

BACKGROUND BRIEF



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Arts Integration K-12 Educator Pre-Service Training and Professional Development

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RESEARCHER

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Foreword

Purpose of this Report

Compelling evidence shows that student learning in the arts leads to a wide array of academic and social benefits.¹ For example, exposure to art education promotes self-directed learning, improves school attendance and sharpens critical and creative skills. Additionally, research has shown that what students learn in the arts, helps them to master other subjects, such as reading, math or social studies and can create a direct pathway to arts-focused careers. For New Mexico, our state's rich arts and culture, if more fully utilized could also help to spur and contribute to economic growth and development.

Participants in the November 14, 2017 focus group convened by New Mexico Arts created a vision statement for arts education in New Mexico which specifically calls for arts integration pedagogy: "By 2026, we will be able to go into any classroom and see arts deeply integrated into the instruction, on any topic."² Teacher training in arts integration at both the pre-service and in-service levels will be vital to realizing this vision. The relevance of the vision to the economic well-being and cultural diversity of New Mexico is corroborated by a 2014 University of New Mexico Bureau of Business & Economic Research (BBER) report which recommends teacher training and innovative curriculum as a way to better prepare educators to teach in New Mexico's culturally diverse classrooms and will further the development of a stronger already promising arts and culture industry in New Mexico.³

Pre-service educator training refers to coursework and degrees required to become a Level I licensed teacher in New Mexico. In-service training refers to professional development required for progress through levels II and III of licensure in New Mexico as well as optional professional development opportunities. Though teacher licensure is largely organized around content area, teacher training includes pedagogy and has the potential to contribute to an arts integration culture in New Mexico schools. This report surveys current arts integration training in New Mexico and best practices nationally for such training.

This project is funded by New Mexico Arts, a division of the New Mexico Department of Cultural Affairs.

About New Mexico First

A statewide public policy organization, **New Mexico First** engages people in critical issues facing their state and communities. The nonpartisan, nonprofit group produces comprehensive policy reports – primarily on natural resources, education, health, good government and the economy. These analyses inform policy discussions, legislative options and often student learning as well. These documents also provide the foundation for New Mexico First's unique town halls and forums that convene citizens to develop proposals to improve the state. The reports are available at nmfirst.org. Our state's two U.S. Senators – Tom Udall and Martin Heinrich – serve as New Mexico First's honorary co-chairs. The organization was co-founded in 1986 by then U.S. Senators Jeff Bingaman and Pete Domenici.

About the New Mexico Department of Cultural Affairs and New Mexico Arts

Created in 1978, the **New Mexico Department of Cultural Affairs** represents New Mexico's dedication to preserving and celebrating the cultural integrity and diversity of our state. The department oversees a broad range of New Mexico's arts and cultural heritage agencies that support the unique cultural, historic and artistic heritage of the state as well as operations of the department.

Among its primary functions is the management of the largest state sponsored museum system in the country. New Mexico's historic sites and state-run museums are located across the state and include:

- New Mexico Historic Sites, Statewide
- New Mexico History Museum/Palace of the Governors, Santa Fe

¹ *Arts for Life*, artsforlife.org (2018)

² "Focus group on fine arts education in public schools, grades 6-12." (2017). Albuquerque: New Mexico First. p. 10.

³ Mitchell, J. and Joyce, G. (2014). *Building on the past, facing the future: renewing the creative economy of New Mexico*. Albuquerque: UNM Bureau of Business & Economic Research. pp. 184, ix, 183.

- New Mexico Museum of Art, Santa Fe
- Museum of International Folk Art, Santa Fe
- Museum of Indian Arts and Culture, Santa Fe
- New Mexico Museum of Space History, Alamogordo
- New Mexico Museum of Natural History and Science, Albuquerque
- New Mexico Farm & Ranch Heritage Museum, Las Cruces
- National Hispanic Cultural Center, Albuquerque

The department's museums welcome nearly a million visitors each year. More than three million New Mexico residents and their out-of-state guests are served yearly by the department's programs and services.

