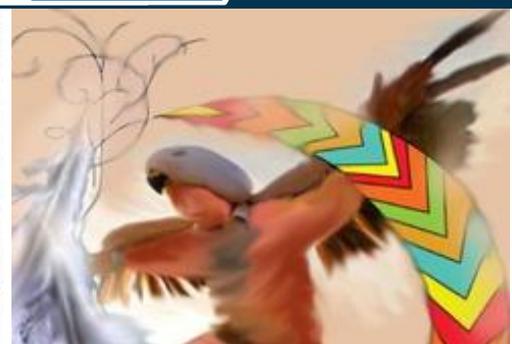


Measuring Creativity: Adobe Youth Voices (AYV) Case Study



MISSION 
MEASUREMENT

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Abstract

This white paper explores the importance and challenges of measuring creativity in the social sector. It situates the concept of “creative confidence” within the broader field of creativity studies, and outlines promising approaches to benchmarking and/or developing indices for creative confidence and the application of creative confidence among youth. This approach was developed through an initial Mission Measurement evaluation of the Adobe Youth Voices program between 2012 and 2013. Following a description of background, methodology, and findings, the paper summarizes lessons learned and suggests best practices for evaluating similar initiatives in education, technology, and media.

Photo Credits:

“Find-your-target-and-follow-it”: iEARN Class of 2012-2013

“Design Your World”: Intel Computer Clubhouse Class of 2012-2013

“Aboriginal Voice Still Strong”: Free the Children Class of 2012-2013

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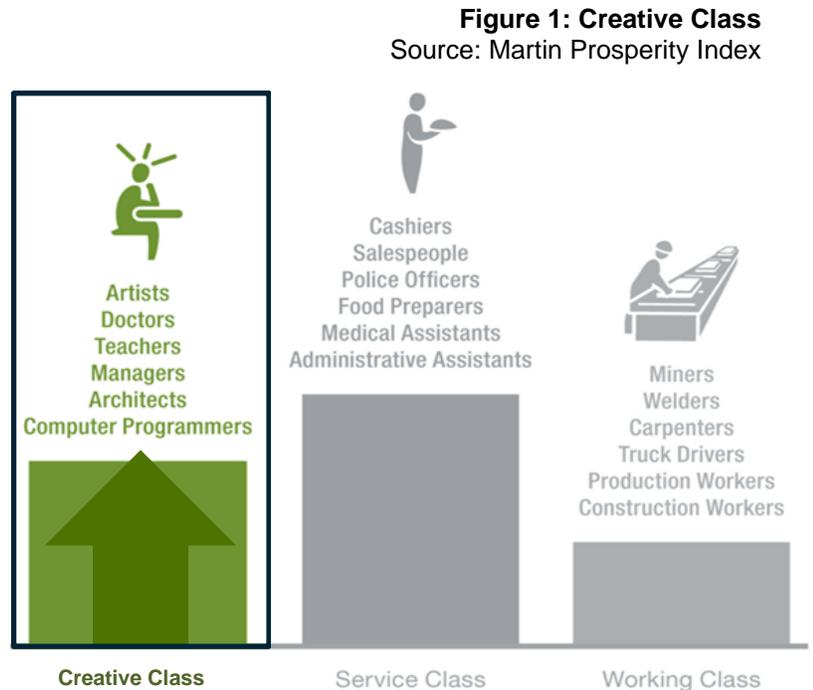
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Why Creativity Matters

In the last 15 years of rapid technological change and use of diverse media engagement platforms, the study of creativity has gained popularity in relation to everything from pop culture to global development. From Richard Florida's inception of the *Global Creativity Index* to Disney's *Creativity Studio* phone application, the need to understand, measure, and even sell creativity is more popular than ever.

Why focus on creativity? A growing population of workers is now defined as "the creative class." This class has been identified as contributing to national economic growth. These individuals – "More than 40 million Americans, roughly one-third of all employed people...in science and engineering, architecture and design, education, arts, music, and entertainment" – engage in problem solving to create new, useful and innovative products and solutions.¹ In the current global economic climate, their creative skills have become even more important. As Florida points out, (citing TechCrunch), "In a time of high unemployment, when traditional skills can be outsourced or automated, creative skills remain highly sought after and highly valuable."²



The 2012 Adobe Creativity Gap study of 5,000 adults in the United States, United Kingdom, Germany, France and Japan confirmed this sentiment. Eighty percent of surveyed adults agreed that "unlocking creative potential is key to economic growth" and nearly two thirds felt that "being creative is valuable to society".³

Beyond general population consensus, employers directly report that they are looking for employees capable of innovation and critical thinking skills. A 2013 Hart Research Associates study of 318 U.S. employers found that 71% reported colleges should put more emphasis on "the ability to innovate and be creative".⁴ Nearly all those surveyed (93%) agreed that "a

¹ Florida, Richard (2011). *The Rise of the Creative Class*. New York: Basic Books.

² Ibid.

³ Adobe Systems Inc. (2012). *The State of Create Study*. Retrieved from:

http://www.adobe.com/aboutadobe/pressroom/pdfs/Adobe_State_of_Create_Global_Benchmark_Study.pdf

⁴ Hart Research Associates. (2013). *It Takes More than a Major: Employer Priorities for College Learning and Student Success*. Retrieved from: http://www.aacu.org/leap/documents/2013_EmployerSurvey.pdf

candidate's demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than their undergraduate major".⁵

As demand for creative job candidates builds, debates about creativity have increasingly entered the education space. A majority of adults in various global economies feel their education system does not support creativity. Some educationists have argued that from an accountability standpoint, schools should be held responsible for cultivating creativity in students just as equally if not more than math and reading skills.⁶ The aforementioned Adobe study found that over half of respondents felt that "creativity is being stifled by their educational system".⁷ Others have focused on issues of access and participation, arguing that historically disadvantaged groups are further left behind by inequitable access to technology and media tools for learning.⁸

Measuring Creativity

In light of what Jenkins calls the "Participation Gap" and what the Adobe Systems benchmark study dubbed as the "Creativity Gap", schools, nonprofits, and corporations are developing new initiatives and approaches to fostering creativity. As these programs and curricula are introduced, leaders are concurrently challenged with measuring their impact.

