Leadership Skills and Teaching Creativity Through Art Education

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s an art educator in my 11th year of teaching public school art in New York, I have observed leadership skills and creativity themes in my teacher training program, visual arts standards, everyday classroom curricula, and annual evaluation criteria. This article describes the results of my doctoral dissertation research in educational leadership. My quantitative study aimed to explore the relationships between art education, leadership skills, and creativity through research and existing literature. This research is vital because, as art educators, we use leadership skills to teach creativity in our classrooms, and we need to exercise our leadership skills beyond our classrooms to advocate for our profession. We can promote art education through showcasing student work, conversing with our administration, and engaging with art education organizations that lobby on our behalf.

Literature Review

The three-skills approach to leadership (Katz, 1955) includes technical, human, and conceptual skills. Technical skills are "competencies in a specialized area, analytical ability, and the ability to use appropriate tools and techniques" (p. 102). Technical

skills are used at the management level and less often at higher levels of leadership. Human skills are "knowledge about and ability to work with people" (p. 102), and conceptual skills are "the ability to work with ideas and concepts" (p. 103). Career experience improves leaders' skills, and the Skills Inventory was developed to measure the prevalence of these three skills (Northouse, 2018).

Creativity is a concept used in this study, defined as "the process of having original ideas that have value" (Robinson & Aronica, 2016, p. 118). As art teachers, we are familiar with creativity, which for students is defined as "an imaginative illustration of their responses to external conditions" (Freedman, 2007, p. 211). Research shows that students who participate in "self-exploratory activities develop stronger creative abilities" (Oreck, 2001, as cited in Rubenstein et al., 2013, p. 324). Regarding leadership, creativity is important for our students' future; according to International Business Machines (2010), more than 1,500 chief executive officers from varying industries across 60 countries indicated that creativity is the most valuable leadership asset for the 21st century. Creativity is a skill anyone can acquire through experience and practice (Guilford, 1952, as cited in Parnes, 1961), and creativity can be taught (Davidson & Sternberg, 1984; Sternberg & Williams, 1996).

Rubenstein et al. (2013) developed the Teaching for Creativity Scales, which measure educators' abilities to teach creativity. The categories are based on several theories, including the expectancy value theory (Wigfield & Eccles, 2000) and the achievement orientation model (Siegle & McCoach, 2005). These theories state that value is required for motivation, impacts performance, and is necessary for action (Rubenstein et al., 2012; Schiefele et al., 1992; Siegle et al., 2010). Further, individuals' beliefs about creativity can impact their performance (Dweck, 1986; Makel, 2009), and believing that someone is either born creative or not is the biggest obstacle to creativity (Plucker & Beghetto, 2003; Plucker et al., 2004).

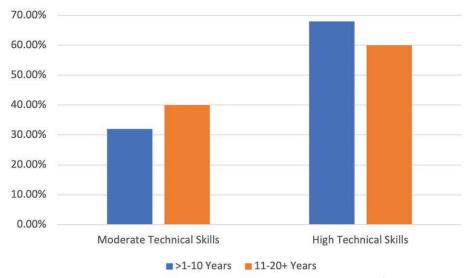


Figure 1. Technical leadership skills and years of art-teaching experience. Note. $X^2(8, N = 741) =$ 19.192, p = .014.

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Based on this research, Rubenstein et al. (2013) developed four categories necessary for teaching creativity: teacher self-efficacy, environmental encouragement, societal value, and student potential. Self-efficacy refers to teachers' beliefs about their own abilities (Bandura, 1997, as cited in Rubenstein et al., 2013), and teachers need to think they can encourage creativity in their students to do so. *Environmental encouragement* is "how teachers perceive their current environment and specifically refers to the

local school atmosphere in which the teacher operates" (Rubenstein et al., 2013, p. 326). Societal value measures how much teachers value creativity in society (Rubenstein et al., 2013), and teachers need to value creativity to foster it in their students. Student potential measures teachers' thoughts about the "potential for students to become more creative" (Rubenstein et

al., 2013, p. 326), which can impact their motivation. The theories described in this existing literature informed the methodology for my doctoral research.

