficacy.

A larger sample size may allow for comparisons between change in self-efficacy beliefs and other variables, such as number of visits, types of participation, engagement in other artistic pursuits outside of the studio, etc. Youth development, and self-efficacy beliefs specifically, are complex phenomenon that are impacted by a wide variety of experiences. By understanding the vast ecosystem of artistic experiences of the participants, as well as the nature of program participation, we can better understand the specific impact of experiences within the art museum open-studio.

As this is the among first studies to specifically explore the drop-in studio program model, there is a great deal of potential for further research. Studies exploring the perspectives of the museum professionals who design, facilitate, and evaluate these programs may provide insight into the model and its relationship to other museum programming for teens. In particular, a case study examining the small, yet perhaps meaningful, differences between programs within the teen open studio model could shed light on the strengths and weaknesses of these programs, as it relates to the impact on participants.

Additionally, the participation described by youth in this study suggested that for some, sustained engagement does not necessitate a selection or application process, or even the stipends
commonly offered in more intensive programs. The community, resources, and support offered by drop-in studio programs seem to provide what teens are looking for. The nature of and motivation behind participation in drop-in studio programs presents an opportunities for future study. By understanding why and how teens are using these types of programs within their broader artistic engagement and learning ecosystems, museums may be able to better describe the unique impact of drop-in art museum studio programs for teens.

Finally, while the design of this study allowed for focused description of the impacts of drop-in art museum studios on youth participants’ artistic self-efficacy beliefs, the use of a self-efficacy questionnaire and the interpretation of interviews through the lens of change in self efficacy may have obscured the broader impacts of this type of programming on youth, their communities, and on art museums. In particular, the social impacts of drop-in studio present an area for further exploration. Using the lens of self-efficacy beliefs, the complex social interactions and relationships at work in the art museum studio are reduced to tools of individual growth, when in fact it seems plausible that the social exchange and community building which takes place in this unique learning content is in fact, central to the impact of these programs.

Concluding Thoughts

As art museums continue to engage teen audiences, drop-in studio programs present a promising model for attracting youth who might not have an interest or ability to become involved in a more sustained or intensive teen program like those described in Room to Rise (Linzer and Munley, 2015). Art museum teen programs have the implicit or explicit goal of building connections with new audiences, not just across generational divides but to teens from communities who have been historically underserved by art museums in their cities, and drop-in studios can provide another entry point for these new audiences. What is more, it seems that by
nature of their design, drop-in studios have the power to harness and develop the agentive capabilities of youth by acknowledging the artistic contributions they bring, and supporting them in developing their self-efficacy as young artists.
References


Appendix A  
ARTISTIC BEHAVIORS QUESTIONNAIRE  

Practice Scale: Please complete this practice item to familiarize yourself with the scale that this questionnaire will use. The following example is asking you to rate how certain you are of your ability to lift certain amounts of weight. Please rate your ability to lift each amount of weight right now/today.

Rate your degree of confidence by recording a number from 0 to 10 using the scale given below:

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am highly certain I cannot do it</td>
<td>Equally do and do not think I can do it</td>
<td>I am highly certain I can do it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Confidence (0-10)

<table>
<thead>
<tr>
<th>Lift a 10 pound object</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift a 20 pound object</td>
<td></td>
</tr>
<tr>
<td>Lift a 50 pound object</td>
<td></td>
</tr>
<tr>
<td>Lift a 80 pound object</td>
<td></td>
</tr>
<tr>
<td>Lift a 100 pound object</td>
<td></td>
</tr>
<tr>
<td>Lift a 150 pound object</td>
<td></td>
</tr>
<tr>
<td>Lift a 200 pound object</td>
<td></td>
</tr>
</tbody>
</table>
The following form lists different activities/tasks. In the “Before Program” column, rate your ability to accomplish that activity/task before you started visiting [INSERT NAME OF ART MUSEUM OPEN STUDIO PROGRAM]. In the next column, “Today,” rate how confident you are that you could perform each activity or task today.