Researchers have developed several approaches to measuring creativity - provisionally defined here as "the type of creativity that makes people adapt to the constantly changing environment, reformulate problems, and take risks to try new approaches to problems".⁹ These approaches include:

- Measuring how creative work is;
- Measuring how creative a person is; or
- Measuring the social or economic value of creative work.¹⁰

Measurement occurs at aggregate and individual levels, with researchers attempting to examine creativity levels in societies, governments, educational systems, and among individuals.¹¹

Measurement of creativity in societies and governments often focuses on understanding environmental conditions believed to contribute to creativity, such as tolerance, heterogeneity, and levels of educational attainment.¹² At the global level, tools such as the *Global Creativity*

⁵ Ibid.

⁶ Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

⁷ Adobe Systems Inc. (2012). *The State of Create Study*. Retrieved from: http://www.adobe.com/aboutadobe/pressroom/pdfs/Adobe_State_of_Create_Global_Benchmark_Study.pdf.

⁸ Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

⁹ Villalba, E. (2009). *Is it really possible to measure creativity? A first proposal for debate*. Retrieved from: <http://ec.europa.eu/education/lifelong-learning-policy/doc/creativity/report/intro.pdf>.

¹⁰ Nilsson, P. (2012). *Four Ways to Measure Creativity*. Retrieved from: <http://www.senseandsensation.com/2012/03/assessing-creativity.html>.

¹¹ Villalba, E. (2009). *Is it really possible to measure creativity? A first proposal for debate*. Retrieved from: <http://ec.europa.eu/education/lifelong-learning-policy/doc/creativity/report/intro.pdf>.

¹² Ibid.

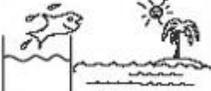
Index have additionally attempted to measure how creativity is linked to elements other than economic competitiveness, including overall happiness and well-being.¹³

Measurement of creativity at the individual level often focuses on understanding the characteristics of a creative person, including but not limited to:

- Autonomy
- Flexibility
- Preference for complexity
- Openness to experience
- Sensitivity
- Playfulness
- Tolerance of ambiguity
- Risk-taking and risk-tolerance
- Intrinsic motivation
- Self-efficacy
- Wide interest and curiosity.¹⁴

Researchers also measure creativity levels in individuals by assessing how creative their work is. For example, assessments such as the Torrance Test utilize questions that require quick creative work such as turning a black egg shape into an image that “no one else will think of”, then score respondents’ creativity based on quantity and quality, with a focus on response diversity and originality. See Figure 2 below for a sample test.¹⁵

Figure 2: Sample Torrance Test

	Starting Shapes	Completed Drawing	
		More Creative	Less Creative
Use		 Mickey Mouse	 Chain
Combine		 King	 Face
Complete		 A fish on vacation	 Pot

¹³ Martin Prosperity Index (2011). Creativity and Prosperity: The Global Creativity Index. Retrieved from: <http://martinprosperity.org/media/GCI%20Report%20Sep%202011.pdf>.

¹⁴ Villalba, E. (2009). Is it really possible to measure creativity? A first proposal for debate. Retrieved from: <http://ec.europa.eu/education/lifelong-learning-policy/doc/creativity/report/intro.pdf>.

¹⁵ Blair, Elizabeth. (2013). “More Than 50 Years of Putting Kids’ Creativity to the Test”. <http://www.npr.org/2013/04/17/177040995/more-than-50-years-of-putting-kids-creativity-to-the-test>. National Public Radio.

The Measurement Challenge

Though frameworks exist, many academics and professionals continue to face conceptual and practical challenges when attempting to measure the impact of programs designed to increase creativity.

Conceptually, as with most social impact programs and initiatives, evaluators begin with the challenge of defining the desired outcome of a given program or initiative. Is the goal to increase “creativity” or to produce a new generation of students ready to join the creative class? Are we looking for creativity in individual work or a broader capacity to collaborate and problem solve with others?

Beyond identifying intended program or initiative outcomes, evaluators must also define their measurement construct. As Shechtman et al., note in a discussion about measuring “grit” or “perseverance”, “an important distinction for measurement purposes is whether perseverance is conceptualized as a disposition or a set of processes.”¹⁶ Similarly, “being creative” can be conceptualized as a mindset, a trait, an enduring tendency, or a set of processes that unfold over time.¹⁷ Skills and attributes or evidence of character traits are often conflated but can be measured separately.

Practically, as programs and initiatives scale their efforts to foster creativity, they face challenges gathering data from a larger number of respondents. Assessments that require review of student work can provide valuable information but can be costly and time consuming to conduct regularly. Authentic assessment involving evaluation of creative student work or problem solving abilities can also be difficult to standardize and scale.

Evaluators must begin with the challenge of defining the desired outcome of a given program or initiative. Is the goal to increase “creativity” or to produce a new generation of students ready to join the creative class?