Methodology

I created the Certified New York Visual Art Educators' Leadership Skills and Perceptions of Creativity survey by combining the Skills Inventory (Northouse, 2018) and the Teaching for Creativity Scales (Rubenstein et al., 2013). I selected these existing surveys because they align with New York State art educators' training, certification, classroom activities, and annual evaluations. Further, there was a gap in existing research linking art education and leadership. I emailed my anonymous survey to the superintendents of all 734 school districts in New York State and all 1,560 New York City Department of Education arts education liaisons. Additionally, a link to the survey was advertised on the art educator social media platforms. In total, 741 art teachers completed the survey. I used chi-square analysis, which compares observed and expected frequencies (Spatz, 2019), to see if there

were significant relationships among the variables.

Findings

What is the relationship between leadership skills and years of artteaching experience?

My first research question used the Skills Inventory (Northouse, 2018), and the findings show that technical leadership skills relate to years of art-teaching experience (Figure 1). I observed that the percentage of participants with high technical skills decreases after 10 years of art-teaching experience. Higher technical skills among less experienced art teachers indicate they may focus on technical skills

in their early careers. There was no relationship between years of experience and human and conceptual skills, perhaps because we use these skills consistently despite how long we have been art

There are similarities between my study and existing literature. Weisberg (1999) stated that it takes 10 years to become a master in one's field, which is when we see a shift in our results. Further, the more experience teachers have, the more likely they are to

> exercise leadership roles, which may explain the decreased technical skills. Managers and teachers provide similar roles, including setting goals and leading followers to accomplish those goals (Danielson, 2007), and technical skills are used by managers. Regarding art education, Robinson and Aronica (2016) stated that the act of making something develops "the individual's

creative voice and... technical skills through which to express it" (p. 103). According to Eisner (2002), technical skills can be considered task-oriented because they require hands-on activities that yield a specific process or product, and teaching art requires knowledge of technical skills for art materials and processes. Additionally, as art educators, we teach creativity.

What is the relationship between teaching creativity and years of art-teaching experience?

My second research question used the Teaching for Creativity Scales (Rubenstein et al., 2013). My research revealed a relationship between all teaching creativity categories and years of experience. Regarding self-efficacy, societal value, and student potential (Figure 2), I noticed that art teachers with fewer than 15 years of experience had a higher percentage of low scores than those with more than 15 years of experience. This finding may indicate that confidence in motivation and actions grows with experience.

Regarding the category of environmental encouragement (Figure 3), I observed a 20% decrease in high environmental

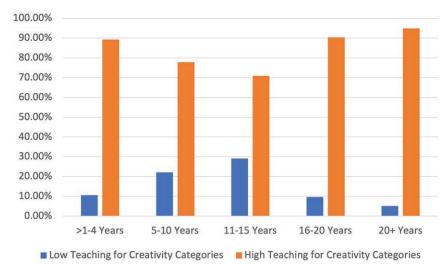


Figure 2. Self-efficacy, societal value, student potential, and years of art-teaching experience. Note. Self-efficacy $X^2(4, N = 741) = 16.260$, p = .003, societal value $X^2(4, N = 741) = 18.579$, p < .001, and student potential $X^2(4, N = 741) = 29.762$, p < .001.

encouragement scores after 10 years of teaching, which steadily decreased with additional experience. When talking to my art teacher friends about our jobs, there is often a natural comparison of environmental encouragement among our districts. Despite this being a quantitative study, I received several unsolicited emails from participants I had never met describing the frustrating issues with which they have to deal because of low environmental encouragement from their administration.

Environmental encouragement survey results differ from the three other creativity categories (compare Figures 2 and 3), similar to what Rubenstein et al. (2013) found in their original study. They connected this finding to the creativity gap (Makel, 2009), whereby teachers value creativity but cannot encourage it among their students. Further, they theorize that the difference between environmental encouragement and the other categories may relate to the "detrimental nature of the standards movement

80.00%
70.00%
60.00%
50.00%
40.00%
20.00%
10.00%
>1-4 Years 5-10 Years 11-15 Years 16-20 Years 20+ Years
Low Environmental Encouragement
High Environmental Encouragement

Figure 3. Environmental encouragement and years of art-teaching experience. *Note*. $X^2(4, N = 741) = 29.762$, p < .001.