New Mexico Arts, a division of the New Mexico Department of Cultural Affairs administers the Arts in Public Places program and provides financial support for arts services and programs to non-profit organizations statewide. Arts Education funding is provided in the Arts Learning in Schools and Arts Learning in Community programs, and the New Mexico Poetry Out Loud Recitation Contest.

Photo Credits

Special thanks to Anne Taylor, the K-12 arts integration School Zone Institute Architecture and Children Program and photographer Jak Media, LLC for permission to use these photos for this report.

Authors and Reviewers

This New Mexico First report was prepared by Doug Dunston and Susan Dunston and reviewed by Pamela K. Blackwell.

WHERE DO WE GET OUR INFORMATION?

Throughout this document, we provide as many data sources as possible. We draw from published reports, newspaper and journal articles, first-hand interviews and online resources. All direct quotes are from interviews conducted for this report unless otherwise noted. We know that policymakers, researchers and students use our reports, so we provide the details you need to learn more.



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Pre-service Arts Integration Training

Training Leading to Teacher Licensure

New Mexico uses a three-tiered teacher licensure system. Level I is a provisional license issued to new teachers for three to five years. In order to continue as licensed teachers in the state, teachers must progress to Level II (a renewable professional license valid for a nine-year period) or Level III (a renewable master teacher license valid for a nine-year period).

The UNM College of Education website lists multiple pathways to licensure in New Mexico:

- Traditional – An undergraduate degree program in education. The general degree requirements for this program include six credit hours (about two semester-long courses) in fine arts.
- Post-baccalaureate – Candidates who have completed a baccalaureate (BA or BS), master’s (MA or MS), and/or doctorate (PhD) satisfying any of the following can be hired on a non-renewable intern license in their content area:
 - 30 hours in first content area(s) and 24 hours in subsequent content areas(s), or
 - 12 graduate level hours in content area(s), or
 - a PhD in content area(s).

To retain their licensure, these teachers must fulfill the requirements for earning a Level I Teaching license within 3 years.

- Other – Additional pathways address certain specific candidate backgrounds and school needs. Becoming a licensed vocational technical education teacher calls for a specified combination of education and work experience. Certificates to teach native language and culture must meet requirements established by respective New Mexico tribes or pueblo authorities.

It is important to note that these pathways and teacher licensure are largely organized around teachers’ content areas, not pedagogy. As a pedagogy, arts integration may not be visible in listings of content-focused requirements. For example, the Performance Evaluation Handbooks for each level of licensure in New Mexico do not specifically address arts integration. Wherever pedagogy is presented in pre-service training, however, arts integration can potentially find its place within what is effectively a marketplace of established and emerging pedagogical approaches.

University pre-service teacher education programs therefore have a significant role to play in preparing both arts and non-arts teachers to employ arts integration teaching strategies.⁴ As recently reported in the *Santa Fe New Mexican*, the new statewide arts education standards which take effect in July 2018 allow educators to weave elements from dance, music, theater, visual arts, and media “into core classes, such as math, reading and social studies,” further bolstering the argument for pre-service training in arts integration.⁵ It is possible that the licensure system can be applied to encourage arts integration prototyping and implementation (See Regulations and Credentialing, below).

However, neither licensure nor pre-service training addresses the full reality of New Mexico’s teacher workforce. According to the 2017 New Mexico Educator Vacancy Report prepared by NMSU’s College of Education, “approximately 71,000 students in New Mexico are currently being taught by a teacher with an alternative license or a long-term substitute teacher” who may not have received much, or any, pre-service teaching training.⁶ A complete approach for preparing educators to incorporate arts integration methods would have to specifically target those who have content area expertise but who have not yet received teaching training.

As of this writing, the term “arts integration” is not in widespread use in pre-service educator training in New Mexico. “Arts integration” does not appear in the current, published course catalogs of University of New Mexico (UNM),

⁴ Huser, J. and Hockman, R. “Championing the way to effective arts integration.” In Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. p. 120.

⁵ “State adopts national arts education standards.” (23 January 2018). *Santa Fe New Mexican*, online.

⁶ Trujillo, K. (2017). *2017 New Mexico Educator Vacancy Report*. NMSU Soar: STEM Outreach Alliance Research Lab. p. 11.