¹⁶ Shechtman, N., DeBarger, A. H., Dornsife, C., Rosier, S., Yarnall, L. (2013). Promoting Grit, Tenacity, and Perseverance: Critical Factors for Success in the 21st Century. Retrieved from: <http://www.ed.gov/edblogs/technology/files/2013/02/OET-Draft-Grit-Report-2-17-13.pdf>.

¹⁷ Ibid.

Articulating Outcomes and Measuring Creativity: Mission Measurement's Approach to Evaluating the Adobe Youth Voices (AYV) Program

In 2012, Mission Measurement was provided with the opportunity to tackle the conceptual and practical challenges of measuring creativity by developing and managing ongoing evaluation of the Adobe Youth Voices program - a large-scale, innovative effort developed by the Adobe Foundation to address the challenge of cultivating creativity in youth.

About Adobe Youth Voices (AYV)

Adobe Youth Voices (AYV) is a global initiative of the Adobe Foundation designed to increase youth creativity through the use of advanced digital media tools and tested storytelling techniques. Launched in 2006 and currently in its 8th year of operation, the AYV program has reached more than 153,000 youth in over 55 countries.¹⁸

The program was developed and implemented in collaboration with Education Development Centers (EDC) and 19 American and international nonprofit partners (grantees). Currently AYV works with 14 partners that participated in a post-program evaluation between 2012 and 2013 (see Appendix A for a list of current partners).¹⁹

AYV provides each of its partners with funding, curriculum, software, training, and technical assistance that enables design and implementation of AYV workshops, full-year, and/or half-year programs²⁰ held during or outside of regular school schedules.

Although each global partner maintains an individualized program structure, a shared student-centered curriculum unites the program. All AYV educators participate in a series of professional development activities via training on curriculum design and implementation catered to AYV. This training, which takes place prior to implementation of each program, utilizes youth-assessment tools and rubrics promoting various student-centered pedagogical approaches that encourage youth to "Create with Purpose". By teaching educators to facilitate the media making process, AYV supports a content focus on various types of media making (e.g., video, animation, photography, podcasting, graphic design, poetry, print, etc.).



Figure 3: Adobe Youth Voices Sites
Source: <http://youthvoices.adobe.com/about>

¹⁸ Adobe Youth Voices. (2013). Retrieved from: <http://youthvoices.adobe.com/about>

¹⁹ Mission Measurement evaluation efforts between 2012 and 2013 involved 16 AYV partners only.

²⁰ Programs lasting one to four months.

While AYV offers training to educators, its primary objective is to give youth a voice. Youth are encouraged to select media topics of personal significance within their school or home communities. Finished media projects share stories and address issues youth value, including but not limited to political conflict, environmental preservation, bullying, gender, and drug abuse (see Figure 4 for more detail).

Each year, Adobe also recognizes youth potential and noteworthy projects through complementary initiatives including awards and scholarships.

Articulating Outcomes

At the onset of its work with AYV, Mission Measurement engaged in comprehensive stakeholder discussions to identify and articulate the program’s high-value outcomes. The development or identification of an Outcomes Inventory™ was a crucial first stage of this engagement, in which the Team began by developing a robust understanding of the Adobe Foundation’s strategic direction, goals, and expectations for its investments. Throughout the year, Mission Measurement worked to develop this knowledge base by engaging program leaders and strategic stakeholders in a series of interviews which enabled the Research Team to track the evolving strategic direction of the program. Through these conversations, Mission Measurement revealed that AYV not only seeks to develop individual youth creativity (potentially characterized as the ability to generate many novel ideas), but rather a much broader, nuanced set of skills that would enable and empower youth to succeed in their personal, educational, and professional lives. As the team probed further, it found that the program was also designed to ensure youth applied their gained skill sets to their education, community, and career pathways.

As a leading global creative company, Adobe has a unique perspective on the importance and application of these skill sets and increasingly looked to the AYV program to support the development of applied creativity. Given this focus, Mission Measurement honed in on an emerging concept in academic and corporate social responsibility literature – **Creative Confidence**.

After reviewing AYV curriculum and program documents, conducting a series of workshops with Adobe staff, and drawing upon various articles and speeches (in particular, Tom and David Kelley’s “Reclaim Your Creative Confidence”), Mission Measurement began to operationalize creative confidence by outlining what this concept means for AYV youth. See Table 1 below.

Figure 4: Adobe Youth Voices Youth Project Topics
Source: Adobe Youth Voices “Youth Say What” Infographic



Table 1: Defining Creative Confidence: An Initial Set of Key Skills and Characteristics

