TECHNICAL SUPPLEMENT METHODS

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Introduction

When this study was launched in 2011, art museums had limited formal research on their teen groups, and museum staff had scarce time and financial resources to capture data that could lead to generalizations, frameworks, or theories about their work. To fill this void, the Whitney Museum of American Art in New York, in collaboration with the Walker Art Center in Minneapolis; the Contemporary Art Museum Houston (CAMH); and the Museum of Contemporary Art, Los Angeles (MOCA)—all renowned modern and contemporary art museums from major cities across the United States—embarked on a three-year research project to investigate the long-term impact of their teen programs. The project was funded by the Institute of Museum and Library Services (IMLS).

Purpose

The purpose of this research project was to conduct a rigorous study that meets standards of research practice, develops findings across sites, and thus produces compelling evidence of the contributions of teen programs in contemporary art museums. The consortium of four cultural partners used the same research methods and data collection instruments to gain comparable knowledge about the contemporary art museum field and, specifically, to better understand shared outcomes. The goal was to advance understanding of how engagement with contemporary art, behind-the-scenes museum access, and aesthetic, personal, and intellectual experiences for adolescent audiences all contribute to lifelong personal and professional benefits for program alumni, new and more diverse audiences for the museum, and benefits that accrue to communities where alumni live and work.

The study sought to investigate the following research questions, in addition to others that the project team could identify throughout the project.

- —Do the short-term benefits that youth experience as a result of these programs—such as college and career preparedness; intellectual and creative development; personal identity formation; and socialization—extend into the long term and manifest themselves in meaningful ways?
- —Do teens who participate in art museum–based programs stay connected to arts and cultural organizations later in life? Do they continue to value and participate in the arts in general?
- Do these programs make a significant contribution to inviting and preparing youth to pursue academic and

- professional careers in the arts and the museum field? Given the diversity among youth in these programs, to what extent are the programs contributing to diversifying museum staffs and building an audience that practices and supports the arts?
- Do the short-term institutional benefits of youth programs—such as increases in offerings for teen audiences; greater diversity of voices in program planning and decision making; and a sense of vitality within the museum—permeate the museum's culture and have a demonstrable, meaningful impact on the institution?

About the Four Museums

The four museums in the consortium were selected based on the following criteria:

- The institution had a strong, intensive teen program that had been in continuous operation for at least 12 years, so that some alumni would be in their late 20s and early 30s.
- —The teen program was viewed as high quality based on large numbers of requests from other museums to replicate the model, evaluations of short-term outcomes, and anecdotal reports of alumni experiences.
- The museums reflected geographic diversity (New York, Minneapolis, Houston, and Los Angeles).
- The museum was able and willing to invest the required time for members of the research team and financial resources for some aspects of data collection and analysis.

Figure 1. Teen Program Start Dates

	Start	Age in 2011
MOCA	1992	19 years
WAC	1996	15 years
WMAA	1997	14 years
CAMH	1998	13 years

Project Management

The Whitney Museum staff took the lead in framing the study questions and extending invitations to the other three museums. Danielle Linzer, the museum's manager of access and community programs, served as principal investigator and managed all aspects of the three-year project. Research assistants and fellows at the Whitney provided project management support. The design, implementation, and data analysis activities were a collaborative effort of all the museums. The final report was prepared by Ms. Linzer, designed by Whitney staff, and reviewed and approved by all team members.

Each museum deemed this study a priority project. The combination of equal participation in decision making with an identified project administrator role for the Whitney contributed to continuity and to a successful mix of shared authority and strong project management. Each museum experienced at least one staff change over the life of the project, but in each case, the museum elected to continue in the study and appointed a new staff member to the research team. Careful attention was given to initiating these team members to the study and research processes.

Practitioner-Researcher Approach

A team of experienced practitioners, with the guidance of Mary Ellen Munley, lead research advisor, conducted this study. The choice of this atypical approach was predicated on the belief that practitioners have a deeper understanding of programs like the ones being studied than is typically acknowledged in a more traditional research model, which would have required those closest to the programs to remain at a distance from research activities. Instead, the practitioners' knowledge was seen as essential to framing the research questions and designing a study that would authentically capture the program purposes and achievements. The practitionerresearcher approach also satisfied the desire for midlevel and senior members of the museums' education departments to engage in systematic reflective practice and to build their capacity for implementing research and evaluation projects at their institutions.

The research team came together for six institutes, held twice a year over three years. The lead research advisor designed and facilitated these gatherings, which combined tutorials about research practices with working sessions so that the group could reach consensus on study design, data collection methods, data analysis, and the supporting evidence for key findings.

The institute agendas (available at whitney.org/RoomToRise) are a record of the researcher-practitioner inquiry process. During the first institute, the team examined the four programs individually. Representatives from each museum articulated what they knew to be the key features of the program design and shared what they understood, from experience and from previous studies, about the outcomes for program alumni and for the museum. This exercise focused on extracting the extensive knowledge that is so often embedded in the actions of experienced and thoughtful practitioners. Team members' reflection on actual actions and decisions was instrumental in coalescing their thinking as they individually and collectively moved from a vague, tacit

understanding of the programs under study to a more grounded articulation of program design features and outcomes

When Does 4 = 1?

A breakthrough occurred when the team began to notice that there were more similarities than differences among their programs. They knew that they were all working with teen audiences and employing a similar model of intensive engagement. Yet the program specifics varied widely. In some programs, teens focused on curating exhibitions or planning large-scale events like teen nights or fashion shows, while in others they developed public speaking skills and practiced leading gallery tours for a range of audiences. The specific focus and activities of each program varied from year to year, depending on exhibitions and collaborating artists, staffing, and input from the teens themselves, and other factors. (For additional details about program history and design, see the Program Profiles in Room to Rise, pp. 76–83)

The early reflective practice work moved the team from thinking about program mechanics (for example, whether the groups meet three hours or six hours a week, or whether teens create a program for other teens or give gallery talks) to understanding the shared elements of the program models. This shift in thinking led the team to frame the study, and their understanding of their programs, around broader ideas. The underlying idea was that the program (and the museum) invited, trusted, and supported the teens in doing real work. Similarly, as team members described short-term outcomes from previous studies and shared a wealth of anecdotes about individual teens' experiences, they began to recognize powerful themes about personal development, community engagement, and the important role of art in the lives of program alumni.

Institute 1 supported the research team's collective capacity for articulating the teen programs' intentional design and broader outcomes. Their analysis convinced them that (1) they gained a richer understanding of their own programs by shifting attention from myriad specifics to a handful of big ideas; and (2) the programs showed considerable commonality when they were viewed in terms of their essential features.

The team concluded that their four individual programs could in fact be examined in one large research study if that study focused on broad concepts rather than specific implementation details. Team members also began to see their work from new perspective to view their contemporary art museum–based programs within the context of research about positive youth development.

Real Work

One research team member said the team was "going through the same process that the teens do in our programs, . . . and that is profound." He was referring to the structure of the multiyear researcher-practitioner experience. Team members got to know, trust, and respect each other while learning new skills and competencies. They addressed difficult issues and moved from a realistic and understandable tendency to wonder which program would "come out on top" when the results came in, toward a genuine collaborative spirit of searching for deeper understanding of their collective work.