New Mexico State University (NMSU), Eastern New Mexico University (ENMU), Western New Mexico University (WNMU), New Mexico Tech (NMT), or New Mexico Highlands University (NMHU). This does not preclude arts integration being discussed in lectures, assignments, or co-curricular activities, but it does indicate that arts integration is not currently a focus area that these universities are putting forward publicly as a component of their programs.

Since at least the early 2000s, however, there have been and continue to be sporadic course offerings in arts integration. For example, NMHU recently offered an integrated curriculum practicum for students to take concurrently with an upper-division, televised-based instruction (ITV) course integrating fine arts and movement into social studies teaching, and NMSU and ENMU list the course combination in their catalogs.⁷ The following are examples of courses offered by the Art Education Program at UNM that have included arts integration as a topic or principal focus:

- A 2009 course, ARTE 414, addressed arts integration in elementary schools.
- A syllabus for a 2015 course toward PK-3 licensure, ARTE 214, included arts integration.
- In spring 2017, UNM Art Education devoted an advanced-level topics course to arts integration: “Arts Integration in the schools: Planning, Teaching, Learning, and Reflective Inquiry.” The course description targets teachers, graduate students, and advanced undergraduates, defining arts integration as “an approach to teaching in which students construct and demonstrate understanding through art forms” and stressing the value of the diversity in the arts in addressing “the needs of academically, linguistically, and culturally diverse learners.”⁸

As well as through course offerings, New Mexico higher education institutions can play leadership roles in supporting arts integration teacher training through faculty research and community outreach and engagement:

- UNM Professor Katherine Crawford-Garrett’s research explores arts integration; she was a Fulbright Scholar during the 2015-2016 term. Fulbright Scholars share their expertise internationally and are able to import insights and effective practices.
- Professors Karla Kingsley and Nancy Pauly presented “Art-Integration and Technology for Authentic Assessment” at the 2016 New Mexico Higher Education Assessment and Retention Conference (NMHEAR) on assessment in higher education. Changes in a system of assessment can have far-reaching implications for teacher motivation and engagement.



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⁷ “Teaching and Learning Social Studies, Fine Arts and Movement” and its associated practicum appear in the NMSU, NMHU, and ENMU catalogs. NMHU lists the instructor as Dr. Carolyn Newman.

⁸ <http://art.unm.edu/wp-content/uploads/2016/11/Art-Education-Spring-2007.pdf>

In-service Arts Integration Training Professional Development Available to Licensed Teachers

It is worth considering the role professional development can play in teacher retention and teachers' job satisfaction. New Mexico has one of the highest rates of teacher turnover in the country, nine percent higher than the national average. Just last year, NMSU reported significant job dissatisfaction among New Mexico educators. Of the 1900 respondents, 50 percent answered "no" when asked if they would encourage a career in education. Only 19 percent answered "yes."⁹ A 2016 report on teacher shortages nationwide explicitly notes that professional development initiatives such as mentoring and opportunities for professional learning and collaboration play important roles in teacher retention.¹⁰ Because arts integration is itself a strategy that connects disciplines and people, even across the divides between teachers, students, administrators, and communities, it is especially suited to improving teacher retention and job satisfaction, even prior to, or in the absence of, whole school implementation.

There is not currently a coordinated program of professional development offerings in New Mexico in the area of arts integration, and arts integration is notably absent from several current professional development programs and listings. For example:

- NM PED's upcoming professional learning opportunities center on science and math (STEM areas), with no mention of arts integration or STEAM, the acronym which purposefully includes arts in addition to the STEM areas of science, technology, engineering, and mathematics.
- The titles and descriptions of summer 2018 professional development offerings listed by the Las Cruces Public Schools do not include mention of arts integration.
- UNM's Institute for Professional Development lists past courses targeting PK-12 educators on its website, but none are explicitly on the subject of arts integration.