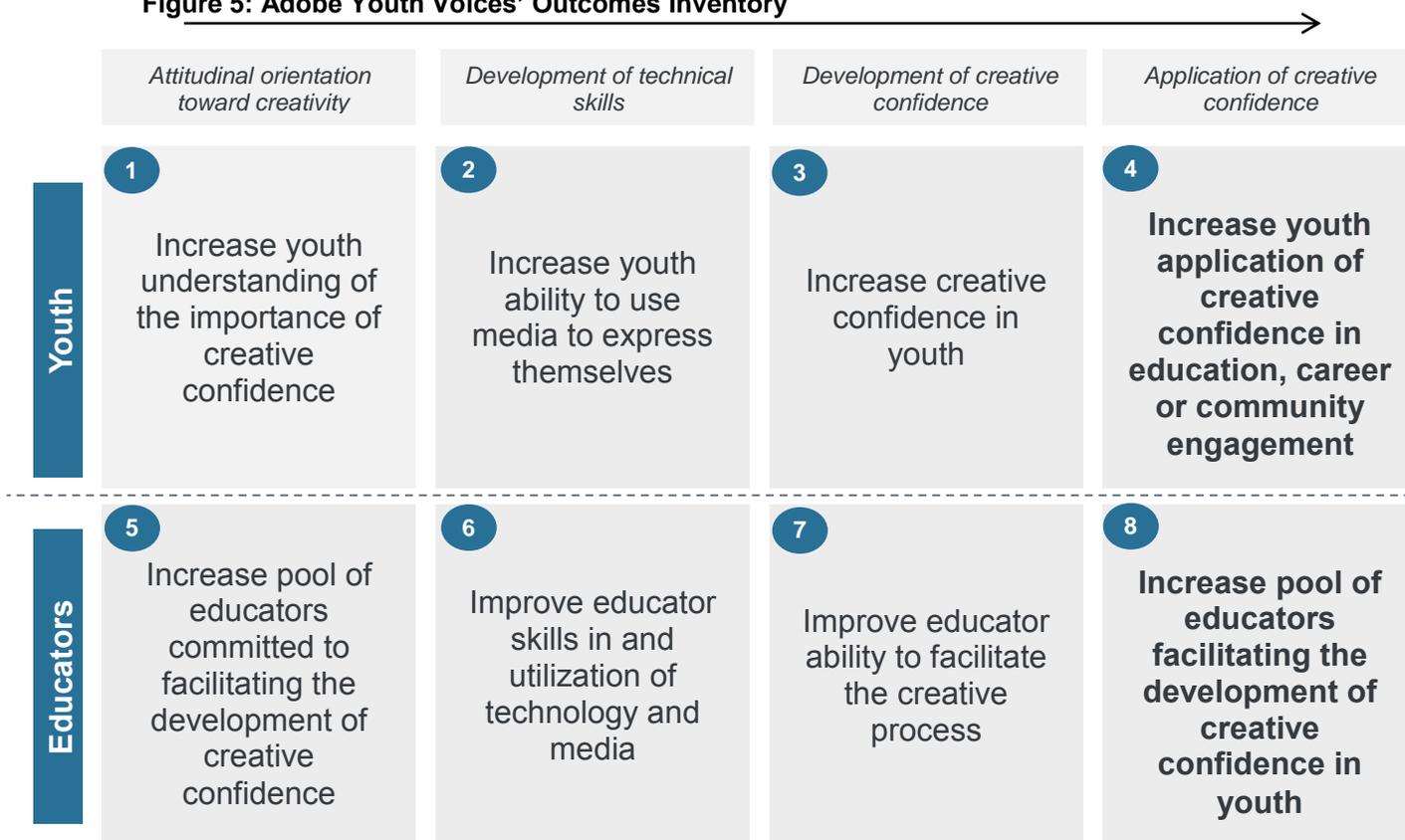
<i>Youth exhibit skills in:</i>	<i>Youth are able to:</i>	<i>Youth have:</i>
<ul style="list-style-type: none"> ❖ Communication ❖ Collaboration ❖ Critical thinking ❖ Problem solving ❖ Ideation 	<ul style="list-style-type: none"> ❖ Innovate ❖ Multi-task ❖ Be flexible/adaptable ❖ Express their point of view 	<ul style="list-style-type: none"> ❖ Self-confidence ❖ Sense of youth voice ❖ Pride in their abilities ❖ Accountability ❖ Persistence and motivation

As the team drew closer to implementing monitoring and evaluation tools, it more precisely defined creative confidence as “the ability to harness creative skills to solve problems” and committed to measuring five dimensions of creative confidence:

- **Self-Expression** – the ability to express a point of view;
- **Ideation** – the ability to ideate and innovate;
- **Collaboration** – the ability to engage others;
- **Flexibility** – the ability to adapt; and
- **Persistence** – the ability to stick with a challenge through completion.

This signature concept is featured among other high-value youth and educator outcomes that Mission Measurement and AYV leaders identified as expected program outcomes during the first stage of the engagement. See Figure 5 below.

Figure 5: Adobe Youth Voices’ Outcomes Inventory



The Outcomes Inventory reflects AYV’s intention not only to develop youth creative confidence and improve educator ability to facilitate the creative process, but also captures the intended development process, through which youth adopt a new attitudinal orientation, develop technical skills, then cultivate and apply their creative confidence.

This paper focuses exclusively on the youth outcomes as a means to a) situate AYV’s work within the broader field of creativity studies, and b) highlight suggested proxies for creative confidence among youth.

In particular, the paper will focus on the following youth outcomes:

Outcome 2: Increase youth ability to use media for self-expression

Outcome 3: Increase creative confidence in youth

Outcome 4: Increase youth application of creative confidence in education, career, or community engagement.

Outcome 2: Increase Youth Ability to Use Media for Self-Expression

Working closely with the AYV team, Mission Measurement initially identified several dimensions relevant to the outcome of increasing youth ability to use media for self-expression. Ultimately, the team focused on measuring:

- Proficiency with media technology;
- Proficiency with the media making process; and
- Media literacy.

Each metric was further defined by outlining key stages or indicators for proficiency. For example, based on review of AYV curriculum and consultation with the AYV and EDC Team, the Evaluation Team identified four key stages of the media making process: brainstorming, selecting an audience, reviewing and editing, and preparing to exhibit media.

Figure 6: Media Making Process



The team additionally developed competency scales to measure proficiency. To measure media making proficiency, the team utilized a scale that probed for degrees of independence in performing certain tasks (e.g., did/did not complete, completed with or without the help of an educator, or completed as the leader of a youth group). To measure media literacy, the team probed for frequency with which youth reported engaging in key media literacy skills including recognizing a media piece's audience, message, technique, and quality.