The project required intensive, difficult work with a steep learning curve. The institute agendas (available at whitney.org/RoomToRise) are a document the research methods tutorials that trained the team in content ranging from sampling methods and operationalization of concepts, to developing codes for analysis of openended survey responses, to the process for supporting a claim with evidence. Team members drafted questions, conducted interviews, gathered archival program records, wrote summaries of statistical analyses, and much more. Along the way, there were supported by a study design advisor, Critical Friends (see chapter 4), and several research specialists with expertise in areas such as quantitative and qualitative data analysis, and participatory research methods (see Room to Rise, p. 92)

Credibility

Some may question whether newly trained researchers who are close to the programs under study can produce valid and reliable findings. The team documented its process carefully in this supplement to Room to Rise, which presents detailed descriptions of study design decisions, instrument development, and data analysis procedures. By following best practices in social science research and by designing a highly transparent process, the team offers readers sufficient information to draw their own informed decisions about the findings.

References Consulted

Practitioner-Researcher Approach

Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The craft of research*. 3rd ed. Chicago: University of Chicago Press.

Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance:* Practitioner research for the next generation. New York: Teachers College Press.

Jarvis, P. (1999). The practitionerresearcher: Developing theory from practice. New York: Jossey-Bass.

Leavitt, D. R. (2010). Book review (review of Inquiry as stance: Practitioner research for the next generation, by M. Cochran-Smith & S. L. Lytle). i.e.: inquiry in evaluation, 1(2), Article 7. Retrieved from http://digitalcommons.nl.edu/ie/vol1/iss2/7.

Schon, D. A. (1983). The reflective practitioner: How professionals think in action. New York: Basic Books. 49–69.

Positive Youth Development and Teen Arts Programs Blunden, C. (2007). What we learned in Seattle: A case study—Best practices of Youth in Focus. Detroit: Living Arts.

Boston Youth Arts Evaluation Project. Reports on process and outcomes. Boston: BYAEP.

Catterall, J. S. (2009). Doing well and doing good by doing art: The effects of education in the visual and performing arts on the achievements and values of young adults. Los Angeles and London: Imagination Group Books.

Deschenes, S. N., with Arbreton, A., Little, P. M., Herrera, C., Grossman, J. B., & Weiss, H. B., with Lee, D. (2009). Engaging older youth: Program and city-level strategies to support sustained participation in out-of-school time. Harvard Family Research and Public/Private Ventures. Retrieved from www.hfrp.org/publications-resources.

Fiske, E. (Ed.). (1999). Champions of change: The impact of the arts on learning. Washington, DC: Arts Education Partnership and President's Committee on the Arts and the Humanities.

Fuel: Giving Youth the Power to Succeed. (2004). Chicago: Marwen. www.marwen.org.

Heath, S. B., with Roach, A. M. (1999). Imaginative actuality: Learning in the arts during the nonschool hours. In Fiske (Ed.), 1999, 22. Retrieved from http://www.artsedsearch.org/summaries/imaginative-actuality-learning-in-the-arts-during-nonschool-hours.

----, & Smyth, L. (1999.) Art show: Youth and community development. Washington, DC: Partners for Livable Communities.

----, & Soep, E. (1998). Youth development and the arts in nonschool hours. *Grantmakers in the Arts Newsletter* 9(1). Retrieved from http://www.giarts.org/article/youth-development-and-arts-nonschool-hours.

Koke, J., & Dierking, L. (2007). Museums and libraries engaging America's youth: Final report of a study of IMLS youth programs. Washington, DC: Institute of Museum and Library Services.

Scales, P. C., Roehlkepartain, E. C., & Benson, P. L. *Teen voice: Relationships that matter to America's 15-year-olds.* (2010). Minneapolis: Best Buy Foundation and Search Institute. www. search-institute.org/teen-voice-2010.

Surdna Foundation. (2002). Powerful voices: Developing high-impact arts programs for teens. New York, Surdna Foundation. Retrieved from http://www.surdna.org/what-we-fund/thriving-cultures/thriving-cultures-resources/38-powerful-voices.html.

Youth voices on learning after school: A qualitative evaluation of the San Francisco Beacon Initiative. (2003). Stanford, CA: Stanford University School of Education. Retrieved from: http://sfbeacon.org/wp-content/uploads/2014/04/Youth-Voices-on-Learning-After-School-Full-Report.pdf.

Literature Review and Other References Cited

As part of preparing a proposal to the Institute of Museum and Library Services, the Whitney Museum of American Art contracted with Ardina Greco, a doctoral student at Teachers College, Columbia University, to conduct a review of literature pertinent to an investigation of teen programs in contemporary art museums. The review included the general topics of out-of-school learning environments for teens and positive youth development, as well as artistic development across the life cycle and the short-term outcomes of participation in a teen art program. It provided a foundation for the research team's work, and additional references were added throughout the project.

Teen Out-of-School Learning Environments

An initial literature review found few resources directly related to art museum programs for teens. (See whitney.org/ RoomToRise for Literature Review Bibliography.) Of the 22 program-specific documents reviewed, six focused on programs in art museums and were primarily descriptive rather than research-based. The review confirmed, however, that research on teens in out-of-school learning environments has occurred primarily in science centers and museums and in vocational settings. Many of these studies benefited from or were influenced by the nationwide initiative YouthALIVE! (Youth Achievement through Learning, Involvement, Volunteering, and Employment), conducted by the Association of Science-Technology Centers in collaboration with the Wallace-Reader's Digest Fund (now the Wallace Foundation) between 1991 and 1999. Although the emphasis of arguments differed between science centers and vocational settings, key findings show that out-of-school programs promote positive youth development. Specifically, adolescents appreciate being a part of programs that develop applicable knowledge and skills, provide opportunities to apply knowledge in "realworld" contexts, promote positive adult-adolescent relationships, provide opportunities to build self-confidence, promote social development, and offer exposure to fields of study and occupations.

Positive Youth Development and Artistic Development

The literature review was expanded further to include publications related to adolescent development, artistic development, positive youth development, and interest and motivation, as well as mixed-method research. Self-identity formation was a theme that continued to surface. Adolescence is a formative time when young people begin

to develop a sense of a future self. In art, teens appreciate learning and developing skills while having the freedom to envision uses for skill application. It has also been documented that art museums offer teens unique opportunities to view and discuss others' visual responses to the world. These experiences present and develop diverse modes of expression that can be used to build upon the research methods used in museum studies, including using visual research methods such as identity mapping.

Because little to no research existed on the effects of teen programming in art museums, the opportunity to conduct a study in four different institutions with long-established teen programs was seen as groundbreaking.

Evaluations of Short-Term Effects of Teen Programs in Art Museums

To begin to understand the benefits the teens experienced through their participation in Youth Insights (YI), in 2008 the Whitney contracted with Audience Focus, a consulting firm specializing in educational evaluation, to hear directly from the current group of teens how they benefit from the program in the short term. The project used the teens' own voices and writing from application essays, pre- and post-program surveys, portfolios of their work, and focus groups to describe the benefits they experienced during the year. The study highlighted these short-term benefits:

- YI has a significant impact on teens' lives in a variety of ways and comes at a crucial stage for the development of positive self-perception and personal identity.
- Through various activities and assignments, teens develop their art-making and communication skills, strengthen their creative processes, and find new sources of inspiration.
- Given the opportunity to set goals and complete projects within a supportive environment, teens channel energy in positive ways and build self-confidence.
- The community of students in YI is extremely diverse, and students learn how to express ideas constructively and listen to and appreciate multiple perspectives.
- Teens gain an awareness of different careers in the arts, and many rethink academic and professional paths.