on creativity development" (Rubenstein et al., 2013, p. 332), which is echoed by existing research (Beghetto & Plucker, 2006; Dobbins, 2009; Grainger et al., 2004; Hartley, 2003). Research from 3,412 participants indicated that more than 70% of participants felt that the No Child Left Behind Act (NCLB), which mandated standardized tests, hurt their attitude about being art educators and had not had a positive effect on their art education programs (Sabol, 2010). NCLB is a national educational policy "focused on limiting the learning of creative thinking and production" (Freedman, 2007, p. 210). Additionally, Rubenstein et al. (2013) theorized that local leadership decisions within individual school districts might discourage teachers from emphasizing creativity despite teachers'

perceived ability to teach it. Regardless, in New York, teachers are annually evaluated on the classroom environment they create, which is described as "a safe place for risk taking" (Danielson, 2007, p. 28), and taking risks is part of creativity.

Environmental encouragement relates to creative leadership. According to Stoll and Temperley (2009), teachers engage in creative leadership to improve students' lives and "provide the conditions, environment and opportunities for others to be creative" (p. 2). Creativity is an essential 21st-century leadership skill that relates to environmental encouragement: "In an arts context, leaders who understand how to provide an environment that supports and encourages... creativity are essential" (Caust, 2018, p. 154). Similarly, the creative environment impacts individuals: "The environment or culture surrounding creativity... has a significant effect on whether creative outcomes occur" (Ekvall, 2002, as cited in Caust, 2018, p. 156). Further, students

need to learn creativity from teachers, and teachers need to be able to teach creatively through the influence of creative leadership (Stoll & Temperley, 2009).

School-district leaders can influence the environment where we teach. Senge (1992) stated that leaders establish the environment: "Innovation and creativity [require] an environment where mistakes and experiments are encouraged by the leadership" (as cited in Caust, 2018, p. 16). Leaders can establish this by encouraging dialogue rather than one-way instructions from the top down. However, creativity can be stifled by the school environment if standardized responses are expected (Ferrari et al., 2009). Many researchers

I observed that participants who scored high on self-efficacy, societal value, and student potential had approximately 50% higher technical, human, and conceptual leadership skills than those who scored low.

agree that authoritarian leadership models do not encourage a creative environment (Amabile, 1998; Caust, 2018; DeSalvo, 1999; Goleman, 1998; Senge, 1995; Tierney et al., 1999). Regarding art education, there is a symbiotic relationship between a successful art program and a positive school culture and climate when leadership values art teachers as "leaders in their discipline, schools and communities" (National Art Education Association, 2016/2019, para. 16). Supplementary findings in my research show additional connections between leadership and creativity.

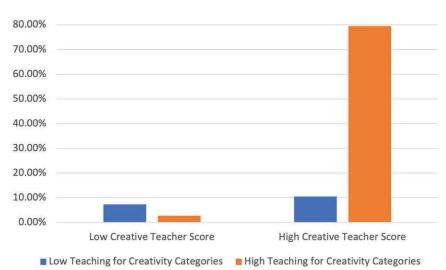


Figure 4. Self-efficacy, societal value, student potential, and creative teacher scores. *Note*. Self-efficacy $X^2(1, N = 741) = 193.692$, p < .001, societal value $X^2(1, N = 741) = 135.044$, p < .001, and student potential $X^2(1, N = 741) = 170.846$, p < .001.

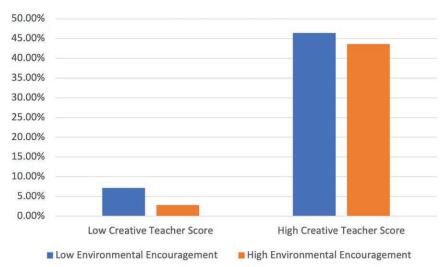


Figure 5. Environmental encouragement and creative teacher scores. *Note.* $X^2(1, N = 741) = 10.763, p = .001$.

Supplementary Findings

Dependent Variables

I compared the results of leadership skills with the ability to teach creativity. I observed that participants who scored high on self-efficacy, societal value, and student potential had approximately 50% higher technical, human, and conceptual leadership skills than those who scored low. This finding may indicate that leadership skills and the ability to teach creativity impact one another.

