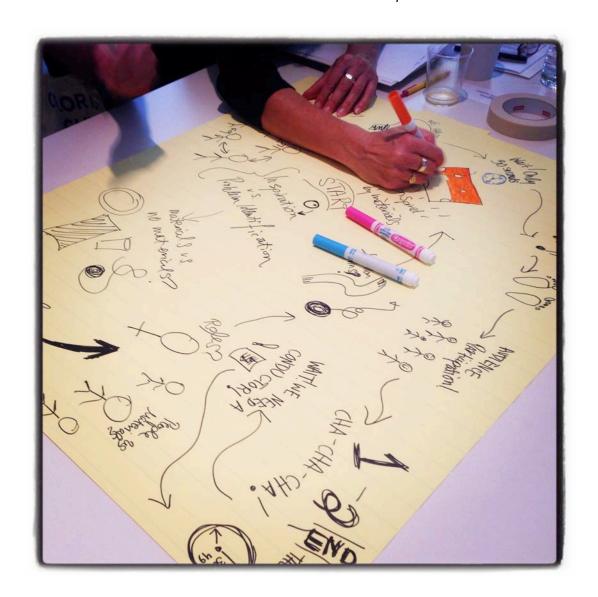# CREATIVITY IN LEARNING TODAY AND TOMORROW:
EXPANDING OPPORTUNITIES FOR CREATIVE PARTICIPATION

Recommendations for Next Steps

A Report on the 2014 Creativity in Learning, Today and Tomorrow Roundtable Series,
A Collaboration between the Sam Francis Foundation and Researchers from Project Zero

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1. EXECUTIVE SUMMARY

Recent discussions concerning the *creative economy*, *creative placemaking*, and *creative entrepreneurialism* suggest the many ways in which creativity is viewed as fundamental to our political and economic well-being.[1] While much of the rhetoric concerning the importance of creativity stems from the corporate sector and the public sphere, messaging from the White House and others has made it clear that it is essential for schools to prioritize creativity within educational systems in order for America to retain its competitive edge today and tomorrow.[2] As a recent report from the President's Committee on the Arts and Humanities notes:

> In the global economy, creativity is essential. Today's workers need more than just skills and knowledge to be productive and innovative participants in the workforce. Just look at the inventors of the iPhone and the developers of Google: they are innovative as well as intelligent. Through their combination of knowledge and creativity, they have transformed the way we communicate, socialize, and do business. Creative experiences are part of the daily work life of engineers, business managers, and hundreds of other professionals. To succeed today and in the future, America's children will need to be inventive, resourceful, and imaginative.[3]

Beyond hardline economic rationales for supporting creativity through education, it is equally important to recognize that creative learning experiences tap the curiosities and imaginations of young people and provide students with unique opportunities to express themselves in various ways.[4] Creativity in learning has the potential to support young people as they develop a sense of inquiry, identity, and agency—and search for meaning in their worlds.[5]

As the contemporary creativity in learning narrative attests, fostering creativity through education continues to be a priority for parents, educators, and policymakers. Nonetheless, while rhetoric concerning the importance of fostering creativity in learning may be on the rise, too often those who advocate for creativity in learning are unable to articulate what creativity *is* and *how* it develops, making it difficult to affect meaningful change in practice or policy.

It is amidst this backdrop that the *Creativity in Learning, Today and Tomorrow* roundtable series was initiated by representatives from the Sam Francis Foundation, a Los Angeles–based artist foundation, to gain a better understanding of the concept of creativity in learning and to lay the foundation for a new agenda to support creativity throughout the education sector. This brief but important initiative was the result of an informal collaboration between the Sam Francis Foundation and researchers from Project Zero—a research center at the Harvard Graduate School of Education.

By engaging participants in a series of Project Zero–led workshop activities and discussion tools, the Creativity in Learning, Today and Tomorrow roundtable series was designed to explore contemporary views of creativity that look beyond traditional individual-based understandings of invention and innovation which risk positioning creativity as being reserved for the most privileged and gifted amongst us. Each roundtable session served the dual purpose

of surfacing participant's understandings of creativity in practice while at the same time providing participants with an orientation towards a non-traditional, distributed approach to invention and innovation. The roundtable sessions were structured around three guiding questions: *What does creativity look like? Under what conditions does creativity thrive? How can we nurture and support creativity?*

After facilitating four interactive Creativity in Learning, Today and Tomorrow roundtable sessions in Boston, New York, Los Angles, and San Francisco throughout the fall of 2014, we—lead researcher Edward P. Clapp and research assistant Raquel L. Jimenez—began the process of reviewing, synthesizing, and making sense of the documentation that was collected from the collective roundtable events. The following five inter-related themes emerged as being of most interest to roundtable session participants:

1. *Creative participation* is a collaborative, socially distributed process;
2. *Equity and inclusivity* must be a priority for creativity in learning;
3. *Professional development and structural support* are necessary to move a creativity in learning agenda forward;
4. A *common language* for creativity in learning must be developed in order to advance policy and practice;
5. The time is ripe for *policy change and future action.*

Based on these themes, we recommend that the Sam Francis Foundation engage in a four-strand research-based program development agenda that (a) establishes an equitable and inclusive framework for creativity in learning founded upon a participatory approach to invention and innovation; (b) illustrates creative participation in action through a series of diverse case studies; (c) builds upon the 2014 Creativity in Learning, Today and Tomorrow roundtable series by formalizing a multi-disciplinary professional learning community, and; (d) yields teacher-generated educational resources that increase creative participation for the broadest array of young people.

> …the Sam Francis Foundation is not only poised to bring new substance and structure to the creativity in learning narrative, but also poised to expand opportunities for creative participation—not just for an elite or gifted few—but for all young people.

Though there is no shortage of advocacy statements arguing for the importance of creative learning experiences, today's parents, educators, and policymakers lack coherent and consistent language and structural support to genuinely advance the creativity in learning agenda. Despite national conversations advocating for creativity in learning, a new approach to understanding creativity that foregrounds issues of access and equity is necessary in order to affect policy—and truly impact the lives of young people. By enacting the recommendations we have presented herein, the Sam Francis Foundation is not only poised to bring new substance and structure to the

creativity in learning narrative, but also poised to expand opportunities for creative participation—not just for an elite or gifted few—but for all young people.

2. CONTEXT FOR THE CREATIVITY IN LEARNING, TODAY AND TOMORROW ROUNDTABLE SERIES

The Creativity in Learning, Today and Tomorrow roundtable series was initiated by representatives from the Sam Francis Foundation, a Los Angeles–based artist foundation, to gain a better understanding of the concept of creativity in learning and to lay the foundation for a new agenda to support creativity throughout the education sector. This brief but important initiative was the result of an informal collaboration between the Sam Francis Foundation and researchers from Project Zero—a research center at the Harvard Graduate School of Education. Below we describe each of these organizations as separate entities, before then discussing the nature of their informal collaboration.