Outcome 3: Increase Creative Confidence in Youth

A core intended outcome of the AYV program is the development of creative confidence in youth. The program is premised on the belief that the guided use of advanced digital media tools and development of storytelling techniques can ignite youth creative confidence and provide the opportunity to use creative skills to solve problems.

AYV regularly collects youth and educator testimonials which confirm the validity of this premise. As with many youth development programs, AYV educators can readily cite examples of youth growth during and after the program – youth who began the program reluctantly and blossomed into engaged, passionate, and effective creators by the end of the program year. However, AYV leaders struggled to structure, aggregate, and report these individual stories of success.

By defining key dimensions of creative confidence and using a blend of quantitative and qualitative analysis, Mission Measurement created a framework to better capture program impact and provided preliminary data suggesting a link between key program activities and youth creative confidence.

As aforementioned, Mission Measurement and the AYV Team agreed on five creative confidence dimensions:

- 1) Ideation: The ability to ideate and innovate
- 2) Collaboration: The ability to successfully engage others
- 3) Flexibility: The ability to adapt
- 4) Persistence: The ability to manage challenges through completion
- 5) Self-Expression: The ability to express a point of view.

The team operationalized each dimension to enable youth to self-report on their abilities and has further refined its phrasing in the second year of evaluation:

Table 2: Creative Confidence Operationalization

	Initial Concept Articulation	Initial Operationalization	Current Operationalization
Ideation	The ability to ideate and innovate	Generate original ideas	Create new ideas
Collaboration	The ability to successfully engage others	Work well with other people	Work with and be inspired by others
Flexibility	The ability to adapt	Adapt to changes and new situations	Adapt to problems and circumstances
Persistence	The ability to manage challenges through completion	Overcome challenges to finish what I've started	Stick with a challenge through completion
Self-Expression	The ability to express a point of view	Communicate my ideas to others	Express my point of view

Youth reported their strength of confidence across all five creative confidence dimensions, providing perspective on their self-perception. Though self-perception of confidence can be viewed as an inherently subjective, problematic method of measuring skills and abilities, where positive self-perception (a disposition or mindset) is itself an outcome, a confidence scale can yield valuable data. As Tom and David Kelly write,

“At its core, creative confidence is about believing in your ability to create change in the world around you. It is the conviction that you can achieve what you set out to do...this belief in your creative capacity lies at the heart of innovation.”²¹

To capture program impact on youth behavior, youth were also asked to provide qualitative feedback regarding whether the program affected their ability to express themselves (a particular focus of the program as executed to date).

Outcome 4: Increase Youth Application of Creative Confidence in Education, Career, or Community Engagement

The ultimate intended outcome of the AYV program is the application of creative confidence. AYV leaders are not only interested in determining whether youth in the program gain specific skills or a more confident outlook, but also whether the program can have a holistic and lasting impact on the lives of youth.

²¹ Kelley, T and Kelly, D. (2013). *Creative Confidence: Unleashing the Creative Potential Within us All*. New York: Crown Business.

Collaborating once again with AYV leaders, the Evaluation Team worked to further define application of creative confidence by narrowing its focus to understanding if and how the program increases youths’ educational, career, and community engagement.

Specifically, youth were asked if, because of the AYV program, they had witnessed change in the following areas of interest:

Table 3: Survey Options for Application of Creative Confidence

Application Areas		Indicators
	Education	<ul style="list-style-type: none"> • Tried harder to succeed in school; • Taken steps to apply to a college/university;
	Career	<ul style="list-style-type: none"> • Learned career skills; • Thought more about the type of career they want to have;
	Community	<ul style="list-style-type: none"> • Volunteered outside of AYV; or • Learned more about an issue within their community.²²

After defining program outcomes, Mission Measurement developed data collection tools to measure AYV’s impact in its seventh program year. Data was primarily collected through two online post-program surveys – one for educators and one for youth. Both surveys were translated and distributed in seven languages to ensure optimal international response rates.²³ This measurement approach enabled the Team to collect data from program participants at multiple geographically separated sites. Online distribution also ensured all partners could participate in the evaluation, regardless of their physical access to AYV educators and youth.

Fundamental to the survey design was an effort to measure creative confidence conceptualized as a set of processes *and* as a disposition. For example, youth were asked about their participation in the media creation process and their level of engagement during media consumption. Self-reported behaviors, such as leading one’s team through each stage of the media making process, were used as skill development indicators. Additionally, the team directly probed to understand youth self-perception on each of the creative confidence dimensions. For example, youth were asked how confident they felt in their ability to “generate new ideas”.²⁴ These self-ratings provided insight into self-perceived character traits.

²² Survey question: “Because of my AYV experience, I have:”

²³ The team opted for post-program measurement alone because many partners had already started programming, therefore pre- and post-program measurement was not possible.

²⁴ Survey question: “How confident are you in your ability to do the following things?”

Measuring Program Outcomes: Mission Measurement's Methodology

Pragmatic and Timely Survey Sampling

Considering time, resources, and varied partner-level implementation schedules, Mission Measurement engaged the AYV Team to devise a pragmatic survey sampling strategy to measure AYV's impact. The strategy aimed to ensure maximum participation of AYV educators and youth globally and facilitate consistent, quick feedback from partners.

In order to evaluate a program of this geographic scope and implementation complexity, Mission Measurement utilized AYV's existing resources across partners and program sites. The Evaluation Team worked with AYV partner coordinators to a) link survey responses to appropriate partners and geographic locations, and b) match youth responses to surveys of respective educators, when applicable.

