



# CREATIVITY, EMOTIONS, AND THE ARTS COURSES:

## An Art Center at the Center

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### INTRODUCTION

A study in 2001 found that museum-goers spend a mere 27 seconds looking at a work of art on average (Smith & Smith, 2001). This finding was then replicated, confirming that people give each masterpiece just a few seconds before moving on (Smith, Smith, & Tinio, 2017). When viewers do spend longer, it is often to take a picture of themselves with the piece. Of course, this is not true of every patron nor every piece of art. Studies such as these raise the question of what causes visitors to merely “taste” versus “savor” any given piece. Smith (2014) describes *the museum effect*: the way in which people use art as a springboard to engage in reflection and contemplation of things that are important in their lives. The model emphasizes that rather than examining how people interact with any single work of art, the visit should be considered as a whole. This leads to another question: what brings a person to an Art Center, and what about their experience brings them back? What kinds of personal benefits are gained from a visit to an Art Center, and how can Art Centers work to provide those benefits most effectively?

In a collaboration between the Yale Center for Emotional Intelligence and Fundación Botín, a set of courses were developed for the Botin

Center, an Art Center at the heart of Santander, Spain. The courses focused on two constructs with critical importance for the 21st century: creativity and emotional intelligence. Creativity is defined as the generation of products (i.e. ideas, behaviors, objects, and performances), that are both novel and useful (Plucker, Beghetto, & Dow, 2004). While creativity is often equated with solely the fine arts (Glaveanu, 2011; 2014; Hoffmann, Ivcevic, Zamora, Bazhydai, & Brackett, 2016), creativity is actually present in almost all areas of human endeavor (e.g. finding a new way for your small business to save money; engineering an electric car). The term emotional intelligence was first defined as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (Salovey & Mayer, 1990) and popularized by Daniel Goleman in his 1995 book *Emotional Intelligence*. While there are several different conceptualizations, the ability model maintains that emotional intelligence is made up of four skills that can be learned and improved through training and practice: recognizing emotions, using emotions, understanding emotions, and regulating emotions.

In studies reported by the World Economic Forum on the future of jobs, both emotional intel-

ligence and creativity make the top ten list of skills most sought by employers, and both are recognized as “growing skills”, meaning those still increasing in frequency of employer demand (World Economic Forum, 2016; 2018). It is logical that both creativity and emotion skills are increasingly viewed as important in the information age and world economy, where collaboration and innovation are key to company success and survival. Both creativity and emotional intelligence have been the goals of other intervention research, much of it based in schools (e.g. Brackett, Rivers, Reyes, & Salovey, 2012; Doron, 2017), but what role can an Art Center play in preparing people for the future?

### What had not been done previously was to combine creativity training and emotional intelligence training and use visual arts as the medium

The connections between creativity and art are many, beginning with the simple fact that art-making is a creative process. Beyond this, we know that art-making can teach skills such as creative thinking, problem-solving, and evaluating the quality of ideas which can then be applied to everyday life (Winner & Hetland, 2011). Similarly, emotions are also integral to engaging with art, from curiosity while viewing an abstract sculpture, to frustration during a creative block. As with creativity skills, emotion skills learned through art appreciation and art-making (reducing anxiety before a performance by taking deep breaths, or using anticipated pride as motivation through positive self-talk) can be later applied to other areas of life. For those who are new to, unsure of, or uncomfortable with discussing emotional content, art serves as an inviting medium while allowing people to maintain personal distance if they choose

While creativity and emotion skills have both been taught through art before (Burton, Horow-

itz, & Abeles, 2000; Funch, Kroyer, Roald, & Wildt, 2012; Hetland, Winner, Veenema, and Sheridan, 2013), what had not been done previously was to combine creativity training and emotional intelligence training and use visual arts as the medium. Because emotional intelligence skills can enhance creativity, and engaging in the creative process is a way to build one’s emotion skills, combining the two was not merely for efficiency, but because each can augment the other. Moreover, learning and practicing such skills while engaging with the visual arts would help people to gain strategies for savoring their experience and accessing the Art Center content in deeper ways.