Sam Francis Foundation[6]

California-born abstract expressionist painter Sam Francis (1923–1994), is regarded as one of the 20th century's leading interpreters of light and color. Sam Francis maintained studios in Bern, New York, Los Angeles, Paris, and Tokyo, making him the first post–World War II American painter whose reach was truly international. Throughout a long and prolific career, Francis created thousands of paintings as well as works on paper, prints, and monotypes. His work holds references to New York abstract expressionism, color field painting, Chinese and Japanese art, French impressionism, and his own Bay Area roots.

Building on Sam Francis's creative legacy, the Sam Francis Foundation is dedicated to the transformative power of art as a force for change. The Foundation's stated mission is to further a greater understanding of Sam Francis's art and ideas through a broad array of programs and activities designed to educate, inform, and catalyze new thinking about the importance of creativity in society.

For the past fifteen years, the Foundation has been dedicated to managing Sam Francis' estate, compiling his collection, and publishing the Sam Francis catalog raisonné. In 2014 the Foundation turned its attention towards sharing Sam Francis' legacy by lending its voice and energy towards fostering creativity in learning.

Project Zero[7]

Project Zero was founded by the philosopher Nelson Goodman at the Harvard Graduate School of Education in 1967 to study and improve education in the arts. Goodman believed that arts learning should be studied as a serious cognitive activity, but that "zero" had yet been firmly established about the field; hence, the project was given its name.

For nearly half a century Project Zero has been committed to helping create communities of reflective, independent learners; enhancing deep understanding within disciplines, and; promoting critical and creative thinking. Project Zero's mission is to understand and enhance learning and thinking in the arts, as well as in the humanistic and scientific disciplines at both the individual and institutional levels. At the core of this pursuit are the following questions:

> *What is understanding and how does it develop?*
> *What do thinking and learning look like?*
> *What is worth learning today and tomorrow?*
> *How and where do thinking, learning, and understanding thrive?*

Over the years Project Zero has maintained a strong research agenda in the arts while gradually expanding to include investigations into the nature of intelligence, understanding, thinking, creativity, cross-disciplinary and cross-cultural thinking, the nature of good work across professions and contexts, ethics in digital participation, design thinking and maker-centered learning, interdisciplinary teaching and learning, and educating for global competence. The organization has conducted dozens of major research initiatives, published hundreds of books, articles, and reports, and collaborated with countless partners. Project Zero's work takes place nationally and internationally in a variety of settings. While much of Project Zero's research occurs in schools, an increasing amount is focused on businesses, cultural organizations, and on various online platforms. In addition to its research initiatives, Project Zero offers symposia and workshops, most notably the annual Project Zero Classroom and Future of Learning summer institutes.

Though several Project Zero frameworks for creativity have been put forth in the past,[8] the collaboration with the Sam Francis Foundation suggests the potential for a next wave of creativity research at Project Zero. The distributed and participatory reframing of creativity in learning discussed herein connects to Project Zero initiatives that emphasize the distributed nature of teaching and learning, among them are projects such as the Learning Innovation Lab, Making Learning Visible, and the Agency *by* Design initiatives.

Initiating the Creativity in Learning, Today and Tomorrow Roundtable Series

During the spring of 2014 the Sam Francis Foundation familiarized itself with creativity in theory and practice by reaching out to organizations and individuals across the country that have been tackling the complex issues related to thinking and learning in the 21st century. As a result, the Foundation built a robust network of creativity experts, including visionary thinkers, researchers, and practitioners.

In collaboration with researchers from Project Zero, the Foundation made it their objective to bring these innovative thought leaders together in a series of interactive roundtable events in the fall of 2014—convening in Boston, New York, Los Angeles, and San Francisco. The

Foundation's goal was to marshal the diverse expertise and schools of thought around the concept of creativity to tackle three key questions: *What does creativity look like? Under what conditions does creativity thrive?* and *How can we nurture and support creativity?*

3. THEORETICAL BACKGROUND

Recent discussions concerning the *creative economy*, *creative placemaking*, and *creative entrepreneurialism* suggest the many ways in which "creativity has come to be the most highly prized commodity in our economy."[9] While much of the rhetoric concerning the importance of creativity stems from the corporate sector and the public sphere, messaging from the White House and others has made it clear that it is essential for schools to prioritize creativity and innovation in order for America to retain its competitive edge in the global economy.[10] As educational leader Tony Wagner boldly asserts, "if we are to remain globally competitive in today's world, we need to produce more than just a few entrepreneurs and innovators. We need to develop the creative and enterprising capacities of all students."[11]

Beyond hardline economic rationales for supporting creativity through education, it is equally important to recognize that creative learning experiences tap the curiosities and imaginations of young people and provide students with unique opportunities to express themselves in various ways.[12] From this perspective, creative learning experiences have the potential to support young people as they develop a sense of inquiry, identity, and agency—and search for meaning in their worlds.[13]

> Regardless of what perspective one takes, fostering creativity through education continues to be a priority for parents, educators, and policymakers.

Regardless of what perspective one takes, fostering creativity through education continues to be a priority for parents, educators, and policymakers.[14] Responding to this interest, the emergent concepts of *STEAM* and *Creative Youth Development* have prompted exciting new conversations concerning the importance of incorporating creative learning experiences into various formal and informal educational settings.[15, 16]

Though the push to foster creativity through education has become more pronounced in recent years, it is hardly new. Speaking at the onset of both the Cold War and the Cognitive Revolution, in 1950 the psychologist J. P. Guilford—then president of the American Psychological Association—famously asked:

> Why is there so little correlation between education and creative productiveness? Why do we not produce a larger number of geniuses than we do, under such supposedly enlightened modern educational practices?[17]

Guilford's concerns about the relationship between creative achievement and educational practices inspired decades of research on creativity and sparked a wave of interest in fostering invention and innovation through education. However, Guilford's explicit reference to creative

"genius" perpetuated a narrowly-focused orientation towards creativity that situated invention and innovation within the minds of individuals—with a particular emphasis placed upon the most accomplished amongst us. This individualistic approach towards creativity positioned creative individuals as "exceptional" and "superior" or, in other words, endowed with unique gifts that set them apart from their peers.[18]

Today, however, research and practice looks beyond such "great man" orientations towards invention and innovation, and instead suggests that creativity is more of a socially-distributed process. As psychologist R. Keith Sawyer notes, "most of what we've heard about famous inventions is wrong because it's based on the myth of the lone genius.… Forget the myths about historical inventors; the truth is always a story of group genius."[19] Whether in the classroom, the workplace, or online in the blogosphere, our increasingly more interconnected and globalized world is not only rich with examples of "group genius" but also ripe with examples of networks of people working together—either remotely or face-to-face—to build new products, establish new memes, and develop new meanings.[20] Despite this shift, traditional, individual-based orientations towards creativity continue to shape our educational initiatives and drive our understandings of what it means to design and facilitate creative learning experiences.[21]

While rhetoric concerning the importance of fostering creativity in learning may be on the rise, too often those who advocate for creativity in learning lack a clear understanding of what creativity is and how it develops. As one roundtable session participant noted, "to really understand the strategies and interactions that support creativity, we need to be able to name what is going on in [creative] environments." It is therefore necessary to undergird well-meaning advocacy for creativity in learning with pedagogically sound structural support.

…"to really understand the strategies and interactions that support creativity, we need to be able to name what is going on in [creative] environments."