Instead, there are numerous individual initiatives, programs, and events that address the substance of arts integration either directly or indirectly. Selected projects and opportunities underway or past (listed here in reverse chronological order) include workshops for educators, exemplar student projects, and whole-school transformation:

- Ongoing – STEAM curriculum projects in 14 Santa Fe Public Schools, federally funded by a four-year 21st Century Community Learning Centers grant. Though the projects are not explicitly billed as "arts integration," they incorporate skills and learning techniques across disciplines including the arts.¹¹
- Ongoing – Eubank Elementary in Albuquerque became the Janet Kahn School of Integrated Arts in 2017, following a three-year pilot study program teaching interdisciplinary design thinking to selected classrooms from grades three through five. (For details on the pilot program and the transformation of the school, see "Taylor, A. (2016). Eubank Academy of Fine Arts: The Turn Around School, 2013-2016" in the Additional Reading/Resources section of this report, below.)
- Ongoing - The Santa Fe Opera provides multi-week residencies in which teaching artists from the Opera collaborate with classroom teachers to engage students in the experience of being composers, librettists, singers, dancers, actors or visual artists. Through this program students create their own original work based on the form they focus on and their unit of study. For example, classes may create dances that demonstrate the systems of the human body, or an entire opera based on the Hero's Journey or Tall Tales. The Santa Fe Opera continues to work with Santa Fe, Rio Rancho, Albuquerque and other public schools around the state.

⁹ Trujillo, K. (2017). *2017 New Mexico Educator Vacancy Report*. NMSU Soar: STEM Outreach Alliance Research Lab. p. 3.

¹⁰ Sutchter, L., Darling-Hammond, L., and Carver-Thomas, D. (2016). *A Coming Crisis in Teaching?: Teacher Supply, Demand and Shortages in the U.S.* Palo Alto, CA: Learning Policy Institute. p. 63. Retrieved from https://learningpolicyinstitute.org/sites/default/files/product-files/A_Coming_Crisis_in_Teaching_REPORT.pdf

¹¹ "STEAM-powered learning helped from grant for local schools." (17 May 2018). *Santa Fe New Mexican*, online.

- Currently online – The website of Santa Fe Public Schools (SFPS) states that they offer “a wide variety of art integration professional development for all educators,” but specific titles or dates are not listed.
- June 2018 – “Plunge: An Exploration of Arts Integration,” a two-day workshop, free to Albuquerque Public Schools elementary and middle school teachers. This program is a partnership of the Albuquerque Museum and Albuquerque Public Schools and is sponsored by the Kennedy Center’s Any Given Child Program.
- June 2018 – New Mexico Art Educators Summer Summit at Mesalands Community College in Tucumcari. This professional development workshop focuses on developing and refining participants’ artistic skills in a collaborative professional development setting. It is not an arts integration conference per se but may include formal or informal discussion on arts integration.
- May 2018 – “Bring a book to life” schoolwide event at Albuquerque’s La Mesa Elementary school. René Colato Laínez, author of “My Shoes and I,” traveled from California to attend the event after learning that students had read his book for class, performed its scenes in a play, and dedicated part of a mural to the book.¹²
- April/May 2018 – “The Colors of Summer: Addressing the Common Core through Music, Drama, Visual Arts & Dance,” an arts integration workshop offered by the Albuquerque Public Schools ARTS Center. The Center regularly offers workshops on arts and arts integration as well as posts an online Arts Integration Curriculum that includes classroom activities and plans.
- 2017 – “School Arts Professional Development and Networking,” a workshop offered by the New Mexico Public Education Department (NM PED) featuring a speaker with expertise in arts integration and STEAM.
- 2016 – “Art-Integration and Technology for Authentic Assessment,” a paper presented at the New Mexico Higher Education Assessment and Retention Conference (NMHEAR) by UNM professors Karla Kingsley and Nancy Pauly.



Photos by Jak Media,

¹² “This is what it’s all about.” (21 May 2018). *Albuquerque Journal*, online.