### **COURSE FRAMEWORK**

Four courses teaching creativity and emotional intelligence through the visual arts were developed and run at the Botin Center in Santander, Spain, each aimed at a different audience: (1) children, (2) adolescents, (3) adults, and (4) families. Professional facilitators were trained by the course creators. Each course was piloted with members of the Santander community, the results of which were published in academic journals (see Ebert, Hoffmann, Ivcevic, Phan, & Brackett, 2015a; Ebert, Hoffmann, Ivcevic, Phan, & Brackett, 2015b; Maliakkal, Hoffmann, Ivcevic, & Brackett, 2016; Maliakkal, Hoffmann, Ivcevic, & Brackett, 2017). The child and adult workshops were also tested experimentally (Hoffmann, Ivcevic, & Maliakkal, 2018; Hoffmann, Ivcevic, & Maliakkal, 2020). With results showing that each course was effective at achieving its intended goals, the Botin Center continues to offer the courses to the community at-large.

The courses collectively target the four skills of emotional intelligence: (1) recognizing emotions accurately in oneself and others including decoding body language, facial expressions and tone of voice, (2) using emotions to facilitate creative thinking, including channeling feelings as inspiration and accessing emotional memories to brainstorm, (3) understanding the causes

of emotions, so as to distinguish between them and label them accurately, and (4) regulating emotions in healthy ways, by knowing and using helpful strategies. The courses also target three major skills in the creative process: (1) problem finding, including noticing, developing and clearly articulating opportunities for creativity (2) idea generation, when one comes up with many ideas, and (3) idea evaluation including comparing potential ideas for feasibility and viability and selecting the best one. Table 1 provides a breakdown of which skills are targeted in each course.

To teach and practice the target skills, a set of techniques were identified (Figure 1). Some strategies focus mainly on enhancing creativity (e.g. associative thinking, revisiting creative decisions, perspective shifting, exploration, and thinking unconventionally), while others focus mainly on enhancing emotional intelligence (e.g. reflecting through journaling, relaxation techniques, positive reappraisal, building an emotion vocabulary). Finally, other techniques address both creativity and emotional intelligence (e.g. sustained art observation, role-playing, accessing emotional memories, using symbol and metaphor).

Courses were designed with a spiraling pedagogy, such that repeated use of techniques and strategies built skills over time. Furthermore, all courses were designed to follow several best practices uncovered in the field of creativity training. Scott and colleagues (2004) reviewed 70 creativity training programs and made a set of recommendations, including that courses should be based in the cognitive activities that underlie creative efforts, that courses should be lengthy and challenging, should apply to 'real-world' cases, and should give participants the opportunity to apply what they learn. These criteria were used in the design of the courses, including decisions about length, number of sessions, and the use of wrap-up discussions to aid generalization of learning, both about creativity and emotions, to participants' lives.

The courses also sought to shift the participants' attitudes. Creative thinking and creative behavior are crucially influenced by one's attitudes towards creativity (Basadur, Graen, & Scandura, 1986). The courses sought to confound any potential negative attitudes (e.g., brainstorming is a waste of time; creativity is reserved for geniuses) that might have been present in the participants. The same is true for emotional intelligence, where the course sought to enhance participants "emotions matter" mindset (i.e., that emotions are information and that all emotions, both pleasant and unpleasant, can be useful), and make clear that emotional intelligence can be developed at any age (Brackett et al., 2012; Cejudo & Latorre, 2015; Greenberg et al., 2003; Rivers, Brackett, Reyes, Elbertson, & Salovey, 2013).

## COURSE PROCEDURES

### *Child Course*

The child course consisted of six 75-minute sessions based around exploration and art-making. The first five sessions each focused on an emotion theme: happiness, sadness, anger, fear, and calm. Sessions began with an introductory activity (e.g. say how you are feeling using a color or metaphor), followed by an art observation exercise related to the emotion of the day (e.g. observing a sculpture that depicts anger). Children then engaged in art-making, starting with time for exploration (e.g. tinkering with the materials), then time for art creation (e.g. making spiky sculptures to represent anger), and ending with time for sharing their work. Guided by the research on the importance of play for social and emotional development (Singer, Golinkoff, Hirsh-Pasek, 2006), and play's relationship with creativity (Hoffmann & Russ, 2016; Russ, 2014), opportunities for play and playfulness were built into the introductory activities (e.g. tossing a beach ball during introductions), art observation scavenger hunts, art-making, and guessing games while sharing out their work. The last session was a showcase of the student's artwork for their families. Children

were encouraged to use emotion-laden memories to generate ideas for art projects, and to discover through experience a central tenet of creative thinking - that first ideas are generally not the most creative. Through wrap-up discussions each session, children learned how the same emotion and creativity skills could be applied to their everyday lives (i.e. when thinking of a birthday present for a friend).