While a lack of cohesion, consensus, and structural support may be seen as an obstacle to the current creativity in learning agenda, this schism in understanding also presents the education sector with the unique opportunity to break from traditional, narrowly-focused orientations towards creativity that favor individual talent. Instead, the education sector may now consider how learning experiences (whether in formal or informal settings) can be reimagined in ways that build upon contemporary systems-based creativity research and practice while also making creative *participation* accessible to *all* students—not just the "gifted" amongst us.

4. THE FALL 2014 ROUNDTABLE SERIES: SESSION DESIGN AND EMERGENT THEMES

By engaging participants in a series of Project Zero–led workshop activities and discussion tools, the Creativity in Learning, Today and Tomorrow roundtable series was designed to explore contemporary views of creativity that look beyond traditional individual-based understandings of invention and innovation which risk positioning creativity as being reserved for the most

privileged and gifted amongst us. Each roundtable session served the dual purpose of surfacing participant's understandings of creativity in practice while at the same time providing participants with an orientation towards a non-traditional, distributed approach to invention and innovation (See Appendix A for a sample roundtable session agenda). The roundtable sessions were structured around three guiding questions: *What does creativity look like? Under what conditions does creativity thrive? How can we nurture and support creativity?*

The participants at the Creativity in Learning, Today and Tomorrow roundtable sessions were largely funders from artist foundations and executive level administrators from a variety of corporate, cultural, educational, and philanthropic institutions. The table below provides basic information concerning the cities, venues, and participation associated with each session (see Appendices B–E for detailed participant lists):

Date	City	Venue	Participants
October 29, 2014	Boston, MA	Isabella Stewart Gardner Museum	31
October 31, 2014	New York, NY	Metropolitan Museum of Art	38
November 7, 2014	Los Angeles, CA	Los Angeles County Museum of Art	50
November 17, 2014	San Francisco, CA	The Exploratorium	39

At the conclusion of the Creativity in Learning, Today and Tomorrow roundtable series, we began the process of reviewing, synthesizing, and making sense of the documentation that was collected from the four roundtable events. Throughout these sessions *creative participation, equity and inclusivity, professional development and structural support, common language,* and *policy change and future action* emerged as a set of inter-related themes that sparked the most interest and dialogue amongst participants.

1. Creative Participation

Though many popular catch phrases and buzzwords (e.g., comfort with ambiguity, risk-taking, thinking outside the box, etc.) related to creativity surfaced during the Creativity in Learning, Today and Tomorrow roundtable series, documentation from these sessions revealed that orientations towards the distributed and collaborative aspects of creativity resonated with the roundtable session participants' personal experiences and professional practices. Participants acknowledged that "learning is interactive and social, not only individually based" and so, too, is creativity. When asked to describe what creativity looked like in action, participants repeatedly remarked that "creativity is collaborative and participatory" and that "collaboration is central to creativity." Referencing the

> Ultimately roundtable session participants suggested that creativity is collaborative, distributed, and participatory, and entails drawing on information and expertise from multiple sources.

creative problem solving activities participants engaged in throughout the roundtable sessions, one participant noted that "there is the myth of the lone wolf," but she and her colleagues "would not have been able to come up with the [solutions] we came up with without the group dynamics." Ultimately roundtable session participants suggested that creativity is collaborative, distributed, and participatory, and entails drawing on information and expertise from multiple sources. Participants further noted that there is no one way to be creative, but instead, creativity requires that multiple people play multiple roles throughout the creative process.

Considering the nature of the activities and the participatory approach to creativity that was emphasized throughout the roundtable sessions, it may not be surprising that participants identified creativity as being a collaborative, distributed, and ultimately participatory process. Nonetheless, we found that participants made important connections between their experiences during the roundtable sessions and their experiences with creativity in their personal and professional lives.

Though an understanding of creativity as being a participatory process did indeed gain traction with participants, there was some skepticism concerning this new theoretical orientation towards creativity in learning. This skepticism took two forms. First, some participants questioned how a participatory understanding of creativity explained the products of artists

To make creativity visible, participants engaged in creative problem-solving activities during the 2014 Creative in Learning, Today and Tomorrow roundtable series.

working alone in their studios, scientists working alone in their laboratories—or students working alone in their classrooms. As R. Keith Sawyer notes, "researchers have discovered that the mind itself is filled with a kind of internal collaboration, that even the insights that emerge when you're completely alone can be traced back to previous collaborations."[22] Though not apparently visible, the ideas, tools, and technologies developed by others are indeed "in the room" with the solitary inventor. However, some roundtable session participants resisted the idea of internal collaboration, which in turn made it difficult for them to fully buy into a distributed and participatory reframing of creativity. The second source of skepticism voiced by roundtable session participants had to do with the nature of the epistemological shift and corresponding changes in pedagogy that would be necessary in order to move from an individual-based understanding of creativity, to a more distributed and participatory approach to invention and innovation. Some participants asked, "how is this [perspective] manifested in the work we are doing? How do we raise this consciousness in society? How do we move these ideas forward?" Without further scaffolding, some roundtable session participants suggested that such a conceptual shift towards creative participation may be a bridge too far.

2. Equity and Inclusivity

By far the most common puzzles shared by roundtable session participants related to issues of access and equity in contemporary creative learning environments. Several participants, particularly educators, observed that creative learning experiences remain out of reach for many young people. They questioned whether access to creativity in learning "is only for the privileged."

Although a number of participants pointed to the "systems that work against cultivating creativity" in public education, many viewed adopting a participatory approach to creativity as a promising way of making creativity more inclusive, thereby providing a solution to this dilemma. Along these lines, one participant raised the question "if creativity is a participatory process, then how does this transform the way we teach in schools?" while another participant wisely noted that "educators are always fighting with what we can change and what we can't change." This latter point refers to the

…new structures that expand opportunities for creative participation offer the hope of fulfilling the promise of creativity as a human right.

systems and structures that marginalize creativity in education—especially in under-resourced schools. Some roundtable session participants also referenced the strong emphasis towards individual achievement that grips so many learning environments, "students have less and less access to collaborative-based learning" one participant noted, whereas as another offered, "I have a hard time seeing how I can change something given that the system is a test-oriented, right answer thinking system." Interestingly, several discussions of access and equity led roundtable session participants to identify creativity in learning as a social justice issue. In one roundtable

session it was even suggested that "a creativity agenda is a human rights agenda." Building on this sentiment, roundtable session participants further suggested that new structures that expand opportunities for creative participation offer the hope of fulfilling the promise of creativity as a human right.

3. Professional Development and Structural Support

In proportion to the excitement expressed towards distributed and participatory approaches to creativity, as noted above, roundtable session participants also recognized the difficulties of "moving away from the idea of an individual genius to a group perspective" of creativity in learning, and asked "what does that look like in the classroom?" To this end, roundtable session participants expressed the need for further professional development and structural support. Especially noting a "need to look at the existing structures of participatory learning in classrooms, broadly defined," roundtable session participants identified the following needs for professional development and structural support:

- A curricular framework for participatory creativity;
- Case studies of exemplar models and existing structures that support participatory creativity;
- Continued opportunities for educators, researchers, and administrators to come together as a community of practice;
- Platforms for sharing ideas amongst a greater number of educators, and;
- Systems of feedback, documentation, and assessment strategies particular to participatory approaches to creativity in learning.