Building on the Audience Focus study, in summer 2009 the Whitney sent 75 YI alumni a brief online survey; 26 responded. Approximately 80% of the respondents participated in YI beginning in 2003 and were no more than 6 years out of program. When asked to reflect on how they benefited, participants had a great range of responses. One indicated that she decided against dropping out of high school to be able to remain in the program, and she pursued a career in museum education as a result. Many

said that they developed confidence and higher selfesteem from the experience of leading tours. Others continued their studies in the visual and performing arts or art history. When asked about their current involvement in the arts, 87% of survey respondents indicated that they still visit art museums, and 74% responded that they create art. (Complete reports are also available upon request.)

In 2008, the Walker Art Center also conducted an informal study of its Teen Arts Council (WACTAC) alumni. Using the Strategic National Arts Alumni Project (snaap. indiana.edu) survey as a guide and a combination of in-person, written, online, and phone surveys, the study yielded the following results:

- WACTAC was a significant experience in participants' lives, broadening their perspectives and fostering a sense of self.
- Alumni stayed engaged with the arts and were regular attendees at events and frequent museumgoers.
- Many went on to pursue careers in the arts or community organizing.
- They gained self-confidence and agency to operate as adults.
- They adopted a broader worldview and learned about new careers.

Findings from the Whitney and Walker studies indicated that art museums are effective in providing experiences that help youth make long-term decisions about their future, allow creativity and self-esteem to develop, and solidify a sustained engagement with the arts.

Building Future Audiences in the Arts

The practitioner-researchers also looked at results from the National Endowment for the Arts 2008 Survey of Public Participation in the Arts, which indicated persistent patterns of decline in participation for most art forms across the United States. The rate of attendance for art museums fell from a high of 26 percent in 1992–2002 to 23 percent in 2008, comparable to the 1982 level. The survey revealed a number of other trends:

- -Fewer adults are creating and performing art.
- -Arts audiences are aging.
- Educated audiences, while still most likely to participate in the arts, are participating less than before.
- The Internet and mass media are reaching substantial audiences for the arts.

At least one recent study has documented that a program that empowers young people to serve as ambassadors to

underserved communities can be an effective tool for building new museum audiences. Knowing Better...Stepping Up and Taking Action: Personal Transformation Leads to Social Change, a study conducted by Mary Ellen Munley in 2008, looked at alumni of Bringing the Lessons Home, a program started in 1994 at the United States Holocaust Memorial Museum that trains high school students from the District of Columbia to share the lessons of the Holocaust with their own communities. The study found evidence of a number of transformational long-term effects of participation, from higher-than-average levels of civic engagement to improved educational attainment. It also revealed that the program had effectively created a new audience for the museum, one that shared its message and collections with others. "Alumni have a special allegiance to the institution, and they reach into workplaces and communities that USHMM does not reach through its general public visitation nor through its work with educators and high level civic leaders."

Additional Literature Reviews

Throughout the study, the practitioner-researchers continued to identify and review new literatures. They investigated social science research about concepts such as social capital, leadership, and cultural literacy. They read about data collection methods and analysis procedures and standards. References they consulted are cited at the end of each section of this technical report, as appropriate.

Study Design

This research project had a retroactive, mixed-methods, multiple-year study design. Its methods allowed for a comparison of program features and benefits across the four different museum programs. The study design also allowed the team to gather information from the largest possible number of alumni and supplement that data with more in-depth investigations of program experience and benefits through a set of individual alumni case studies.

No baseline data existed, and there was no control group (a comparable group of young people who had not experienced the museum programs), so there was no possibility for an experimental or quasi-experimental design. As a result, the study design gave particular attention to the quantity and quality of the data. The entire universe of alumni (600 people) was eligible for answering an online survey; quantitative data were combined with qualitative data; and the selection case study candidates followed purposeful randomizing procedures.

Dependent Variables

To investigate the similarities and differences between the immediate and longer-term benefits of participation in the programs, the practitioner-researchers reviewed the literature about short-term, immediate benefits of teen art programs. Based on that review and a reflective practice analysis of their own programs, the team identified five dependent variables to measure the long-term benefits of program participation:

- 1. Personal growth
- 2. Leadership
- 3. Social capital
- 4. Arts participation
- 5. Artistic and cultural literacy

In most cases, the specific items that appeared on the online survey used the exact wording, or a slight modification of the wording of items used in other social science research studies on youth development. The following set of impact definitions and key indicators guided the processes of developing data collection instruments and final stages of data analysis.

Personal Growth

In the process of personal development we learn the skills, knowledge, and aptitudes necessary to live a fulfilling, satisfying, and happy life (Irving & Williams, 1999). We give ourselves the opportunity to realize our full potential. The process of personal development and growth is the process of seeking authenticity – the full expression of self (Tarr, 2005).

Personal growth and development requires a person to become self-aware through self-reflection. It is a critical dimension of self-regulation and the ability of students to relate to others (Zimmerman, 1989). Youth learn the skills associated with personal growth and development in the context of learning subject matter, making the subject matter more interesting (Tarr, 2005). Personal development enriches life and helps youth learn more about their place in the world.

Indicators of personal growth: Identity formation, confidence, agency, respect others, authenticity

Leadership

Leaders are people who think for themselves, communicate their thoughts and feelings, and help others understand and act on their own beliefs. They influence others in an ethical and socially responsible way (vanLinden & Fertman, 1998; Wehmeyer, Agran, & Hughes 1998).

Self-knowledge and commitment to relationships that sustain group goals, along with skills necessary for collection and assessment of information, are important aspects of youth leadership. Youth leadership has been described as the process through which young people "stand up on their own, make their own choices, move on in their lives, and recognize what's out there for them and how what they do affects other people and themselves" (Roach et al., 1999).

Leadership also includes the ability to analyze one's own strengths and weaknesses, set personal and vocational goals, and have the self-esteem to carry them out. It includes the ability to identify community resources and use them, not only to live independently, but also "to establish support networks to participate in community life and to effect positive and social change" (Adolescent Employment Readiness Center, Children's Hospital, n.d.).

Indicators of leadership: Problem solving, creativity, communication skills, taking initiative, engaging and motivating others

Social Capital

Social capital represents the features of social relations, such as networks, informal values, norms, and social trust that facilitate the ability of people to work together for common purposes in groups and organizations. It is the social glue that gives families and communities the sense of belonging in an increasingly fragmented and uncertain world (Catts & Ozga, 2005). These features are manifest in individuals by the ability and disposition to create and maintain social networks; trust; reciprocity; civic

engagement; the power to achieve things; and the bridges that people are able to build with individuals and groups both within and outside of their communities.

Indicators of social capital: Networks of support, friendships, knowledge about how organizations work and how to get things done

Arts Participation

Arts participation is "all the ways people encounter and express their creative selves and share in the creativity of others" (Brown & Novak-Leonard, 2011, p. 5). Based on new analyses of how people describe their participation with the arts, the National Endowment for the Arts, along with American arts administrators and researchers, are adopting a broader view of arts participation (NEA, 2009). The Arts Councils of England and New Zealand are also expanding their definitions of arts participation (Novak-Leonard & Brown, 2011; Rosenstein, 2005; Tepper & Gao, 2007).