#### *Adolescent course*

The adolescent course consisted of six, 75-minute sessions, all beginning with a water coloring and journaling activity, followed by an art observation and/or art making activity, and ending with a photographic portrait making activity. The watercolor journal emphasized emotion perception and understanding; adolescents would paint a solid page on the left-hand side of their journals, providing opportunity and space for reflection and decompression from their day. They would then go into the exhibition space to find a piece of art that symbolized their current emotion state, reflect further, and write about their emotions on the right hand side of the page. Each session, the journaling activity added a new technique to enhance emotion understanding skills. For example, session three asks the teens to use metaphorical language to express their feelings (e.g. feeling sunny, stuck in the mud, etc).

Each session the adolescents also produced portraits, working in pairs to take pictures that best represented themselves as an individual, with weekly variations. Photographic portraits were selected as the medium to reflect both that identify exploration and formation is the developmental task of adolescence (Erikson, 1950; 1968), and the ubiquity of smart phones and selfie culture beginning in 2013 (Soerjoatmodjo, 2016). Session one and two involved unconventional perspectives (reflected in glass, through a fence, extreme close-up), while week three focused on metaphors for the self (a tree, a shadow, a crack in the pavement). Week four translated social emotions (e.g., accepted,

lonely) into photographs, and the fifth session aimed to capture multiple characteristics of the personality. At the end of each session, participants selected a single photograph to add to their portfolio. The final session reviewed all the techniques used for idea generation, and reflected on the creative process as a whole.

#### *Adult Course*

The adult course was made up of eight 60-minute sessions. Sessions were designed to stimulate curiosity and reflection through art observation, thought-provoking questions, and open discussion. Session one introduced participants to sustained observation of artwork, and asked them to begin noticing and understanding their own emotional reactions while spending up to 15 minutes viewing a single piece. Sessions two

#### When one is experiencing a problem or challenge, going to the Art Center to reflect is one viable course of action

and three then gave adults more strategies to use during art viewing to sustain their attention to a single piece, by incorporating perspective shifting techniques (i.e. adding new knowledge about an artist, physically viewing a sculpture from multiple angles, visualizing oneself inside the art).

From the fourth session onward, participants were asked to begin engaging with their unpleasant emotions (e.g. confusion, outrage, boredom) and using the information provided by their emotions to identify problems they were experiencing in everyday life (outside of the Art Center). Sessions five and six introduced associative thinking as an idea generation technique for bridging the gap between problem finding and problem solving. This involved finding a piece of art that represented a problem (same as session four), then finding a piece that represented the optimal outcome, then filling in the



gap. For example, a person might pick a piece of art depicting violence, and find it uncomfortable because they miss their active duty spouse. Then, find a piece eliciting warm, loving feelings. They might then identify the solution as resolving to write letters to their spouse more often. In the final two sessions participants were asked to think of the problem first and then find the art rather than the other way around. This emphasized the point that when one is experiencing a problem or challenge, going to the Art Center to reflect is one viable course of action.

### *Family course*

The family course had the goal of building both parents' and children's skills through six 90-minute sessions. Sessions began with a family journaling activity, followed by art activities, and ending with an on-going collage project. Journaling was used as an opening, asking families to think about their everyday creative behavior since the previous session (e.g. decorated cookies, invented a new game, solved an interpersonal problem). This created space for family members to acknowledge and praise each others' creative efforts, and to shift their mindset away from believing that creativity is reserved for professionals or only exists in the arts.

Over the six sessions, families built a collage together representing their family's identity and story, responding to different themes, such as combining two elements to represent the uniqueness of their family (session three), or adding a representation of the silliest thing their family had done (session five). In session six, the collages were displayed and families engaged in a gallery walk. Activities were designed to help families break out of their habitual ways of thinking, to notice more opportunities for creativity, and to free themselves from unspoken rules or constricting assumptions. Families could experience the joys and challenges of working together, and in doing so, practice noticing their emotions, understanding the causes, and channeling those feelings into art-making.

## PILOT TESTING

All four courses were subjected to pilot testing with participants from the Santander community, including twenty children (ages 6-12), thirty-seven adolescents (ages 13-18), twenty adults (ages 18-68), and twelve families (21 children, 22 adults). All courses were run by trained facilitators. These trials helped assess participant satisfaction with their experience and understand participants' perspectives on different aspects of the courses.