4. Common Language

Responding to the epistemological shift that a participatory and process-based understanding of creativity would entail, participants also expressed the importance of developing new language. They viewed this new language as having an important role in (a) developing a shared understanding of creativity and (b) being instrumental in shaping future action and policy change. As one participant noted, "in viewing creativity, I find that it's easier to remove the word 'creativity,' because of all the definitions that word has in it." Participants throughout the four roundtable sessions underscored the ambiguous nature of the word creativity, "if you can't define creativity," one participant asked, "then how do you create an environment that engenders creativity?" Increasingly "creativity" became entwined with concepts such as "agency" and "social justice," and participants shared a common view of creativity as a fundamental aspect of humanity. Consistent with what creativity researcher Mark Runco terms the "arts bias" in creativity rhetoric, many participants were also eager to decouple creativity from art making.[23] As participants noted "[creativity] is not about just making art." Though some participants did indeed correlate creativity with artistic talent, the more consistent suggestion to separate

creativity from the arts may be useful in reframing creativity as being more inclusive and equitable—by suggesting that there are many ways one may participate in creativity, beyond engagement in the arts.

5. Policy Change and Future Action

Roundtable session participants were quick to point to the sweeping changes in policy that would be needed in order to reform a system of public education that does not prioritize creativity. "How can we leverage this work to make change in policy?" was a popular refrain throughout the Creativity in Learning, Today and Tomorrow roundtable series. One may argue that tackling the inter-related themes outlined above is a necessary first step in effecting system-level change. Specifically, supporting the development of a learning community (theme 3) towards generating a shared language and structures to support participatory approaches to creativity (themes 3 and 4) may ultimately increase equity and inclusivity (theme 2)—by instituting a creativity in learning agenda that embraces a participatory approach to invention and innovation (theme 1).

5. DISCUSSION

The five themes discussed above can be understood in three different ways. First, *creative participation* and *equity and inclusivity* may be viewed as new orientations towards creativity that emerged from the Creativity in Learning, Today and Tomorrow roundtable series. These new orientations towards invention and innovation are not only inter-related (i.e., a participatory approach to creativity in learning has the potential to make access to creativity more inclusive and equitable) but also mark an exciting shift away from traditional creativity in learning narratives. Emphasizing the participatory and distributed nature of creativity with the ultimate goal of making creativity in learning more inclusive and equitable provides a wonderful opportunity to introduce new language and greater substance to today's creativity in learning advocacy statements—and new pedagogical structures to traditionally focused creativity in learning environments.

"if you can't define creativity," one participant asked, "then how do you create an environment that engenders creativity?"

Second, the themes of *professional development and structural support* and *common language* may be viewed as the needs of the field, as expressed by the participants at the Creativity in Learning, Today and Tomorrow roundtable sessions. The call for professional development, structural support, and a common language provide a clear indication of what are the essential next steps for moving a creativity in learning agenda forward. As opposed to a top down approach that would involve establishing structures and language that would be imposed on practitioners, the needs expressed by the roundtable session participants may be best addressed through a collaborative action research study that takes a bottom-up, practitioner-based approach to collaborative inquiry.

Participants engaged in thoughtful discussion during the 2014 Creativity in Learning, Today and Tomorrow roundtable series.

Lastly, the theme of *policy change and future action* may be viewed as a long-term outcome built upon the findings of the aforementioned practitioner-based action research study. Below, we discuss a four-strand approach to just such a research-based program development agenda.

6. RECOMMENDATIONS FOR FUTURE ACTION

Based on the themes that emerged from our analysis of documentation gathered throughout the Creativity in Learning, Today and Tomorrow roundtable series, we recommend the pursuit of a four-strand inquiry that (a) establishes an equitable and inclusive framework for creativity in learning founded upon a participatory approach to invention and innovation; (b) illustrates creative participation in action through a series of diverse case studies; (c) builds upon the 2014 Creativity in Learning, Today and Tomorrow roundtable series by formalizing a multi-disciplinary professional learning community, and; (d) yields teacher-generated educational resources that increase creative participation for the broadest array of young people.

Strand One: Establishing a Framework for Participatory Creativity

Throughout the Creativity in Learning, Today and Tomorrow roundtable series, we found that providing access to creative learning experiences was a primary concern for participants. A participatory approach to creativity in learning not only made practical sense to participants, it also offered the hope of making creativity more inclusive and equitable and thereby delivering on the promise of establishing creativity as a human right. As noted above, the wealth of contemporary advocacy statements surrounding creativity in learning do little without consistent language and coherent pedagogical structures to support them. We therefore find it essential to establish a pedagogical framework for creative participation, including accessible language that

is easily communicated to others, as the primary goal of the Foundation's next steps for advancing creativity in learning.

Strand Two: Illustrating Creative Participation in Action through a Series of Diverse Case Studies
Establishing a new framework for creativity in learning should not be a purely theoretical endeavor. Instead, we recommend developing a series of case studies that exemplify creative participation in a variety of learning environments. Detailed case studies of creative participation in action will help make the concepts central to a new framework for creativity in learning visible, surface new language, and provide important structural referents for educators. At the same time, case studies of creative participation in various learning environments will help surface best practices and provide insight on how to develop documentation and assessment strategies that best capture the learning and development that takes place through creative participation.

Strand Three: Formalizing a Multi-Disciplinary Learning Community
Through the Creativity in Learning, Today and Tomorrow roundtable series the Sam Francis Foundation began to establish a national community of people interested in advancing a creativity in learning agenda. The Foundation is in the unique position to transform this social capital into a multi-disciplinary learning community established to further develop inclusive and equitable approaches to creative participation in various educational settings. Molded around a collaborative, multi-year action research study, the guided work of such a community of practice may include (a) informing a new framework for creativity in learning; (b) structuring professional development experiences; (c) sharing and discussing student work, and; (d) designing, prototyping, and refining a variety of educator resources and other pedagogical tools. True to Project Zero's previous work with professional learning communities, a Creativity in Learning community of practice may include face-to-face workshops and study group sessions supported by structured online engagement—all of which may serve as a platform to share ideas and build camaraderie.

Strand Four: Educational Resources
In addition to developing the frameworks, case studies, and learning community suggested above, developing research-based educator resources will provide creativity in learning instructors with important tools that they can use in a variety of teaching and learning environments. Practitioner-generated educator resources, such as Project Zero thinking routines, will serve as flexible curricular supports that help educators routinize important thinking strategies and ultimately foster effective habits of mind for their students. Other educator resources, such as documentation strategies, may be designed to gauge student learning and make participation in creativity visible. Pictures of practice gleaned from learning community members employing these educator resources will serve as additional case studies of inclusive and equitable creative participation that may be broadly shared for the benefit of others.