Through continuous engagement, Mission Measurement was able to conduct the most comprehensive surveying of AYV educators and youth to date. Program coordinators successfully directed educators and youth participants from all 16 program year 7 partners, at over 300 program sites in more than 50 countries to the surveys. Mission Measurement was able to verify and analyze 3,603 youth responses (~10% response rate) and 490 educator responses (~44% response rate).²⁵ Though lower than desired, these survey response figures were triple that of previous years.²⁶

Additionally, Mission Measurement was able to match a subset of the youth survey sample with educators who submitted a post-program survey. Of the 3,603 youth who completed the survey, 76% were matched to their corresponding educators. The ability to match these surveys offered deeper insights into links between program implementation and resulting youth outcomes.

Despite success reaching an international audience (400 youth at international AYV sites completed the post-program survey, with 300 of these youth matched to an educator who also participated in the evaluation process), Mission Measurement notes that nearly 87% of all youth responses were generated at domestic sites. Given the overrepresentation of U.S. sites in the survey, trends in outcomes by site and/or partner should be interpreted bearing this limitation in mind.

Data Cleaning, Coding, and Analysis

Mission Measurement utilized an easily accessible and cost effective online survey host and cleaned survey data in collaboration with program coordinators, who helped confirm active versus non-active educators. To clean the entire dataset, the Evaluation Team took steps such as removing responses from unconfirmed educators and their youth and removing incomplete or inconsistent responses. The Evaluation Team subsequently examined relationships between different variables and assessed trends in implementation and outcomes by running a series of frequencies, cross-tabulations, and Chi-Square tests.

²⁵ Youth response rate calculated from expected program reach numbers, as estimated using educator reports of youth taught in program year 7. Educator response rate calculated from coordinator-provided lists.

²⁶ In the prior year, analysis was conducted on 143 educator responses and 1,087 youth responses.

Key Evaluation Findings

Data from the three highlighted youth outcomes, coupled with educator and program reports on implementation, begin to tell the story of AYV's impact in its seventh program year.²⁷

The team found that AYV reached over 30,000 youth in its 7th program year and that 90% of AYV educators reported working with youth for more than three hours per week. These educators worked with youth to foster media making skills in a variety of settings (in- and out-of-school), sometimes integrating curriculum into their existing courses, and in other cases, providing separate classes and workshops to engage youth.

Despite varied levels of technology and internet access at the site-level, the team found that a high percentage of youth program participants around the world reported completing three key stages of media making (i.e., brainstorming, selecting audience, and reviewing and editing media). Notably, over 90% of youth practiced brainstorming and over two-thirds of youth selected an audience or revised their work. Youth completed and submitted over 2,000 media projects to Adobe's online community. Additionally, nearly 60% of AYV youth reported practicing four key media literacy skills (i.e., recognizing audience, message, technique, and quality). Approximately 51% and 62% of AYV youth surveyed think about message and quality when viewing media, respectively.

More importantly, 87% of surveyed AYV youth reported being confident or somewhat confident across the five creative confidence dimensions (ability to ideate, collaborate, be flexible, persist through challenges, and self-express). Nearly 80% of AYV youth reported that their participation in the program changed their behavior in their school, career, and/or community life. Taking the opportunity to share AYV's impact, youth offered:

- "I am able to come up with ideas... [AYV] will help me to go **beyond what I would normally think of** to help out with simple but complex problems."
- "I learned how to **work as a group**, and learn from other people's ideas. I think that, I had learned much more **people skills**."
- "Using the storyboards, video camera and the supplies around me helped me to create a video for a book...We learned how to do things with the video camera and learned to **be creative by using the items around me**."
- "I had to learn more about my topic, so I learned to do some research for any project in my life and that it is important to **believe in yourself**."
- "I now know that I can **express myself through my creations**, rather than just staying bottled up about things...this helped me to learn that it's okay to open up to other people about the problems that I think are important."

²⁷ AYV educators responded to a post-program survey, which included questions about program inputs, technology and internet availability.

These findings suggest that educators are fostering more than just media making skills: they are also supporting skill development that can be applied outside of the program. As quoted above, a common theme for youth across many partners was the use of media as a call to action about issues of personal and community significance. Globally, youth in AYV use media to share perspectives on issues ranging from promoting human rights to preserving the environment, among others.²⁸

Encouraging Creativity among Youth in Diverse Learning Environments

Outcomes data also provided a platform to begin exploring the connection between AYV program implementation and youths' development of technical skills, creative confidence, and application of creative confidence to their daily lives.

As aforementioned, while AYV has a common curriculum, partners are given the flexibility to implement the program in and outside of school, with different frequencies, durations, and dosages. These implementation models contribute to the variations observed between partner grantees. Specifically, there are differences in the levels of access to resources and tools (i.e., cameras, computers, etc.), and in the degree to which educators maintain fidelity to the AYV curriculum and recommended practices. Though findings were mixed given inconsistent response rates across partners, the team identified several preliminary findings to be further explored in subsequent evaluation cycles.

For example, the team found that youth served by programs *outside* of the regular school day reported stronger outcomes on the post-program survey.²⁹ These youth were more likely to report a) completion of all stages of the media making process, b) consistent use of media literacy skills, c) confidence across all creative confidence dimensions, and d) impact on their educational, career, or community engagement.

The Evaluation Team suspects that this trend may follow from a combination of factors. Out-of-school programs may offer more scheduling flexibility and/or additional time specifically devoted to AYV curriculum. Another possibility may be that the students attending programs outside of school may self-select into these programs because they offer an outlet for creativity, which arguably remains uncommon in existing academic curricula. Although these findings did not prove significant through the Evaluation Team's initial Chi-Square analysis, Mission Measurement hypothesizes that the larger, more geographically diverse sample for its next round of evaluation will provide deeper insights.