Across the courses, participants reported greater knowledge and skills related to both emotional intelligence and creativity. Children reported greater understanding of how emotions can be used to facilitate their thinking, and stated that they were less likely to settle on the first idea that came to mind. Likewise, adolescents reported a greater understanding that it is sometimes advisable to change directions even in the middle of a creative task. The vast majority of children (95%) also indicated learning new emotion vocabulary words, strategies to express themselves, and ways to know what others are feeling. Adolescents also reported improvements in their ability to use metaphors to explain their feelings, and awareness of their feelings when observing art. Adults reported more ability to maintain sustained attention when observing art, use multiple perspectives to understand art, and use imagination and visualization strategies. Adults, adolescents, and families all stated that they were leaving more confident in their abilities to solve problems creatively. Children and parents in the families course also agreed strongly with statements such as "I learned something new about my family and myself", and "This workshop has helped our family to be more creative".

Adolescents and adults reported shifts in their attitudes and mindsets. After the course, both endorsed a stronger belief that creativity and emotional intelligence can be improved with practice, and a greater acknowledgement of the

value of information provided by negative emotions than they had before the course. After the course, adults were more likely to believe that engaging with art was useful for self-understanding. Participants across all four courses reported high satisfaction with their learning experience. Children stated the most interesting components of the course were seeing the art, making their own art, and talking about emotions. Adults stated that learning about emotional intelligence skills was the most useful part of the course, and noticing their emotions in response to art was the most interesting. Finally, participants of all ages reported intentions to return to the Botin Center to view more art, interest in engaging in additional courses in the future, and a likelihood of recommending the courses to others.

## EXPERIMENTAL STUDIES

After piloting, the child and adult courses were also subjected to experimental studies, including random assignment of participants to either be enrolled in the course or a waitlist comparison condition. These experimental studies used robust measures of creativity and emotion skills, including ability tests. Participants completed the measures not only before and after the course, but also 2-months later. This method allowed for stronger conclusions to be drawn about the effects of the courses.

Sixty-four children in grades 4 through 6 from primary schools in Santander, Spain participated in the study of the child course. Those children enrolled in the course showed significantly improved emotion skills at the two month follow-up, as well as a greater frequency of engaging in everyday creative behaviors compared to the control group. Moreover, children who completed the course showed significant improvements from before the course to afterwards in the number of answers given and the originality of those answers on two creativity tasks; however, those gains were not maintained at two-month follow-up. This lack of sustained gains

suggests a need to further examine dosage (number of session), duration (session length), and the need for consistent messaging across home, school, and the Art Center (see Hoffmann, Ivcevic & Maliakkal, 2020 for further discussion).

## Art-based activities proved viable as a vehicle teaching emotional intelligence and creativity skills

Similarly, sixty-six adults were recruited from the Santander, Spain community to participate in study of the adult course. The course did not have an effect on the emotion understanding skills of those who participated. As noted in the publication of this study (Hoffmann, Ivcevic, & Malikkal, 2018), this result may have been due to a discrepancy between skills practiced in the course (i.e. understanding their own emotions) and the skills measured by the assessment (i.e. understanding the emotions of others). Participants in the course did however report engaging in significantly more creative behaviors after being in the course, and this effect was maintained at the two-month follow-up. The most notable improvement was that adults who took the course provided significantly more original responses on a problem finding task (e.g. You find yourself in a foreign city and need to find dinner. Restate the problem as many ways as possible starting with ‘How can I...’). This effect on problem finding originality was the strongest at the two-month follow-up. This finding fits nicely with the fact that the course had a heavy focus on problem finding, and articulating those problems through the use of visual art.

## CONCLUSIONS

The successful development and application of four courses on emotional intelligence and creativity, through the visual arts at the Botin Center, lead to several important conclusions. For one, art-based activities proved viable as a vehicle for teaching emotional intelligence and

creativity skills. Demonstrating that creativity skills can be improved is important, since people who believe their creativity can be improved tend to have higher confidence in their ability to think creatively, and solve problems more creatively (Karwowski, 2014; O'Connor, Nemeth, & Akutsu, 2013). Moreover, not only are Art Centers perfectly poised to provide such educational opportunities to the community, but in doing so, may create a more engaged citizenship, and one with higher potential for innovation and empathy (Ivcevic, Maliakkal, & The Botin Foundation, 2016; Kou, Konrath, & Goldstein, 2019). By showing people a new way to engage with the visual arts, through reflection and self-exploration, visitors begin to realize that Art Centers are a place to think, to connect, to gain perspective, and to problem-solve.