7. CONCLUSION

Through the Creativity and Learning, Today and Tomorrow roundtable series, the Sam Francis Foundation has succeeded in surfacing new orientations towards creativity that emphasize inclusivity and equity through creative participation, while also establishing the needs of the field of creative learning, which include professional development, structural support, and common language. We recommend that the Foundation build on these findings and continue its momentum by launching a four-strand research-based program development agenda that includes establishing an equitable and inclusive framework for creative participation, developing a diverse set of case studies, formalizing a multi-disciplinary professional learning community, and developing teacher-generated educator resources.

Though there is no shortage of advocacy statements arguing for the importance of creativity in learning, today's parents, educators, and policymakers lack coherent and consistent language and structural support to genuinely advance the creativity in learning agenda. Despite national conversations advocating for creativity in learning, a new approach to understanding creativity that foregrounds issues of access and equity is necessary in order to affect policy—and truly impact the lives of young people. By enacting the recommendations we have presented herein, the Sam Francis Foundation is not only poised to bring new substance and structure to the creativity in learning narrative, but also poised to expand opportunities for creative participation—not just for an elite or gifted few—but for all young people.

8. ACKNOWLEDGEMENTS

9. NOTES

1. For a discussion of the creative economy see Richard Florida, *The Rise of the Creative Class and How it's Transforming Work, Leisure, Community, and Everyday Life.* (New York:

Basic Books, 2002). For a discussion of creative placemaking see Artplace America, "Principles of Creative Placemaking," retrieved from http://www.artplaceamerica.org/articles/principles-of-creative-placemaking/ and; Ann Markusen & Anne Gadwa, "Creative Placemaking." Whitepaper for the Mayors' Institute on City Design. (Washington, D.C.: National Endowment for the Arts, 2010). For a discussion of creative entrepreneurialism see William Deresiewicz, "The Death of the Artist—and the Birth of the Creative Entrepreneur." *The Atlantic,* December 28, 2014, retrieved from http://m.theatlantic.com/magazine/archive/2015/01/the-death-of-the-artist-and-the-birth-of-the-creative-entrepreneur/383497/?single_page=true.

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4. See Edward P. Clapp, "Reframing Creativity as the Biography of an Idea: Developing Learning Narratives that Describe Creativity as a Participatory and Distributed Process. (Doctoral thesis, Harvard University, Graduate School of Education, 2014).

5. See Carla Rinaldi, *In dialogue with Reggio Emilia: Listening, researching, and learning* (New York: Routledge, 2005).

6. Content appropriated from http://www.samfrancisfoundation.com/

7. Content appropriated from the Project Zero information sheet. Additional information about Project Zero can be found at http://www.pz.harvard.edu/

8. For previous discussions of Project Zero work on creativity, see Howard Gardner, *Creating Minds: An Anatomy of Creativity Seen through the Lives of Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi* (New York: Basic Books, 1993); David N. Perkins, *The Mind's Best Work* (Cambridge, MA: Harvard University Press, 1981); Ron Ritchhart & Tina Blythe, *Creativity in the Classroom: An Educator's Guide for Exploring Creative Teaching and Learning*. (Burbank, CA: Disney Learning Partnership, 1999); Weber, R. J. & David N. Perkins, *Inventive Minds: Creativity in Technology*. (New York: Oxford University Press, 1992), and; Emily C. Weinstein, Zachary Clark, Donna J. DiBartolomeo, & Katie Davis, "A Decline in Creativity? It Depends on the Domain," *Creativity Research Journal, 26*(2), 2014, 174–184.

9. For a discussion of the creative economy see Florida, *The Rise of the Creative Class and How it's Transforming Work, Leisure, Community, and Everyday Life*, p. 5. For a discussion of creative placemaking see Artplace America, "Principles of creative Placemaking" and Markusen & Gadwa, "Creative Placemaking." For a discussion of creative entrepreneurialism see Deresiewicz, The Death of the Artist—and the Birth of the Creative Entrepreneur.

10. See White House, "State of the Union 2011" and White House, "Remarks by the President on the 'Education to Innovate' Campaign." See also Partnership for 21st Century Skills, "Framework for 21st Century Learning."

11. See Tony Wagner, *Creating Innovators: The Making of Young People Who Will Change the World* (New York: Scribner, 2012), p. 4.

12. See Clapp, "Reframing Creativity as the Biography of an Idea."

13. See Rinaldi, *In Dialogue with Reggio Emilia*.

14. See Create CA, "A Blueprint for Creative Schools: How the Arts and Creative Education can Transform California's Classrooms. (Los Angeles, CA: Authors, 2014); David Gauntlett & Bo Stjerne Thomsen, *Cultures of Creativity: Nurturing Creative Mindsets Across Cultures* (Billund, Denmark: Lego Foundation, 2013); Massachusetts Department of Elementary and Secondary Education, "Massachusetts Commission to Develop an Index of Creative and Innovative Education in the Public Schools." Retrieved from http://archives.lib.state.ma.us/bitstream/handle/2452/200332/ocn819646980.pdf?s equence=1; Partnership for 21st Century Skills, "Framework for 21st Century Learning"; Wagner, *Creating Innovators*; White House, "Remarks by the President on the 'Education to Innovate' Campaign," and; Yong Zhao, *World Class Learners: Educating Creative and Entrepreneurial Students* (Thousand Oaks, CA: Corwin Press, 2012).

15. Though STEAM is commonly understood as adding the arts to the study of science, technology, engineering, and math, the A in the STEAM acronym is more accurately used to emphasize the importance of creativity in STEM learning. See for example Michael K. Daugherty, "The Prospect of an 'A' in STEM Education." *Journal of STEM Education, 14*(2), 2013, 10–15.; Suzanne Bonamici & Aaron Schock, "STEAM on Capitol Hill," *The STEAM Journal, 1*(2), 2014, 1–2; Harvey White, "Our Education System is not so much 'Broken'—as it is totally outdated!" *STEAM,* 2010, retrieved from http://steam-notstem.com/articles/our-education-system-is-not-so-much-broken-as-it-is-totally-outdated/

16. For a discussion of Creative Youth Development, see Massachusetts Cultural Council, National Guild for Community Arts Education, & President's Commission on the Arts and Humanities, "National Summit on Creative Youth Development: Unite. Celebrate. Activate" retrieved from http://creativeyouthsummit.org; Lauren Stevenson, "Setting the Agenda: The National Summit on Creative Youth Development," (report commissioned by the

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17. J. P. Guilford, "Creativity," (address of the President of the American Psychological Association, September 5, 1950, Pennsylvania State College, University Park, PA).

18. See Vlad Petre Glăveanu, *Thinking through Creativity and Culture: Toward an Integrated Model* (New Brunswick, NJ: Transaction Publishers, 2014), p. 40.

19. See R. Keith. Sawyer, *Group Genius: The Creative Power of Collaboration* (New York: Basic Books, 2007), p. xiii.

20. See Ibid and Peter Gloor, *Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks* (New York: Oxford University Press, 2006).

21. Paul Duncum, "Creativity as Conversation in the Interactive Audience Culture of YouTube," *Visual Inquiry, 2*(2), 2013, 115–125.