Traditionally, arts participation has meant attendance at visual and performing arts events, such as visits to museums, and attendance at live performances by professional artists at art-specific venues, such as theaters and concerts. Today, the definition of art includes an expanded understanding of the types of expression, and researchers are examining levels of active engagement ranging from spectating to person-as-artist (Brown & Novak-Leonard, 2011; Novak-Leonard & Brown, 2011; Pettit,1997).

Indicators of arts participation: Attendance; support for the arts, engagement with the arts, art making

Artistic and Cultural Literacy

Wileman (1993) defines visual literacy as "the ability to 'read,' interpret, and understand information presented in pictorial or graphic images." Yenawine (1997) adds that the ability to "find meaning in imagery" is an essential aspect of visual literacy. Baca and Braden (1990) found that scholars agree that visual literacy refers to the use of visuals for the purposes of communication; thinking; learning; constructing meaning; creative expression; and aesthetic enjoyment.

Cultural literacy is a related and intertwined phenomenon. Hirsch, Kett, & Trefl (2002) noted that national communities are bound together by shared values, allusions, and shared language that are known to the culturally literate. Cultural literacy may be broadly defined as fluency in history, traditions, aesthetics, manners, customs, language, and the arts, and the ability to apply critical thinking and creativity to these elements (Kreidler & Trounstine, 2005). For the purposes of this study, cultural literacy refers to knowledge of multiple cultures; critical thinking and creativity are essential skills.

Indicators of artistic & cultural literacy: knowledge of contemporary art, art history; knowledge of art forms and elements, multicultural perspective; comfort with contemporary art; creative & critical thinking

Independent Variables

The team wrestled with how to articulate a set of meaningful independent variables given that there were considerable differences in the specifics of the program designs. As the group moved past their focus on program specifics to a broader understanding of shared engagement strategies, established best practices in positive youth development emerged as a helpful lens through which to view and describe key program features. With this new perspective on their programs, the team identified a set of independent variables to examine in relation to their influence on program impact:

- Length of engagement (time in the program)
- Opportunities for critical thinking and active, selfdirected learning
- Teaching of specific skills using interactive methods
- -Involvement with all aspects of a young person's life
- Strong relationships with adults (museum staff and artists)
- Opportunities for new roles and responsibilities
- Attention to specific youth needs and interests within a physically and psychologically safe environment
- Highly qualified and diverse staff who adopt a youth development philosophy

Sequence of Data Collection and Analysis

Year 1 of the study focused on gathering information from as many alumni as possible about their assessments of the program experience and on learning how the program influenced some of their life choices and behaviors. Based on analysis of the quantitative and qualitative data from hundreds of alumni, Year 2 focused on more in-depth information gathering to add depth of understanding about the most important features of the program experiences and ways the programs do or do not influence alumni's lives several years after participation. Qualitative methods—focus groups, Photo Journals, Journey Maps, and interviews—were the emphasis of data collection in Year 2. Year 3 was devoted to analysis of the qualitative data from alumni, review of program records and history, and interviews with museum staff about the impact of the teen programs on their institutions. A major part of Year 3 involved articulating findings and identifying supporting evidence that was the result, whenever possible, of triangulating data from multiple sources.

Special Features of the Study Design: Photo Journals and Journey Maps

Identification of dependent and independent variables based on literature reviews and reflection on practice informed the design of the survey instrument. To ensure that the data collection and analysis generated unexpected and new information about long-term program impact, the instrument included open-ended questions that allowed alumni to explain their answers and express thoughts that were not predetermined by the practitioner-researchers.

Sharing compelling stories about individual participants is a time-honored way of providing evidence of a program's value, and the teen programs have consistently been a source of such stories. They are well received, but they do not satisfy stakeholders who want to have a broader understanding of the program's effects. Museum staff observe the variety and magnitude of positive change in program participants in their art work, in what they notice and talk about in the galleries, and what participants share about the difficulties and triumphs they manage from day to day. Having that deep knowledge of the programs' effects drove the research team to find innovative ways to capture the essence of the teen program experiences. They knew that words often failed them—and the alumni in accurately expressing the totality of the impact. They were eager to experiment with visual expression as a form of storytelling so that practitioners and stakeholders could understand the programs' impact on alumni identities and lives.

During an Institute, the team learned about participatory research methods, and in particular, the use of photography as a data collection method. They designed two approaches that recognized and built on the alumni's capacity to reveal the impact of the program while honoring their artistic interests and capacities: Photo Journals, which documented the program's impact on the lives of alumni today, and Journey Maps accompanied by in-depth interviews, which helped researchers understand the life directions of alumni since their teen program experiences. These methods are similar to those used by anthropologists to bring out information not accessible in surveys or even most interviews—especially emotions that remain hidden when using only verbal data collection methods.

The Photo Journals and Journey Maps were analyzed from a variety of perspectives: the research team experienced youth arts program professionals, and researchers who use analysis of art and phenomenological methods (see chapter 7). In essence, the research team wanted to use methods that would allow the alumni freedom to tell their stories through their own images and words. The

photographs and maps transform the experiential knowledge of daily lives into data and are a relatively quick way to gain an in-depth, integrated introduction what has happened since alumni left the programs.

For verification of accuracy, the team shared descriptions of the themes the analysts uncovered with each person who made a Photo Journal or Journey Map. Alumni also reviewed the descriptions of the Photo Journals and Journey Maps presented in the final report for accuracy.

References Consulted

Aspinwall, L. G., & Staudinger, U. M. (Eds.) (2003). A psychology of human strengths: Fundamental questions and future directions for a positive psychology.

Washington, DC: American Psychological Association.

Adolescent Employment Readiness Center, Children's Hospital, Washington, DC (n.d.). Youth Leadership Forum, Washington, DC

Baca, J. C., & Braden, R. A. (1990). A research approach to the identification, clarification, and definition of visual literacy and related constructs. Paper presented at the Annual Convention of the Association of Educational Communications and Technology, Anaheim, CA.

Bloch, D. (2003). The power of positive talk: Words to help every child succeed. Minneapolis: Free Spirit Publishing.

Bloomberg, L., et al. (2003). Chicano-Latino Youth Leadership Institute: An asset-based program for youth. *American Journal of Health Behavior* 27, 45–54.

Boyd, B. L. (2001). Bringing leadership experiences to inner-city youth. Journal of Extension 39(4). Retrieved from www.joe.org/joe/2001august/a6.php.

Broudy, H. S. (1990). Cultural literacy and general education. Journal of Aesthetic Education 24(1): 7–16.

Brown, A. S., & Novak-Leonard, J. L. (2011). Getting in on the act: How arts groups are creating opportunities for active participation.
Focus Research Findings Report.
San Francisco: James Irvine
Foundation.

Burmaster, E. (2001). Opening doors to self-determination skills: Planning for life after high school. a handbook for students, school counselors, teachers, and parents. Wisconsin Department of Public Instruction.

Catts, R. & Ozga, J. (2005). What is social capital and how might it be used in Scotland's schools? CES Briefing #36. Edinburgh: Centre for Educational Sociology. Retrieved from www.ces.ed.ac.uk/PDF%20 Files/Brief036.pdf.

Crowther, J., Tett, L., & Edwards, V. (2008). Building connections, getting involved: Measuring social capital outcomes of community learning and development. Edinburgh: Scottish Government. Retrieved from www.scotland.gov.uk/Publications/2008/06/20121049/2.