Creativity

The Teaching for Creativity Scales (Rubenstein et al., 2013) also measure how art teachers rate their creativity as individuals and teachers. My research showed a relationship between creative scores and years of art-teaching experience. I noticed that art teachers' perceptions of themselves as creative individuals increase slightly with more years of experience. This concept aligns with literature about how experience impacts creativity: "Deliberate practice and knowledge in a given field positively contribute to creativity" (Weisberg, 1999, as cited in Ferrari et al., 2009, p. 11). Additionally, I discovered that art teachers who thought they were highly creative had higher leadership skills, and those who did not had lower leadership skills.

I found a relationship between teaching creativity categories and creative teacher scores. I observed that art teachers who scored creatively high had an approximately 75% increase in high self-efficacy, societal value, and student potential scores compared to those who scored creatively low (Figure 4). However, low environmental encouragement scores outweigh high environmental encouragement scores regardless of creativity scores (Figure 5). Therefore, environmental encouragement, yet again, differs significantly from the other creativity categories (compare Figures 4 and 5).

These findings align with the original Teaching for Creativity Scales findings discovered by Rubenstein et al. (2013). The categories of self-efficacy, societal value, and student potential were significantly correlated, meaning that teachers who value creativity thought they could encourage it in their students and that their students could become more creative. This finding was supported by literature in the original study that teachers need to be creative themselves before they can teach creativity to others (Boldin et al., 2010, as cited in Rubenstein et al., 2013) and that teachers who considered themselves highly creative viewed their students as more creative (Eason et al., 2009, as cited in Rubenstein et al., 2013). This existing research and the results of my study can contribute to our field of art education.

Discussion

The survey results inspire future implications for professional development and leadership opportunities. Locally, the survey can be used by administrators to measure creativity and educational encouragement among art teachers and inspire professional development that focuses on fostering and teaching creativity in our districts. The National Art Education Association (2015/2023) stated that collaborative research is a method to enact positive change in art education. New York can use this research to reevaluate annual teacher evaluations with an understanding of how administrators establish environmental encouragement. Nationally, this survey can include other states to inspire policy that encourages creativity based on collaborative results.

Although my study focused on art educators' beliefs in their classrooms, art education leadership often happens outside of teaching. According to the National Art Education Association (2011/2019), preservice preparation should engage future art educators in "inquiry, advocacy, and leadership" (para. 1) to prepare them to foster change in their schools and communities. Further, Ferrari et al. (2009) stated that preservice and ongoing professional development is "fundamental in promoting [a democratic and creative culture]" (p. 43). Once established in their field, teachers need continual professional development "to refresh their own creative practices and to keep pace with related development policy practice and research" (Robinson & Aronica, 2016, p. 127). Art educators need to become leaders by sharing their expertise with other teachers through leading professional development and making interdisciplinary connections (Hunter-Doniger, 2018). Research shows that teachers of other subjects can benefit from the arts, and "artistic and creative teaching strategies

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should be embedded in all subjects" (Burrows, 2007, p. 134). However, principals and school administrators must believe in and act to support arts integration in schools for true collaboration to be successful (Smilan & Miraglia, 2009). Collaboration can include advocacy.

Robinson (2011) suggested that change needs to occur in both internal and external environments at the school level and through political advocacy (p. 266). Americans for the Arts (n.d.) recommended creative conversations with community leaders "to discuss issues facing the local arts, culture, education, and related fields to generate relationships and increased energy around the grassroots movement" (Americans for the Arts, n.d., "Findings" section, para. 6). Freedman (2007) recommended that leadership extends beyond advocacy to include collaboration and action. Teaching creativity needs "a redefinition of policy and leadership at all professional levels. We can no longer be mere *advocates* in our responses to policy; we must become *activists* who work together to trouble policy and lead creativity" (p. 216). My research was a form of creative leadership that produced a collaborative outcome.

Conducting research for my dissertation taught me that environmental encouragement is imperative to teaching creativity, and our leadership skills are needed to enact positive change that will benefit art education. Locally, this survey can encourage collaboration among educators and administration by providing cohesive feedback about our environment. On the state level, the survey can be used to give art educators a voice regarding the criteria for annual evaluations. Nationally, these surveys can inform art education organizations about topics that are important to us when writing legislation that directly impacts us, such as the art standards we teach, the funding we receive, and measurable outcomes. This study is critical because it gives us the opportunity to be stakeholders in our field in a way that expands beyond our classrooms. Instead of being the only art teacher in the room or the entire school, this survey demonstrates that we are a community of thousands of art educators who can make a difference because we have strength in numbers.

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