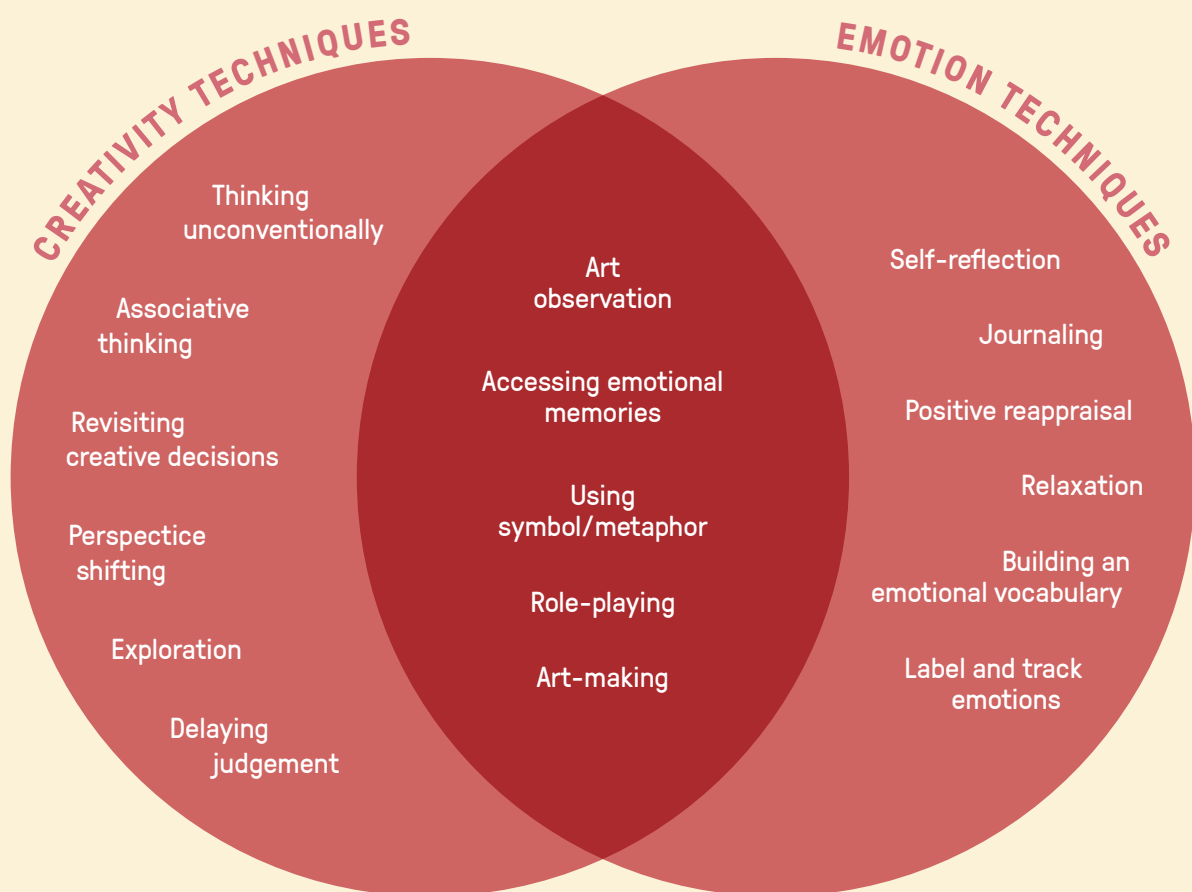
**TABLE 1.**

Targeted Skills for each Course

	Target Skill	Child Course	Adolescent Course	Adult Course	Family Course
<b>EMOTIONAL INTELLIGENCE</b>	Perceiving emotions	✓			
	Using emotions	✓	✓	✓	
	Understanding emotions	✓	✓	✓	✓
	Regulating emotions				✓
<b>CREATIVITY</b>	Problem finding	✓		✓	
	Idea generation	✓	✓	✓	✓
	Idea evaluation		✓		✓

**FIGURE 1**

Techniques for practicing creativity and emotional intelligence skills



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