Deasy, R. J. (Ed.). (2002). Critical Links: Learning in the arts and student academic and social development. Washington DC: Arts Education Partnership.

Dekker, P., & Uslaner, E. (Eds.) (2001). Social capital and participation in everyday life. London: Routledge.

Des Marais, J., Yang, Y., & Farzanehkia, F. (2000). Service-learning leadership development for youths. *Phi Delta Kappan* 81(9): 678–680.

DiMaggio, P. & Mukhtar, T. (2004). Arts participation as cultural capital in the United States, 1982–2002: Signs of a decline? *Poetics* 32: 169–194.

Fiscus, L. (2003). Youth as equal partners in decision making. *Education Digest* 68(7), 58–62.

Goleman, D. (2000). Leadership that gets results. *Harvard Business Review* 72(2), 78.

Hirsch, E., Kett, J., & Trefl, J. (2002). *The new dictionary of cultural literacy*. Rev. ed. Boston: Houghton Mifflin Harcourt.

Irving, J. A., & Williams, D. I. (1999). Personal growth and personal development: concepts clarified. *British Journal of Guidance & Counseling*, 27(4), 517–526.

Jackson, M., Kabwasa-Green, F., & Herranz, J. (2006). *Cultural vitality in communities: Interpretation and indicators*. Washington, DC: Urban Institute.

Kreidler, J., & Trounstine, P. J. (2005). *Creative community index: Measuring progress toward a vibrant Silicon Valley*. San Jose, CA: Cultural Initiatives Silicon Valley.

MacNeil, C. (2000). Youth-adult collaborative leadership: strategies for fostering ability and authority (Unpublished doctoral dissertation). University of Michigan, Ann Arbor.

Moore, D. M., & Dwyer, F. M. (1994). Visual literacy: A spectrum of visual learning. Englewood Cliffs, NJ: Educational Technology Publications.

NEA. (2009) Survey of public participation in the arts. Research Report 49. Washington, DC: National Endowment for the Arts.

Novak-Leonard, J. L., & Brown, A. S. (2011). Beyond attendance: A multi-modal understanding of arts participation. Report based on NEA (2009). Washington, DC: National Endowment for the Arts.

O'Brien, J., & Kohlmeier, J. (2003). Leadership: Part of the civic mission of school? *The Social Studies*, 94(4), 161.

Pace, C. R. (1984). Measuring the quality of college student experience. An account of the development and use of the

college student experiences questionnaire. Los Angeles: Higher Education Research Institute, UCLA Graduate School of Education and Information Studies.

Pettit, B. (1997). Resource for studying public participation in the arts: An inventory and review of available survey data on North Americans' participation in and attitudes towards the arts. Working Paper Series, 2. Princeton, NJ: Princeton University Center for Arts and Cultural Policy Studies.

Polistina, K. (2009). Cultural literacy: Understanding and respect for the cultural aspects of sustainability. In A. Stibbs (Ed.), *The handbook for sustainability*. Oxford: Green Books.

Putnam, R. (2000). *Bowling alone*. New York: Simon & Schuster.

Roach, A., Wyman, L. T., Brookes, H., Chavez, C., Heath, S. B., & Valdes, G. (1999). Leadership giftedness: Models revisited. *Gifted Child Quarterly*, 43(13), 13–24.

Rosenstein, C. (2005). Diversity and participation in the arts: Insights from the Bay Area. Washington, DC: Urban Institute. Retrieved from www.urban.org/research/publication/diversity-and-participation-arts/view/full_report.

Siegel J. D., MD. (2001). The developing mind: *How* relationships and the brain interact to shape who we are. New York: Guilford Press.

Spear, L. P. (2000) The adolescent brain and age-related behavioral manifestations. *Neuroscience and Biobehavioral Reviews*. 24(4), 417–463.

Tarr, L. (2005) Student success: Motivating-middle-schoolstudents through personal development. Retrieved from http://www.studentmindset.com/ Article-Motivating-Middle-School-Students.pdf

Tepper, S. & Gao, Y. (2007). Engaging art: What counts? In S. J. Tepper & B. Ivey (Eds.). Engaging art: The next great transformation of America's cultural life. New York: Routledge.

Tileston, D. W. (2004). What every teacher should know about student motivation. Thousand Oaks, CA: Corwin Press.

vanLinden, J. A., & Fertman, C. I. (1998). Youth leadership: A guide to understanding leadership development in adolescents. San Francisco, CA: Jossey-Bass Publishers

Wehman, P. (1996). Life beyond the classroom: *Transition* strategies for young people with disabilities. Baltimore: Paul H. Brookes Publishing Co.

Wehmeyer, M. L., Agran, M., & Hughes, C. (1998). Teaching self-determination to students with disabilities: Basic skills for successful transition. Baltimore: Paul H. Brookes Publishing Co.

Wileman, R. E. (1993). *Visual* communicating. Englewood Cliffs, N.J.: Educational Technology Publications.

Yenawine, P. (1997). Thoughts on visual literacy. In J. Flood, S. B. Heath, & D. Lapp (Eds.) Handbook of research on teaching literacy through the communicative and visual arts. New York: Macmillan Library Reference.

Zeldin, S., & Camino, L. (1999). Youth leadership: Linking research and program theory to exemplary practice. Research and practice: Completing the circle. New Designs for Youth Development, 15(1), 10–15.

Zeldin, S., McDaniel, A. K., Topitzes, D., & Lorens, M. B. (2001). Bringing young people to the table: Effects on adults and youth organizations. *CYD Journal*, 2(2), 21–27.

Zimmerman, B. J. (1989). Models of self-regulated learning and academic achievement. In B. J. Zimmerman and D. H. Schunk (Eds.), Self-regulated learning and academic achievement: Theory, research, and practice. New York: Springer-Verlag.

Ethical Considerations

The research team was advised that, given the nature of the project, the institutional review board process was not necessary. However, to ensure high standards of ethical and methodological practice, the team asked a group of six experienced researchers and evaluators to serve as Critical Friends to the project. This group reviewed the team's work and provided constructive feedback at three points during the project, advising on such matters as data collection techniques, sampling, privacy concerns, and instrument construction. A summary of all Critical Friends comments was prepared for the research team, recommendations were discussed, and in most cases, the advice was accepted and instruments and analysis were revised.

Critical Friends

William Cleveland, Director, Center for the Study of Art and Community

James S. Catterall, Founder, Centers for Research on Creativity

Marit Dewhurst.

Director of Art Education and Assistant Professor in Art and Museum Education, City College of New York

Sandra Jackson-Dumont, Frederick P. and Sandra P. Rose Chairman of Education, Metropolitan Museum of Art

Randi Korn,

Founding Director, Randi Korn & Associates, Inc.

Jessica Luke, PhD, Vice President, Senior Research Associates, Adjunct Faculty, George Washington University, Museum Studies Department

5

Study Participants

Sample for Online Survey

Program files showed that collectively, the programs had 600 alumni from the beginning of the first program through the end of the 2011 school year. These alumni constituted the universe for the study. We set a goal of verifying current contact information for at least 75% of all alumni from each program. In fact, the programs were able to acquire current contact information for 472 alumni—79% of the universe.

Online surveys were sent to these 472 alumni. There was a 67% response rate (N = 316), and of those who responded, 84% completed the entire survey. Thus, survey results are based on a sample of 264 alumni who are representative of all four programs and who are distributed across all years of the programs' lives.