Rate your degree of confidence by recording a number from 0 to 10 using the scale below:

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am highly certain I cannot do it</td>
<td>Equally do and do not think I can do it</td>
<td>I am highly certain I can do it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Activity/task: CONFIDENCE (0-10):**

<table>
<thead>
<tr>
<th>Develop Craft</th>
<th>Before Program</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use art tools/materials you used in this program</td>
<td>________</td>
<td>________</td>
</tr>
<tr>
<td>2. Use art techniques you used in this program</td>
<td>________</td>
<td>________</td>
</tr>
<tr>
<td>3. Find a way of working with tools, material and techniques that enables you to succeed at your goals</td>
<td>________</td>
<td>________</td>
</tr>
</tbody>
</table>

**Engage and Persist**

| 4. Commit to try new new things until you find something that works for your artistic project | ________ | ________ |
| 5. Follow through on completing an artistic project | ________ | ________ |
| 6. Struggle through a difficult task in the studio | ________ | ________ |

**Envision**

| 7. Create an artwork from your imagination | ________ | ________ |
| 8. Develop a plan for a new artistic project | ________ | ________ |

**Express**

| 9. Communicate your ideas through visual art | ________ | ________ |
| 10. Show your feelings through visual art | ________ | ________ |
| 11. Tell stories using visual art | ________ | ________ |
Activity/task: CONFIDENCE (0-10):

<table>
<thead>
<tr>
<th>Observe</th>
<th>Before Program</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Look closely at an artwork to learn more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Understand an artwork by taking your time to observe it closely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Create an artwork by referencing something outside of your own imagination, like an image or another work of art</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reflect</th>
<th>Before Program</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Ask questions about your own artwork</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Describe your artistic process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Explain your artistic decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Judge if an art piece you made was successful</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Participate in a group critique of your own work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Participate in a group critique of the work of your peers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stretch and Explore</th>
<th>Before Program</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Play with new art materials, tools, or techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Not worry about how an artistic project will turn out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Experiment with ways of making art that are new to you</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Create something after learning from your old mistakes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding Art World</th>
<th>Before Program</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Create works of art that reflect your understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the art world, including art history</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Make connections to adults in the art world</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Make connections to art-interested peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Visit an art museum with friends or family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Use art related vocabulary to communicate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Get an art related job or internship</td>
<td></td>
<td></td>
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<tr>
<td>31. Find further opportunities to be part of the art world</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **What month and year did you first come to [INSERT NAME OF PROGRAM]?** 

2. **In the past 12 months, how many times have you come to the teen studio program?**
3. In the past 12 months, how have you been involved within this studio program?

*Please check ALL that apply.*

- Worked on art projects alone
- Worked on art projects with peers
- Worked on projects with adult artists or museum staff
- Explored the museum’s exhibitions or galleries
- Talked about works of art in the museum
- Socialized with other teens
- Worked on homework or other non-art projects
- Other: _____________________________

4. In the past 12 months, how have you been involved with art outside of this program?  

*Please check ALL that apply.*

- Working on art projects as homework
- Working on self-directed art projects
- Visiting an art museum with your friends or family
- Visiting an art museum on your own
- Taking an art class at school
- Taking an art class outside of school
- Working at a job or internship related to art
- Other: _____________________________

5. What year were you born? _______  6. What is your race and/or ethnicity? __________________
7. What is your gender? ___________  8. What is your zipcode? _______

*If you are willing to participate in a 10-minute phone interview about your experience in [INSERT NAME OF PROGRAM], please sign up for an interview time slot with Emma and provide your contact information below:*

Your name: ____________________________________________

Best phone number to reach you: __________________________

Your email address: ______________________________________

Name of parent or guardian (if under 18 years old): __________________________

Email address of parent or guardian (if under 18 years old): __________________

Phone number of parent or guardian (if under 18 years old): __________________
Appendix B
INTERVIEW GUIDE

Youth Self-Efficacy and the Art Museum Studio
Emma Cantrell
Museology Graduate Program
University of Washington

“Thank you so much agreeing to chat with me today! I had so much fun visiting your program and seeing the studio. I really appreciate your participation and all of your answers will be so helpful in my research project. To protect your privacy, your name will not be attributed to the questionnaire or anything said in the interview. I am interested in learning more about the aspects of the program that have potentially changed how you feel about your abilities to engage with art.”

1. How has this program contributed to how you are as a person?
   What is specifically about the program that made that contribution?

2. How has this program contributed to who you are as an artist?
   What is specifically about the program that made that contribution?

3. In what ways has the program made a difference to your confidence in your art making process?
   What is specifically about the program that made that contribution?