22. See Sawyer, *Group Genius*, p. xii.

23. See Mark A. Runco, *Creativity: Theories and Themes: Research, Development, and Practice.* (Burlington, MA: Elsevier Academic Press, 2007). See also, Arthur J. Cropley, "Is There an 'Arts Bias' in the *Creativity Research Journal?* Comment on Glăveanu (2014)," *Creativity Research Journal, 26*(3), 2014, 368–371, and; Vlad Petre Glăveanu, "Revisiting the 'Arts Bias' in Lay Conceptions of Creativity," *Creativity Research Journal, 26*(1), 2014, 11–20.

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APPENDIX A: SAMPLE ROUNDTABLE SESSION AGENDA (SAN FRANCISCO)

CREATIVITY IN LEARNING, TODAY AND TOMORROW

A Roundtable Discussion Series
Presented by the Sam Francis Foundation in
Collaboration with Researchers from Project Zero

Facilitated by Edward P. Clapp
The Exploratorium
San Francisco, CA
November 17, 2014 | 8:30 a.m. – 1:00 p.m.

Goals for this Discussion: The goals for this roundtable session are (a) to engage a diverse group of creative industry and education professionals in conversation around the overall theme of *creativity in learning, today and tomorrow* by way of three guiding questions: *What does creativity look like? What are the conditions under which creativity thrives?* and *How can we nurture and support creativity?*; (b) to collect data in response to these guiding questions; (c) to spawn dialogue and engagement amongst a group of individuals that hold the development of creativity as a core value, and; (d) to prompt new researchable questions and program development prospects around the theme of *creativity in learning, today and tomorrow*.

Time	Activity	Materials
8:00	**Tech Check and Prepare the Space** • Sam Francis Foundation and Project Zero staff arrive on site to tech check and prepare the space. • Breakfast is delivered.	All necessary food, technology, and materials
8:30	**Meet, Greet, and Eat** • Participants arrive and enjoy light breakfast refreshments while mingling with Sam Francis Foundation staff, Project Zero staff, and their peers.	Coffee and refreshments Name tags Participant packets
9:00	**Welcome and Overview of the Day** • The session begins with Marina McDougall welcoming participants on behalf of the Exploratorium, followed by Debra Burchett-Lere welcoming participants on behalf of the Sam Francis Foundation. • Debra then introduces the Sam Francis Foundation, Loree Goffingon, and the present staff before introducing Edward as the facilitator for the day's session. • Edward introduces Project Zero, himself, and Raquel before then providing an overview of the day. • Before starting, Edward introduces the hashtag for the Creativity in Learning roundtable series #creativitymatters, and then invites Kena to say a few words about how participants can voice why they think creativity matters by using the "tweet sheet."	Tweet sheets
9:15	**Brief Introductions** • Building on the theme of social media, participants are asked to each briefly introduce themselves in "140 characters or less"—Edward begins by modeling a short introduction. • Ask "who's in the room?": o K–12 teachers o Higher education professors o Researchers and academics o Industry professionals o Program administrators	N/A

	o Artists o Funders o Who else?	

9:25	**Setting the Scene: Portraying Creativity in Learning, Today and Tomorrow**
	• Edward sets the scene for the session by defining the problem space, presenting a "PZ perspective," and presenting the guiding questions for the session:
	   o *What does creativity look like?*
	   o *What are the conditions under which creativity thrives?*
	   o *How do we support and nurture creativity?*
		N/A

9:30	**What Does Creativity Look Like? Part I** • Participants are asked to split up into groups of three-four. • Quietly to themselves, participants are then asked to consider for a moment a time when they saw creativity in action. Participants are encouraged to take notes or sketch images if they find that helpful. • After two minutes of quiet reflection, participants are asked to discuss with a partner their experiences observing creativity in action. • After several minutes of conversation, Edward asks, *you've all just spent some time making creativity visible—so, what does it look like?* DOCUMENTATION STRATEGY: • To document participant responses, Raquel and Sam Francis Foundation staff (a) scribe participant responses onto chart paper (b) take notes on a laptop, (c) photograph the discussion/participants' work, and (d) live tweet participant responses.	Chart paper Sharpies Markers Assorted craft materials

9:45	**What Does Creativity Look Like? Part II: Design Challenge**
	• Participants are placed into new groups of four-five.
	• Supplied with cardboard and basic craft supplies, each participant group is given the following challenge:
	• *Using the materials in the room, build a contraption that conveys a rubber ball to the ground as slowly as possible when dropped from a height of five feet.*
	• One person in each group is a designated observer. The role of the observer is to track the evolution of their group's ideas and to collect data (sketching, taking notes) that can be used to tell the story of their group's process of making, including:
	   o The "moves" the group makes throughout their process of making
	   o How the group's contraption changes along the way
	   o Who contributes to the evolution of ideas
	   o Where new ideas come from
		Cardboard
		Box cutters
		Rubber bouncy balls
		Masking tape
		Assorted craft materials

10:10	**What Does Creativity Look Like? Part III: Telling the Story of Creative Problem Solving and Emergent Idea Development** • After each participant group has exhibited their ball drop machine, the observers from each group are given five minutes to collect their notes and compose a narrative that captures their group's creative problem solving process and emergent idea development. While they do so, the participants take time to reflect on their experiences. • Each group's observer is then asked to share the story of their creative problem solving process and emergent idea development.	N/A
10:30	**What Does Creativity Look Like? Part IV: Situating Creativity in Learning** • Edward introduces the concept of individual and group learning from the perspectives of Project Zero's Making Learning Visible (MLV) initiative.	N/A

	• Edward then asks for three volunteers to participate in the MLV City of Reggio (boys) narrative. • After engaging in this interactive narrative, Edward offers a forward-looking presentation on the topic of creativity in learning, today and tomorrow, with a special angle towards distributed and participatory approaches to creativity. • Before going on break, Edward prompts participants to reflect on their experiences, and then encourages the participants to talk to someone they haven't spoken to before.	
11:00	**BREAK** • Before going on a break, Kena reminds participants of the tweet sheet and encourages participants to engage online using #creativitymatters. • Coffee and refreshments are available for participants. • Participants are encouraged to introduce themselves to at least two people they haven't spoken to yet.	Coffee and refreshments
11:15	**Headlines and Highlights** • After returning from the break, participants are asked to surface some headlines and highlights pertaining to their experiences this morning.	N/A

11:25
 	
11:45
 	
12:00
	What are the Conditions Under Which Creativity Thrives? and How do we Support and Nurture Creativity?
	• Transitioning to new groups of three-four, participants are asked to build on their understandings of what creativity looks like from this morning's activity by considering the second guiding question for this session: *what are the conditions under which creativity thrives?*
	• Using chart paper participant groups are asked to consider the following:
	  ○ What are the conditions under which creativity thrives?
	  ○ What are the conditions under which creativity *does not* thrive?
	• After 20 minutes of discussion, participants are asked to consider the third guiding question for this session: *How do we support and nurture creativity?*
	• After 15 minutes of further discussion, a full group discussion follows.
	