Within a flexible implementation model, the linkages between program type and outcomes suggest that understanding youth interest and motivation may be a key factor in driving primary program outcomes.

²⁸For a global depiction of youths' media themes:

http://youthvoices.adobe.com/summit2013/img/AYV_Infographic_v18alt.pdf

²⁹Based on program setting information documented by AYV. The analysis included a comparison of partners which run programming exclusively outside school ours against those that run programming exclusively in-school. Note, some partners use both in-school and out-of-school approaches.

Stronger youth outcomes were also observed in programs taught by “high fidelity” educators - educators who reported that over 50% of the youth in their program selected the topic of their media project, used media tools, and completed a media project. The team observed that youth taught by these educators reported higher levels of a) confidence across the creative confidence dimensions, b) program impact on their educational, career, or community engagement, c) consistent use of media literacy skills, and d) completion of all stages of the media making process. These findings were also not found to be statistically significant, but did show some trends that helped AYV think more broadly about the role that fidelity might play in the larger, more diversified sample in the eighth program year.

So What? Lessons Learned

Ultimately, the AYV engagement allowed Mission Measurement to:

- 1) Advise AYV on how to standardize desired youth and educator outcomes, as measured in a post-program survey;
- 2) Engage the AYV Team in a series of discussions regarding the degree to which the program was achieving intended outcomes (discussions included possible explanations for achievements and constraints);
- 3) Offer data-driven recommendations on which partners and/or geographic sites could benefit from various types of additional support;
- 4) Provide feedback on inputs, outputs, and outcomes that may benefit from the addition of targeted routine monitoring alongside the existing summative evaluation; and
- 5) Utilize survey data to generate other exploratory analysis, including estimates of overall portfolio reach and cost per youth outcome at the partner level.³⁰

The development and implementation of this evaluation process for AYV yielded a multitude of lessons relevant to program leaders and evaluators.

In relation to program development, the team found that:

- 1) The concept of “creative confidence” –the ability to harness creative skills to solve problems - has become increasingly relevant as nonprofits and businesses look to foster applied creativity. As leaders develop their program strategy, they can benefit from a focus on a wider range of skills and competencies related to the capacity for ideation, including the capacity for collaboration, persistence, self-expression, and flexibility.
- 2) Programs that provide opportunities for participatory media and digital production may serve as a particularly promising mechanism for developing youth creative

confidence.³¹ Mission Measurement's evaluation of the AYV program found that it successfully fostered youth self-expression and prompted positive behavioral changes including learning about and trying to address social issues. In the upcoming year, the team will have the opportunity to conduct pre- and post- program assessment to more rigorously monitor and evaluate youth growth across creative confidence dimensions globally. However, preliminary research suggests that AYV's youth-centered model and emphasis on media making as a means for creative self-expression supports positive youth outcomes across diverse modes of partner-level implementation.

Methodologically, the team found that:

- 3) Evaluators tasked with measuring the impact of programs designed to foster creativity must begin their work by understanding the full range of intended program or initiative outcomes. Creativity can be strictly defined as a capacity to generate original ideas, but more often programs are also designed to foster critical thinking skills, problem solving skills, or a host of other skills and abilities. Understanding the purpose and scope of a program is a crucial first step to effective monitoring and evaluation.
- 4) Beyond collaboration during the initial phase of evaluation design, evaluators and program leaders can benefit from engagement throughout the monitoring and evaluation process. The joint development of competency scales, indexes and/or benchmarks can support articulation of program goals and ensure that evaluation is informed by experienced practitioners.
- 5) An understanding of partner needs and continuous engagement throughout the survey fielding process can yield improved response rates. Mission Measurement more than tripled the number of youth and educator responses to AYV's post-program surveys by ensuring its surveys were translated and providing program coordinators with regular updates on survey completion.
- 6) A clear understanding of intended outcomes and universal impact indicators serve as a means to evaluate a diverse portfolio of grantees. By using standardized competency scales, Mission Measurement was able to measure and compare youth and educator outcomes achieved by a diverse set of partners. This work informed both program design and management approaches for Adobe Foundation.

As shown through Mission Measurement's work with AYV, foundations can, and should expect rigorous evaluation methods to support anecdotal data collection. This evaluation approach can be pursued regardless of the challenges that come with a diverse portfolio of grantees.

³¹ Kafai, Y. and Peppler, K (2011). *Youth, Technology, and DIY: Developing Participatory Competencies in Creative Media Production. Review of Research in Education: 35(89).*

Next Steps

By establishing a collaborative relationship with the AYV Team and implementing partners, Mission Measurement has developed a platform for ongoing evaluation and engagement with participants who are committed to measuring and benchmarking their progress.

Mission Measurement is now in the process of evaluating AYV's eighth program year and has developed and fielded pre- and post-program surveys for educators and youth. This tracking of growth over time will supplement the continued process of matching youth surveys to those from respective educators. Mission Measurement will also continue to explore linkages between program implementation and high-level outcomes to determine if particular program practices are linked to the development of creative confidence characteristics.

Finally, in an effort to fully capture holistic and long-term impact on AYV youth, the Evaluation Team is working with AYV to explore ways to reach and engage AYV alumni to determine if and how the AYV program has impacted their long-term educational and career aspirations, as well as their level of community engagement. These evaluation efforts will continue to add to the growing pool of research promoting more robust approaches to monitoring and evaluation of creative confidence.