Sample for Focus Groups

Using the list of alumni who said on the survey that they were willing to participate in other aspects of the study, 18 participants were selected for two focus groups, one in New York City (N = 10) and one in Los Angeles (N = 8). The team developed instructions for selecting participants (available at whitney.org/RoomToRise) so as to assure a representative mix. The 18 participants were distributed as follows: MOCA, 8; Whitney, 4; Walker, 4; and CAMH, 2. Eight were male and ten were female. Two were recent alumni; 13 had participated five to ten years earlier; and 3 participated in the earliest years of the programs. Six currently worked in the arts, and 12 did not.

Sample for Case Studies (Photo Journals and Journey Maps)

The team also developed a guide to selecting participants for case studies, with instructions to select participants who had not been in a focus group and who represented a range of ages, a mix in terms of gender, race, and ethnicity, and a combination of participants who did and did not currently work in the arts.

Twelve participants were asked to create Photo Journals, and 12 were asked to create Journey Maps. The Photo Journals included three from each museum: six from females and six from males, with a range of ages. Technical difficulties in uploading Photo Journal content from one CAMH alum resulted in the loss of image captions, which could not be recovered or replicated. As a result, a fourth alum from CAMH was asked to participate, and the incomplete Photo Journal was omitted from analysis. The Journey Maps included three from each museum: six from females and six from males. All Journey Maps were made by alumni who were between the ages of 27 and 33 at the time of the study.

Sample for Museum Staff Interviews

For each museum, members of the research team conducted an interview with the current director, the director at the time the program began, and a staff member who was with the museum at the time the program began and could provide institutional memory when reflecting on how the teen program affected the museum over time. MOCA was experiencing leadership and institutional transitions throughout this research period, so a current director was not available for comment and was replaced with another member of the museum's executive team.

Figure 2. Participants by Age and Museum

Institution	Beginning Year	Program Age in 2011	Total Participants	Approx. Range of Current Ages for Alumni in 2011
CAMH	1998	13	153	19-30
MOCA	1992	19	155	19-36
WAC	1996	15	112	19-31
WMAA	1997	14	180	19-32
			600	

Figure 3. Responses by Institution

	Returned Surveys
CAMH	81
MOCA	77
WAC	76
WMAA	80
Total	314

Figure 4. Number of Survey Responses by Program Phase by Institution

	САМН	MOCA	WAC	WMAA	Total
Phase 1 (Years 1-5)	25	6	25	34	90
Phase 2 (Years 6-10)	32	22	32	32	99
Phase 3 (Years 11-15)	24	29	14	24	87
Phase 4 (Years 16-20)	0	38	0	0	38
Total	81	77	76	80	314

Figure 5. Percent of Respondents in Each Age Group by Museum

Current Age	CAMH	MOCA	WAC	WMAA	All
18-24	72%	70%	55%	57%	64%
25-30	28%	19%	34%	42%	31%
31+	-	11%	11%	1%	7%

Figure 6. Gender of Participants by Institution

	CAMH	MOCA	WAC	WMAA	All
Female	74%	53%	56%	80%	66%
Male	23%	47%	42%	20%	33%
Other	3%		2%		1%

Figure 7. Percent of Respondents who Self-Identify as Members of Different Ethnic Groups*

	CAMH	MOCA	WAC	WMAA	All
White	76%	27%	76%	44%	56%
Black/African American	10%	3%	11%	27%	13%
Hispanic/Latino	17%	53%	5%	19%	24%
Asian	6%	22%	10%	11%	12%
American Indian/Alaskan	3%	3%	6%	2%	4%
Hawaiian/Pac. Islander	1%	2%	2%	0%	1%
Multi-Ethnic	13%	3%	16%	7%	10%
Other	0%	0%	3%	0%	1%

^{*}While U.S. census categories can be problematic, for comparison and consistency purposes these categories were used in the survey instrument for demographic self-identification.



Data Collection Methods

Online Survey

The online survey was conducted in Year 1. The survey format was chosen because the team wanted to gather the same type of information from a large number of alumni. Given the young ages of the alumni and their locations in all parts of the country, an online survey was deemed most likely to get high response rates. (For a sample survey, visit whitney.org/RoomToRise.)

Survey Construction

The survey was designed to acquire information about:

- -How teens learned about the program
- -Their level of participation in the program
- —The aspects of the program that meant the most to them
- The aspects of the program that they feel have influenced the person they are today
- Their overall assessment of the experience
- The impact of the program experience in five specific areas: personal growth; leadership; social capital; arts participation; and artistic and cultural literacy.

The research team had identified these five concepts as key impact variables (see chapter 3). During Institute 1, the team went through a facilitated reflective practice exercise to articulate what they saw as the outcomes expressed by alumni and witnessed by museum staff. They also reviewed the literature about outcomes reported in other studies of art programs for teens.

The complete survey included 34 questions in a combination of multiple choice, rating, and open-ended formats. It was pilot-tested between April 24 and May 1, 2012. The response and completion rates were high, and participants' feedback confirmed that they understood the survey questions and that, given the importance of the programs in their lives, they did not experience the length of the survey as a detriment. In fact, several participants commented that they welcomed the opportunity to reflect on the experience and to contribute to a study about its impact.

Several questions asked for information about each area of investigation:

- -How learned about program and why attended: Q3; Q4
- Type and level of participation in the program: Q1, Q2; Q5; Q6
- Assessment of experience and most important aspects of

- the program: Q7; Q8; Q9; Q10; Q11; Q15
- -Long-term influence of the program: Q12; Q18; Q19; Q20
- -Impact (five key outcomes): Q13; Q14
- -Museum visits: Q22; Q23; Q24; Q25; Q26
- Demographics: Q16; Q17; Q21

With the exception of Q6, each question was worded the same. Q6 listed the specific program elements using wording tailored to each program. Thus, four versions of the survey were created, one for each museum. The sample survey is the version used for the Walker Art Center program.

Survey Administration

Alumni were notified about the research study via a current e-mail address. The e-mail was sent from a teen program staff member at each museum. The first message announced the study and asked each alum to expect to receive an online survey later in the month and to seriously consider completing the survey.

The survey went live to alumni from all four museums on May 22, 2012. Participants were asked to open a link to the Survey Monkey site and to complete and return the survey by May 31, 2012. May 22 was a Tuesday, the day of the week when people are most likely to open their e-mails. Reminders were sent the following Friday, May 25, and on May 30, the day before the final deadline. Each museum identified and offered a modest incentive to alumni who completed the survey.

Focus Groups

Focus groups with alumni from all four programs took place in New York City on March 7, 2013 (10 alumni) and in Los Angeles on March 12, 2013 (8 alumni). The purpose of the focus groups was to gather information about the program design features (e.g., length, format, staff, participant selection, and content) that alumni associate with both positive and challenging aspects of the experience at the time and that they believe contribute to its ongoing influence on their lives today. The two-hour focus groups were facilitated by Mary Ellen Munley, lead research advisor, using a script she developed in collaboration with the research team.

In an effort to jog memories, the team asked participants to come to the focus group session with an item that represented an important recollection of the experience. As the groups gathered for the session, a slide show of images from different years of the four programs' histories ran on a continuous loop. Several participants found their (younger) selves in the photographs, and all of them reminisced about the teen programs while they waited for

the session to begin. All participants gave their written consent for the sessions to be audio recorded. Written verbatim transcripts were prepared.