	DOCUMENTATION STRATEGY:
	• To document participant responses, Raquel and Sam Francis Foundation staff (a) scribe participant responses onto chart paper (b) take notes on a laptop, (c) photograph the discussion/participants' work, and (d) live tweet participant responses.
		Chart paper
		Sharpies
		Markers

12:15	**Insights, Puzzles, and Implications** • Edward reorients participants to the roundtable session's three guiding questions, reviews the work we have done in our time together today, and then asks participants to utilize a Project Zero thinking routine to quietly consider to themselves what insights, puzzles, and implications they may have—through the lens of their classrooms or workplace environments. Participants are encouraged to write down their insights, puzzles, and implications on three different colored Post-it notes. • Participants are then asked to post their responses on a gallery wall. • Participants are further asked to review the insights, puzzles, and implications responses of their colleagues and to organize/cluster/group them in a way that makes sense. • After the participants have organized/clustered/grouped their insights, puzzles, and implications responses, they are asked to share their process for organizing/clustering/grouping their colleagues' responses and describe what they see in their colleagues' remarks. DOCUMENTATION STRATEGY:	Three different colored Post-it notes.

	• To document participant responses, Raquel and Sam Francis Foundation staff (a) scribe participant responses onto chart paper (b) take notes on a laptop, (c) photograph the discussion/participants' work, and (d) live tweet participant responses.	
12:55	**Wrap-Up and Closing Remarks** • Loree shares her impressions from the day's session, thanks participants for their time, and offers to be in touch soon to share the Foundation's impressions from the collective roundtable discussions.	N/A
1:00	**Clean Up, Pack Up, and Lingering Questions** • Members of the Sam Francis Foundation and PZ teams begin cleaning up the space and packing up materials while taking any last remaining questions.	N/A

APPENDIX B: ROUNDTABLE PARTICIPANTS (BOSTON)

Creativity in Learning, Today and Tomorrow
Roundtable Session Participant List
Boston, MA | October 29th, 2014

Andrea Sachdeva • International Director of Education, The ArtScience Prize
Anne Barrett • Architect and Founder, 30Edesign
Bridget Rodriguez • Director of Planning and Collaboration, Executive Office of Education for
    the State of Massachusetts
Brooke DiGiovanni Evans • Head of Gallery Learning, Museum of Fine Arts & Vice-President,
    Museum Education Roundtable
Carmen Torres • Clinical Instructor for Institute for Creative Educational Leadership, Boston
    University School of Education
Daniel Hewett • Executive Director of Research, Rhode Island School of Design
Diane Daily • Creative Youth Development Program Manager, Massachusetts Cultural Council
Erik Holmgren • Creative Youth Development Programs Manager, Massachusetts Cultural
    Council
Ellie Carlough • Associate Director, MIT Collaborative Initiatives
Gene Diaz • Associate Professor, Lesley University
Heidi Henderson • Associate Professor of Dance, Connecticut College
Jennifer Groff • Research Assistant, MIT Media Lab
Jesse Stansfield • Photographer and Educator, Salem High School
John Hirsch • Chair of Visual Arts Department & Director of Media Production and Distribution,
    Noble & Greenough School
Julie Bernson • Deputy Director for Learning and Engagement, deCordova Sculpture Park and
    Museum
Juliette Fritsch • Chief of Education and Interpretation, Peabody Essex Museum
Justin Cook • Senior Lead on Sustainable Development, Finnish Innovation Fund, Sitra
Kate Scott • Executive Director, Neighborhood House Charter School
Martha McKenna • University Professor and Director of the Creativity Commons, Lesley
    University
Michelle Grohe • Director of School and Teacher Programs, Isabella Stewart Gardner Museum
Michelle Sheppard • Educator
Mimi Rabson • Associate Professor of Strings, Berklee School of Music
Monica Garza • Director of Education, Institute of Contemporary Art Boston
Mònika Aldarondo • Creative Director, Boston Arts Academy
Myran Parker-Brass • Executive Director for the Arts, Boston Public Schools
Nancy Fincke • Director of the Lincoln Nursery School, deCordova Sculpture Park and Museum

Peggy Burchenal • Esther Stiles Eastman Curator of Education and Public Programs, Isabella Stewart Gardner Museum

Peter Lawrence • President and Co-Founder, Biomimicry New England

Shaun McNiff • University Professor, Lesley University

Shaunalynn Duffy • Partner, Sprout & Co.

Tracie Costantino • Associate Dean of Faculty, RISD

APPENDIX C: ROUNDTABLE PARTICIPANTS (NEW YORK)

Creativity in Learning, Today and Tomorrow
Roundtable Session Participant List
New York, NY | October 31st, 2014

Ada Ciniglio • Executive Director, ArtTable
Alessandra Carnielli • Executive Director, Pierre and Tana Matisse Foundation
Amy Sananman • Executive Director, Groundswell
Andrew Ackerman • Executive Director, Children's Museum of Manhattan
Brett Littman • Executive Director, The Drawing Center
Brooke Whitaker • Manager of Business Development & Operations, Lincoln Center Education
Charles H. Duncan • Executive Director, Richard Pousette-Dart Foundation
Cynthia Tobar • Archivist & Oral Historian, Bronx Community College, CUNY
Dee Dunn • President, Dorothy Dunn Consulting
Elisabeth Callihan • Manager of Adult Programs, Brooklyn Museum
Gabrielle Santa Donato • Co-Founder, Design Gym Global
Ira Goldberg • Executive Director, Art Students League of New York
Jason Maas • Founder and Director, Artist Volunteer Center
Jessica Gildea • Programs Director, CUE Art Foundation
Jil Weinstock • Director of Curatorial Programming, Children's Museum of New York
Jonathan Herman • Executive Director, National Guild for Community Arts Education
Katy Rogers • Programs Director, Dedalus Foundation
Kemi Ilesanmi • Executive Director, The Laundromat Project
Lisa Mazzola • Assistant Director of School and Teacher Programs, Museum of Modern Art
Mark Alter • Professor of Educational Psychology, NYU Steinhardt School of Education
Martha Erskine • Curriculum Director & Upper School English Teacher, Marymount School
Michael Fishman • Project Director, Stantec
Michele Saliola • Director of Programs, Judd Foundation
Michelle Hagewood • Studio Programs, Metropolitan Museum of Art
Nicole Caruth • Founder, With Food in Mind
Petrushka Bazin Larsen • Program Director, The Laundromat Project
Radiah Harper • Vice Director for Education and Program Development, Brooklyn Museum
Risë Wilson • Director of Philanthropy, Robert Rauschenberg Foundation
Robert W. Balder • Executive Director, College of Architecture, Art, and Planning, NYC
        Program, Cornell University
Robyne Walker-Murphy • Director, Dreamyard Art Center

Rosanna Flouty • Assistant Professor of Museum Studies, NYU and PhD Candidate in Urban
	Education, CUNY Grad Center
Sam Miller • President, Lower Manhattan Cultural Council
Sandra Jackson-Dumont • Frederick P. and Sandra P. Rose Chairman of Education, Metropolitan
	Museum of Art
Scott Barry Kaufman • Scientific Director, The Imagination Institute
Tom Cahill • President and CEO, Studio in A School
Travis Laughlin • Art Education Director, Joan Mitchell Foundation
Virginia McEnerney • Executive Director, Alliance for Young Artists & Writers/Scholastic Art
	& Writing Awards
William Crow • Managing Museum Educator, Metropolitan Museum of Art