Appendix A:

Table 3: Current Adobe Youth Voices Partners

Partner	Domestic / International	Description
1 st ACT Silicon Valley	Domestic	1stACT Silicon Valley is a network of business, civic and arts leaders working to foster cultural engagement and help create an authentic sense of place and cultural identity for Silicon Valley. As a network of leaders, 1stACT's focus is to make catalytic change across three areas: 1) Silicon Valley Arts & Culture - support and strengthen arts and culture industry by providing a pipeline of leadership, strategic investment funds, marketing and branding, and capacity building; 2) Cultural Engagement - broaden the range of opportunities for Silicon Valley workers, residents, children, and families to become engaged in participatory cultural experiences; and 3) Vibrant Urban Core - realize a vision of Downtown San Jose as Silicon Valley's urban core, which is anchored in big deals and small wonders across five planning domains. http://www.1stact.org/
American India Foundation (AIF)	International	The American India Foundation (AIF) is the largest diaspora philanthropy organization focused on India and based out of the United States. Since inception, AIF has benefited more than 1 million people, by investing in over 115 Indian non-governmental organizations. AIF partners with high quality Indian NGOs to implement scalable and sustainable programs that demonstrate effective solutions. In the process it builds a new generation of social entrepreneurs and civil society leaders. The foundation works in tandem with government agencies to translate these solutions into policy change. AIF works out of New York and California in the US, and New Delhi and Bangalore in India. In addition to its offices in the United States, AIF has eight chapters in major metropolitan areas in the US. http://aif.org/
Bay Area Video Coalition (BAVC)	Domestic	The Bay Area Video Coalition (BAVC) inspires social change by enabling the sharing of diverse stories through art, education and technology. http://www.bavc.org/
Chicago Public Schools (CPS)	Domestic	Chicago Public Schools, the third largest school district in the United States, offers high quality world class education for the 21st century. Our mission is to ensure that every child is on track to graduate prepared for success in college, work and life. http://www.cps.edu/
Eastside Educational Trust	International	Eastside Educational Trust is a highly acclaimed, award-winning, world record-breaking arts education charity and London's leading youth arts and media provider. Eastside aims to educate and engage young people through direct participation in the arts and media. We want to inspire all young people to develop their potential, share their talents and enrich their lives and we do this by enabling young people to work with professionals in neighborhoods where help is needed the most. http://www.eastside.org.uk/
Free the Children (FTC)	International	Free The Children is the world's largest network of children helping children through education, with more than one million youth involved in our innovative education and development programs in 45 countries. Founded in 1995 by international child rights activist Craig Kielburger, Free The Children has a proven track record of success. The organization has received the World's Children's Prize for the Rights of the Child (also known as the Children's Nobel Prize), the Human Rights Award from the World Association of Non-Governmental Organizations, and has formed successful partnerships with leading school boards and Oprah's Angel Network. http://www.freethechildren.com/
International Education and Resource	International	EARN is a non-profit organization made up of over 30,000 schools and youth organizations in more than 130 countries. iEARN empowers teachers and young people to work together online using the Internet and other new

Network (iEARN)		communications technologies. Over 2,000,000 students each day are engaged in collaborative project work worldwide. http://www.iearn.org/
ReelGrrls	Domestic	Reel Grrls empowers young women from diverse communities to realize their power, talent and influence through media production. Our mission is to cultivate voice and leadership in girls at a vulnerable age in their development. We offer a variety of hands-on workshops for teenage girls in specific skills including animation, cinematography, script writing and more. http://www.reelgrrls.org/
Spy Hop Institute for Teachers (SHIFT)	Domestic	Spy Hop, SHIFT formerly known as the Interactive Digital Education Academy (iDEA), offers K-12 educators immersive, high-quality, innovative professional development and support to integrate the filmmaking process into core content instruction. Participants receive a comprehensive, standards-linked filmmaking curriculum and learn how to produce Public Service Announcements (PSAs), instructional videos, stop motion projects, and other short films. http://www.shiftworkshops.org/
TakingITGlobal (TIG)	International	TIG's missions is for youth everywhere actively engaged and connected in shaping a more inclusive, peaceful and sustainable world. The organization's mission is to enable a collaborative learning community which provides youth with access to global opportunities, cross-cultural connections and meaningful participation in decision-making by harnessing internet technologies to cultivate youth leadership and engagement in social issues; bridging the continuity gap that causes fragmentation between and within generations of youth movements; championing the role of young people as key stakeholders in all aspects of society. TIG facilitates global understanding and grow leadership among youth to enhance their participation in social movements for a better world. http://www.tigweb.org
TechBoston within Boston Public Schools (BPS)	Domestic	TechBoston is a department within the Boston Public Schools that supports advanced technology courses in the district's schools. TechBoston's mission is to inspire Boston Public School students by providing access to cutting edge technology resources and opportunities that positively advance their academic and career aspirations. http://www.techboston.org/
TechSpace	International	Inspiring young people to become digital creators through free access to hardware, software, trained educators and creative mentors. http://www.techspace.ie/
The Intel Computer Clubhouse Network	International	The Intel Computer Clubhouse Network The Intel Computer Clubhouse Network is an international community of 100 Computer Clubhouses located in 20 different countries around the world. The Computer Clubhouse provides a creative and safe out-of-school learning environment where young people from underserved communities work with adult mentors to explore their own ideas, develop skills, and build confidence in themselves through the use of technology. http://www.computerclubhouse.org/
Urban Arts Partnership (UAP)	Domestic	Urban Arts Partnership advances the intellectual, social and artistic development of underserved public school students through arts-integrated education programs to close the achievement gap. Urban Arts Partnership accomplishes its mission through a variety of interdisciplinary arts programs that include in-school classroom integration, after-school programs, master classes, professional development, summer programs, arts festivals, and special projects. http://www.urbanarts.org