4. I’d like you to rate how much you think the teen program has impacted your confidence in your ability to make art, on a scale from 1 (being not at all) to 5 (being very much)
   1   2   3   4   5

5. I’d like you to rate how much you think the teen program has impacted your confidence in your ability to understand art made by others, on a scale from 1 (being not at all) to 5 (being very much)
   1   2   3   4   5

6. Overall, how did this program contribute to the role of art in your life?
## Appendix C
### CODING RUBRIC FOR RESEARCH QUESTION 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Experiences of Artistic Practices** | Participant describes increased confidence on tasks or behaviors they attempted within the studio | “So now I'm more confident in showing people what I've done, because that's what we do there. We make stuff and share it with each other. I'm very open about sharing my stuff now.”  
“I think the more I do I become a little bit more confident in my art making process, so I think just having the opportunity to do art every week is good.” |
| **Models of Artistic Engagement** | Participant describes increased confidence on tasks or behaviors they observed in others (peers, mentors, etc.) during the program | “I think with the opportunities of being able to go around the [museum] and the different exhibits and that kind of thing, it helped me learn about other artists and so I'd be able to apply those things to my artistic mind, you know? To be able to not only see, and we've had guest artists come in as well, and to be able to hear their stories and to hear where they came from and hearing the teenagers and the artists’ creative processes, that helps you develop your own.”  
“Other teen artists who could share their work with each other makes it easier for me to do so.” |
| **Verbal Encouragement** | Participant describes increased confidence on tasks or behaviors after they received words of affirmation and/or support from peers, mentors, etc. engagement | “We all really encourage each other and say like "Oh, how did you do that? How did you come up with that?"  
“I feel more confident...when you have someone say "this is cool" and when you're looking at it you don't think it doesn't look that great but someone else in the program says it is. Then it helps a lot.”  
“The teachers, they were very patient with me, especially with the bookbinding, which took forever to do. They still made it fun - "you know, it's okay, not everyone gets it" they're always saying "Everybody makes mistakes" and stuff so it's very easygoing and fun atmosphere” |
<table>
<thead>
<tr>
<th>Non-Judgemental Culture</th>
<th>Participant describes increased confidence on tasks or behaviors related to the culture of acceptance and experimentation in the program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“[The teen studio program], it only lasts about 2 hours, so you only have 2 hours to make this piece of art. It doesn't have to be perfect, it just has to be what it is. You have to show that you have some creativity, and you are expressing that creativity. So it has allowed me to be kind of like &quot;this isn't perfect, but whatever - it is the best I can do and I'm working on it. I'm growing as an artist, and that is a really exciting thing.&quot;</td>
</tr>
<tr>
<td></td>
<td>“They really listen to what you have to say, and there is not really any judgement. The words &quot;judgement-free zone&quot; get tossed around a lot, especially when you are in high school, but I feel it really is a judgement-free zone, where people are very able to express themselves, and their ideas and opinions in a really laid-back, chill manner.”</td>
</tr>
</tbody>
</table>
Appendix D
DESCRIPTION OF CONSENT & ASSENT TALKING POINTS

Youth Self-Efficacy and the Art Museum Studio
Emma Cantrell
Museology Graduate Program
University of Washington

Consent and assent talking points will include the following:

- Data collector’s name and affiliation
- Purpose of the study
  - The purpose of this study is to describe the impact of art museum drop-in studio programs on teen participants.
- Voluntary nature of participation, there are no consequences for choosing not to participate
- Your participation includes: written questionnaire and phone interview
- Sample questions
  - For example, in the questionnaire you will be asked to estimate how confident you were in your ability to successfully communicate your ideas through visual art before ever attending this program, as well as your confidence to successfully communicate your ideas through visual art today.
  - In the interview, you will be asked more open ended questions like “How has [this program] contributed to who you are as an artist?
- The survey will take approximately 10 minutes
- The interview will last no longer than half an hour
- You can choose to not answer a question if you do not want to
- The interview will be audio recorded
- Responses are confidential; you may be quoted, but the quote will not be attributed to you.
- Some questions may feel uncomfortable or embarrassing if you feel like your level of ability is not as high as it should be. Please be as honest as possible with these questions and know that you can skip questions that you are not comfortable answering.
- Contact information of researcher and committee chair
- Do you have any questions?
- Do you agree to participate in this questionnaire and interview?