Photo Journals and Journey Maps

During Institute 3 in Houston, the research team was introduced to visual and participatory methods for data collection by Kimberly Kay Lopez, assistant professor at Baylor College of Medicine, Baylor International Pediatric AIDS Initiative, who has experience using Photo Voice methods. Twenty-four alumni completed either a Photo Journal or a Journey Map. Journey Maps were completed only by alumni who were 27 years or older because they were uniquely suited to reflect on the long-term effects of the teen program experience as they reached adulthood. In total, there were 12 Journey Maps, 12 Journey Map interviews (see below), and 12 Photo Journals.

Both the Photo Journals and the Journey Maps used qualitative case study methods. The Photo Journals delved into the ways alumni saw the influence of their teen program experiences in their everyday lives. The Journey Maps reflected on experiences through the years in relation to museums, the role of art in their lives, and their careers.

Each Photo Journal included 10 photographs with captions and an introductory statement by the alum, for a total of 120 photographs about the teen programs' influence in the lives of alumni today. Once alumni had completed their Journey Maps, they participated in an exploratory interview with a member of the research team, giving them the chance to describe and discuss the visual representation of their map. A copy of the interview protocol is available at whitney.org/RoomToRise. These interviews were audio-recorded and transcribed.

Program Profiles

Each museum team constructed a program profile by conducting research using program archives and interviews with staff. Using the same form, they gathered information about program history, budgets, and staffing. Each museum also submitted answers to the following questions.

- Q1. Why and how did your program start?
- Q2. What was/is the overarching philosophy/approach/ assumptions that guided the program design and decisions?
- Q3. Who is the audience for the program? How did this

stay the same/change over the years?

Q4. Who staffs the program? What was/is their backgrounds? What were/are their titles? How often did staff change?

Q5. Where did support (financial and other) come for the program? Was support consistent through the years? Were their highs and lows?

Q6. When was the program strongest? According to whom? What was going on that made the program so strong?

Q7. What phases or stages has the program gone through from its beginning through the end of 2012? What were the challenges along the way?

Q8. What contributes to the longevity of the program? Were there times when the program was in jeopardy? How did it survive? How does it stay vital?

Written profiles were shared with all members of the research team.

Museum Staff Interviews

To understand the impact of the teen programs on each institution, members of the research team conducted 12 interviews [add URL] (see chapter 5). All interviews were audio recorded and transcribed for analysis.

References Consulted

Collier, J., Jr. & Collier, M. (1986). Visual anthropology: Photography

as a research tool (rev. ed.). Albuquerque, NM: University of New Mexico Press.

Lorenz, L. & Kolb, B. (2009). Involving the public through participatory visual research methods. *Health Expectations* 12, 262–274.

Powers, M., Freedman, D., & Pitner, R. (2012). From snapshot to civic

action: A photovoice facilitator's manual. Columbia, SC: University of South Carolina, College of Social Work, 2012.

Yin, R. K. (2009.) Case study research: Design and methods (4th ed.). Los Angeles: Sage.

Data Analysis

Survey

During Institute 2, Joe Heimlich, professor at Ohio State University Extension and then president of the Visitor Studies Association, conducted a statistical analysis tutorial with the research team. Before the Institute, Heimlich conducted descriptive and relational analyses of the survey data using a statistical software program. During that session some data entry and coding errors were discovered.

After the data file was cleaned, Jeff Hayward, principal, and Christine Larouche, senior research analyst, both of People, Places & Design Research in Northampton, Massachusetts, conducted the statistical analyses that informed the research findings.

An SPSS database of 315 program alumni cases collected through the online survey was reviewed. One duplicate case was eliminated from the analysis, as were cases that contained a large number of missing answers. The final number of valid cases was 283, about one-quarter from each of four institutions.

Using SPSS, version 21, some variables were recoded and new variables were created in order to prepare the data for the required analyses. These analyses were mostly descriptive (using frequencies, means, and standard deviations) and relational (using cross tabulations). Chi Square tests were used primarily to compare program outcomes in the four institutions and in the four phases of program implementation. In addition, open-ended responses were filtered by phase and by institution and presented verbatim in the report.

Focus Groups: Analysis of Transcripts

Analysis of the focus group transcripts followed this process:

1. Identification of Themes

- The project evaluator and one independent reviewer read the entire transcripts, underlining key words and ideas.
- Based on a review of the key words and ideas, each reader independently identified a set of key themes that emerged from the focus group discussions.
- They compared key themes, found them compatible, and agreed on consistent language to describe the themes
- -Using different color highlighters (one color for each

- program), the two readers independently coded each instance of the appearance of a theme for the teen program the program alum attended.
- A chart was created to show the themes mentioned by participants from each of the four programs.
- Program staff and alumni reviewed the themes for authenticity.

2. Selection of quotes

- One reader selected five direct quotes from each focus group transcript that supported or elaborated each of the themes. An independent reader verified that the selected quotes did have a relation to its theme.
- One reader identified passages that had the potential to be considered for features and/or sidebars in the final research report.
- 3. Reliability and inter-rater reliability
- —Using the list of themes, two additional readers independently read the entire transcripts and underlined key ideas and words. They used highlighters to place each underlined item into one of the theme categories.
- The readers' codes were compared for consistency.
 They were also analyzed for emergence of ideas that were not represented in any of the identified themes.

Photo Journals and Journey Maps: Case Study Analysis

Three sets of people analyzed the Photo Journals and Journey Maps, each bringing a different perspective to the task:

- The project research team: Two representatives from each museum who had direct experience with the teen program and the project evaluator
- Three professionals with teen programming experience in the arts and museums:Beth Crownover, director of learning, Field Museum; Mike Hawkins, associate director and lead mentor, Digital Youth Network; and Jason Pallas, faculty member, Illinois Institute of Art—Chicago, and lead artist, Teen Creative Agency (TCA), Museum of Contemporary Art, Chicago.
- —Three academics who use visual and phenomenological research methods: Rachel Harper, artist and museum educator, University of Illinois at Chicago; Lynn Kapitan, professor and director, Professional Doctorate in Art Therapy, School of Arts and Design, Mount Mary University, Milwaukee; and Randy C. Roberts, deputy director, Jan Shrem and Maria Manetti Shrem Museum of Art, University of California, Davis.

For the research team and the teen program professionals, the analysis process consisted of looking at the Journey Maps and Photo Journals (with captions) and identifying themes. The group arrived at consensus on a set of themes that emerged from the photographs and sorted them by theme. If a single photograph represented more than one theme, it was put in more than one theme group. For both the Journey Maps and the Photo Journals, the analysts used a systematic yet inductive set of procedures designed to identify and examine themes from the visual and textual data in a transparent and credible way. The methods drew from a broad range of theoretical and methodological perspectives used in qualitative research, but in the end, the primary concern was presenting the stories and experiences voiced by alumni as accurately and comprehensively as possible. The analysis was conducted in three steps.

Step 1: Read and studied by research team (June 2013)
First individually and then in pairs, the members of the research team highlighted key ideas, images and words in the Photo Journals and Journey Maps. Based on what was highlighted, as a group they identified themes and wrote basic explanations for each theme.