APPENDIX D: ROUNDTABLE PARTICIPANTS (LOS ANGELES)

Creativity in Learning, Today and Tomorrow
Roundtable Session Participant List
Los Angeles, CA | November 7th, 2014

Barbara Drucker • Associate Dean of Community Engagement and Arts Education, UCLA
        School of Arts & Architecture
Bill Thompson • Executive Director, Young Storytellers
Catherine Arias • Director of Education & Visitor Experience, MOCA
Charlie Saylan • Executive Director, Ocean Conservation Society
Chloe Spitalny • Associate, Guggenheim, Asher Associates
Christine Terry • Associate Art Teacher, Buckley School
Colette Brooks • Chief Imagination Officer, Big Imagination Group
Dan Fauci • President, Fauci Productions
Dan McCleary • Executive Director, Art Division
Daniel Blumstein • Professor and Chair, Department of Ecology and Evolutionary Biology at
        UCLA
David Garrett • Attorney & Screenwriter, Harris & Ruble
Daya J. Berger • Senior Manager of Signature Programs, Disney
Denise Grande • Director of Arts Education, Los Angeles County Arts Commission
Douglas Weston • Director of Development, Green Dot Schools
Ellie Herman • Writer, Teacher & Coach
Eric Golo Stone • Curator of Discursive Programs, LA ART
Eric Greene • Psychologist
Fabian Cereijido • Art History Educator, Art Division
George Szekely • Professor & Director of Graduate Studies for Art Education, School of Art &
        Visual Studies, University of Kentucky
Guy Fish • Art Education Manager, The Huntington Library, Art Collections, and Botanical
        Gardens
Hugh Vanderlinden • Guidance Counselor, Baldwin Park High School
Ilona Szekely • Assistant Professor of Art Education, Department of Art & Design, Eastern
        Kentucky University
Jeanne Fauci • Executive Director, Center for Powerful Public Schools
Jeanne Hoel • Senior Education Manager, MOCA
Jill Hunter • Educator, Ocean View School District at Mesa View Middle School
Jocelyn Tetel • Vice President Advancement, Skirball Cultural Center

John Woldenberg • Writer, Producer, Digital Media & Education Activist, Wildlands Film & TV
Julianna Guill • Actress

Julius Diaz Panoriñgan • Director of Education, 826LA

Kelly Kagan Law • Vice President, Coalition for Engaged Education

Kim Zanti • Assistant Director, Centers for Research on Creativity

Kristi Greer Paglia • Executive Director of Education & Programs, P.S. ARTS

Laurel Schmidt • Author, Educator, Museum Consultant, Art&Inquiry.com

Leonardo Bravo • Director of School Programs, Music Center

Lizabeth Fogel • Director of Education, The Walt Disney Company

M'pambo Wina • Dance Educator, Marlborough School

Maria Galicia • Assistant Director, Art Division

Matty Wilder • Senior Program Officer, Herb Alpert Foundation

Meryl Friedman • Director of Education and Special Initiatives, Center for the Art of
    Performance at UCLA

Merryl Goldberg • Professor of Visual and Performing Arts, CSU San Marcos

Paul Cummins • Founder, President and CEO, Coalition for Engaged Education

Rachel Levin • Executive Director, Rosenthal Family Foundation

Sarah Jesse • Associate Vice President of Education, LACMA

Sheri Bernstein • Vice President and Director of Education, Skirball Cultural Center

Sibyl O'Malley • Director of Communications and Community Engagement, California Alliance
    for Arts Education

Steven Totland • Performing Arts Teacher, Buckley School

Suzanne Isken • Executive Director, Craft and Folk Art Museum

Theresa Sotto • Assistant Director, Academic Programs, Hammer Museum

Viktor Venson • Founder, No Right Brain Left Behind

Zipporah Yamamoto • Program Director, Turnaround Arts: California

APPENDIX E: ROUNDTABLE PARTICIPANTS (SAN FRANCISCO)

Creativity in Learning, Today and Tomorrow
Roundtable Session Participant List
San Francisco, CA | November 17th, 2014

Aaron Vanderwerff • Creativity Lab & Science Coordinator, Lighthouse Community Charter
School

Andrea Liguori • Managing Director, Richard Diebenkorn Foundation

Angi Chau • Director, Bourn Idea Lab, Faculty Advisor for Robotics, Castilleja School

Ann Ledo Lane • Director of Arts Programming & Resource Development, Creative Arts
Charter School

Ann Wettrich • Community Arts & Education Consultant, Adjunct Professor, California College
of the Arts

Ascha Drake • Visual Arts Teacher, The Bay School of San Francisco

Bettina Warburg • Public Engagement Lead, Institute for the Future

Brendan Boyle • Partner, Ideo, Consulting Associate Professor, Stanford

Brooke Toczylowski • Art Teacher, Oakland International High School

Carl Schmitz • Visual Resources & Art Research Librarian, Richard Diebenkorn Foundation

Carolyn Carr • Program Manager, District & Regional Initiatives, Alameda County Office of
Education

Dana Schloss • Senior Exhibit Developer, Telus Spark Calgary, Artist in Residence, Tinkering
Studio

David Clifford • Director of Innovation and Outreach, East Bay School for Boys, d.school
Fellow, Stanford University

Elizabeth Rood • Director of Education, Bay Area Discovery Museum, Director, Center for
Childhood Creativity

Emily Jennings • Manager of School and Teacher Programs, Fine Arts Museums of San
Francisco

Erica Fortescue • Assistant Director of Program Development, Bay Area Discovery Museum

Hilary Crowley • Fund Development and Communications, Alameda County Joint Fund
Development Office

Ilya Pratt • Design+Make+Engage Director, Park Day School, Agency *by* Design Maker Leader

James Kass • Founder and Executive Director, Youth Speaks

Jennifer Stuart • Artist & Art Educator, San Francisco Friends School

Jessica Hobbs • Co-Director & Lead Artist, Flux Foundation

Jessica Mele • Executive Director, Performing Arts Workshop

Jessica Parker • Assistant Professor, Department of Curriculum Studies, Sonoma School of
Education

Julia Marshall • Chair of Art Education Department, San Francisco State University

Karen Bennett • Associate Curator for Education, School & Family Programs, UC Berkeley Art
    Museum
Karen Wilkinson • Director, Tinkering Studio, Exploratorium
Ken Rosen • Managing Partner, Performance Works
Kirstin Bach • Program Manager, Center for Art & Inquiry, Exploratorium
Marina McDougall • Director, Center for Art & Inquiry, Exploratorium
Mike Petrich • Director of Tinkering and Making Programs, Exploratorium
Miko Lee • Executive Director, Youth in Arts
Nydia Gonzalez • Director, Arts Unite Us
Peter Lawrence • President & Co-Founder, Biomimicry New England
Rachel Barbour • University Programs Coordinator, Google
Rachel Fink • Director, Berkeley Rep School of Theatre
Stephen Thomas • Founding Director and Head of School, The Oxbow School
Suzanne Joyal • Director, Artists in Schools
Tatum Omari • Public School Teacher, Cragmont Elementary School
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