Two independent groups sorted all photos into the emerging theme piles to test inter-rater reliability. More than 80% of the photographs were placed in the same theme pile by both groups. The remaining images were discussed one by one, and the group arrived at consensus about the themes in the images and captions.

Step 2: Read and studied by peer practitioners (October 2013)

Individually, each reader was asked to study four Photo Journals and four Journey Maps. They highlighted key ideas and words and looked for emerging themes. As group, they discussed their individual analyses, looked more carefully at many of the images and identified themes about teen outcomes. They also discussed the relationship between the outcomes from the programs being studied and outcomes of other teen art programs.

The discussions were audio recorded, and the project evaluator took notes. The recordings and notes were referenced during the process of identifying study findings.

Step 3: Read and studied by three researchers with ethnographic and epistemological approaches (October 2013)

Individually they highlighted key ideas and themes in all of the Photo Journals and Journey Maps. As a group they reviewed the quality of the data, concluding that the data were rich enough and had been collected carefully enough to warrant using them as evidence to support findings. Working from the alumni's own language, the three researchers came to consensus on emerging themes. They also conducted a detailed analysis of the 12 Journey Maps; once again reviewed their set of emerging themes, and made changes as needed. The group arrived at consensus on the themes.

As they worked with the data, the researchers began to identify a framework that would make connections among the reasons teens were drawn to these programs, the program design features, and the ways the program experience was influencing alumni lives. That framework was the basis for the framework that appears in the final report (see Room to Rise, fig. 1, p. 11). This team of researchers recommended presenting the Journey Maps and associated interview transcripts by either writing a few composite profiles of experience and impact or by writing a portraiture of each Journey Map that combined reflection on the visual images themselves with messages from the interviews.

The project research team chose the portraiture approach and established guidelines. A team of four writers prepared the portraitures; they were edited; and before being presented with the findings, each alum read and approved his or her portraiture for publication.

The themes and framework that emerged from this three-step process served as the basis for identifying and reporting study findings.

Program Profiles

The program profiles written by the museum staff were edited by a professional writer/editor so that they were approximately the same length and addressed similar aspects of the program histories. Each museum read and signed off on the final version of the profile.

Museum Staff Interviews

Members of the research team read the interview transcripts. Using a method similar to the one used to identify themes and quotes in the open-ended answers to survey questions and across the Photo Journals, the team arrived at consensus about the themes and findings embedded in the interviews.

References Consulted

Lightfoot, S. L. (2005). Reflections on portraiture: A dialogue between art and science. *Qualitative Inquiry* 11(1), 3–15.

Lightfoot, S. L., & Davis, J. H. (1997). The art and science of portraiture. San Francisco: Jossey-Bass.



Problems, Solutions, and Limitations of the Study

The ultimate question about any study is: Does it produce sufficient—and credible—evidence to give the reader confidence in its results? As with any study, this one was not without challenges. This section describes the issues that the research team and Critical Friends identified as potential threats to validity of the findings, and then it explains how the research team addressed the issues. Based on that information, the reader is invited to determine his or her own level of confidence in the study's conclusions.

Does 4 = 1? Are the teen programs too different from each other to allow credible comparisons about program design features and outcomes?

An early challenge faced by the practitioner-researchers is that museums are known for their individuality. No two are alike. The question about these four intensive teen programs was: Is there sufficient similarity among them to warrant studying them and their impact as a collective in order to develop generalizations, or are their differences so distinctive that each program needed to be studied separately?

The group compared the individual programs' design features and found differences in details like program schedule and nature of projects. One program met for two hours on weekdays, for example, and another met for several hours on a weekend. In one program the teens planned and ran programs for teens, while in another they facilitated family programs in the gallery, and in yet another, they produced an exhibition of their own work.

Informed by research about best practice in positive youth development, the team decided that focusing on these details would not be as useful as examining the imbedded ideas. When the team looked at all four programs from a larger frame of reference, they arrived at a consensus of program features that were common to all: sustained engagement; supportive staff and mentors; authentic work; interaction with artists; and peer diversity. Having identified the overriding concepts, the team was in a position to develop information-gathering methods and approach the data analysis as a collective, confident that the findings would generalize to other programs that shared these characteristics.

Did the project only hear from alumni who had positive experiences?

This is possible but unlikely. So why are there so few negative critical comments and so few accounts of zero or negative impact? While it is entirely possible that those willing to participate in the study were participants who had better-than-average experiences and outcomes, the research team has confidence in the overwhelmingly positive assessment of the programs and outcomes of the four intensive teen programs for the following reasons:

- The sample was large and well distributed across museums, ages of participants, and different program years and stages of development.
- Word-of-mouth and anecdotal reports are universally positive and come from a wide range of program participants.
- Responses were not universally positive. There were some reports of less-than-positive experiences and outcomes.
- The environment for interaction in the interviews and focus groups was highly supportive and encouraging, so the team is confident that respondents felt free to be critical if they so desired.

Despite the extremely positive nature of participant evaluations of the programs, alumni raised issues and limitations, giving staff a wealth of information to use for improving the programs to maximize impact.

Are the museum staff too close to the alumni and the programs, and too invested in the results of the research, to provide reliable and credible input into study design and data analysis?

Staff knowledge and depth of participation in the teen programs was seen as an advantage that contributed to the strength of the study in several ways:

- The staff's deep background helped the team ask the best questions for assessing the program experiences and outcomes.
- Positive relationships between staff and participants helped increase the sample size.
- Staff were able to provide program history that had not been recorded previously.
- —Staff were motivated to understand the findings and eager to connect the findings to their practice. The approach to research taken here is based on the notion that people really do want to know if and how their work makes a difference and are highly motivated to improve.

Given the likelihood that participants came into the teen programs because of an early interest in art, how is it possible to credit the programs with high levels of participation in the arts as adults? Despite their interest in art, participants did not have certain characteristics when they joined the programs—impacts that the study concludes they felt from their program experiences:

- -Acceptance of their interest in art
- Feelings of support from a community of others who are drawn to art
- -Access to art and artists
- Knowledge about how museums and the art world operate
- Knowledge that it is possible to make art your life's work
- -Validation from a respected institution

The programs crystalized participants' interest in art and supported them in ways that kept them focused in the face of other pressures that would lessen the role of art in their lives.

Why is there greater change for those with minority or immigrant backgrounds?

Some focus group participants who identified themselves as coming from minority or immigrant backgrounds—Latino, Indian, African—provided insight into this question. These participants observed that their families expected and hoped that they would go into a reputable, potentially lucrative field like science. While they had an interest in art, they had no access to positive role models in the art world, or to anything that validated or exemplified what success in the arts might look like. The museum programs gave them that. And because the programs were affiliated with respected institutions, they were something these participants' parents could support. We suspect that these factors help to explain the tendency among minority and immigrant participants to rate the importance of the experience more highly.

Availability of Instruments and Data

All of the data gathered for this study are available for review and further analysis. Participants are either not identified in the file, or the participant granted permission to share his or her images and comments as part of the dissemination of study findings.

Photo Journals Journey Maps Data collection instruments and instructions To request access to additional data files, send a request to:

Danielle Linzer
Education Department
Whitney Museum of American Art
99 Gansevoort Street
New York, NY 10014
danielle_linzer@whitney.org
youthinsights@whitney.org

Data sets include focus group transcripts; museum staff interview transcripts; detailed teen program profiles from each museum; and Excel files for all closed and openended survey questions.