Best Practices

Arts Integration Educator Pre-service Training and In-service Professional Development

In determining how to develop and support pre- and in-service arts integration educator training in New Mexico, a survey of evidence-based best practices nationwide can orient implementation efforts. For example, the state of Maryland's Arts Integration Institute has an 18-year history of providing courses for PK-12 teachers and administrators.¹³ The best practices listed below address four broad categories: Diversity and Equity, Regulations and Licensure, Teacher Support, and Research and Assessment. They are drawn from a variety of sources including the highly regarded 2017 book *Preparing Educators for Arts Integration*, a collection of articles by arts integration researchers edited by Gene Diaz and Martha Barry McKenna. Each of the following best practices has been implemented by one or more states, and although individual states' resources differ dramatically from one another, the best practices can in many cases be adapted to contexts different from the source states'.

DIVERSITY AND EQUITY

- Ensure inclusive training and professional development by collaborating “across disciplines and within the community in designing and implementing innovative arts-integrated preservice and professional development programs for educators.”¹⁴
- Encourage bottom-up development of professional development (through expressed needs and goals of local schools, teachers, administrators, and other constituents) in conjunction with top-down facilitation from the state and system administrators in the areas of equity, consistency, and quality control.¹⁵
- Leverage the diversity in the arts for more democratic and equitable learning environments. “Diversity in the arts” here refers both to diversity of the fields of art themselves, which encompass different modes of doing art and therefore different modes of student thought and activity, and the diversity of individuals participating in each art form.¹⁶
- Consider interested but disadvantaged schools as sites for pilot programs of in-service training and arts integration implementation. The attention afforded successful pilots can lead to ongoing and sustainable programs, provide positive publicity by acknowledging individual schools' leadership, and promote emulation statewide.¹⁷



Photo by Jak Media, LLC

¹³ Mears, M., et al. “The evolution of arts integration in Maryland.” In Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. p. 70.

¹⁴ Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. p. 183.

¹⁵ Hendrickson, J. “Whole-school models of arts integration: Oklahoma A+ Schools.” In Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. p. 59; Mitchell, J. and Joyce, G. (2014). *Building on the past, facing the future: renewing the creative economy of New Mexico*. Albuquerque: UNM Bureau of Business & Economic Research.

¹⁶ Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. p. 23; Deasy, R. and Stevenson, L. (2005). *Third space: When learning matters*. Washington, DC: Arts Education Partnership.

¹⁷ e.g., La Mesa Elementary, Albuquerque and Wilson Arts Integration Elementary School, Oklahoma City, OK; Donahue, D. and Stuart, J., eds. (2010). *Artful teaching*. New York: Teachers College. pp. 31-44.

- Offer arts integration training that targets professional specializations such as teachers of English language learners, special education teachers, administrators (whose informed support is critical to success), and teaching-artists (who may be unfamiliar with standards-based instruction).¹⁸

REGULATIONS AND LICENSURE

- Incorporate arts integration preparation into state credentialing for teachers, including requiring pre-service arts integration training for teachers of English language learners and students in special education.¹⁹
- “Teach standards-based arts-integration curriculum design” in pre-service and in-service training. This serves to align the arts with Common Core State Standards not only in terms of art content but also in terms of the skills, abilities, and “habits of mind” that are addressed by art and other content areas. These include “close observation, envisioning, exploration, persistence, expression, collaboration, and reflection,” skills that are well-suited to be applied across disciplines.²⁰
- Leverage the Every Student Succeeds Act (ESSA) in promoting arts integration training. ESSA includes language that suggests that students receive “well-rounded education,” which can be interpreted as “encouragement for arts integration across subjects, including STEM.”²¹
- Develop and offer graduate certificate and degree programs in state higher-education institutions. Examples include Towson University’s MA in Interdisciplinary Arts Infusion and the University of Maryland, College Park’s M.Ed. with a specialization in Arts Integration.

TEACHER SUPPORT

- Ensure that making art is part of any professional development on arts integration. Modeling arts integration pedagogy provides educators opportunities to experience its efficacy and imagine methods they might include in their own teaching. Providing educators with art-based hands-on experience that “build[s] foundational content knowledge in...dance, theater, and visual arts, model[s] best teaching practice, and develop[s] personal artistic confidence.”²²
- Offer extended or intensive professional development programs, such as Maryland’s Artistry in Teaching Institute, a summer program for K-12 teachers, arts specialists, and administrators with options for degree or certification credit.
- View teachers as learners in their own right, structuring professional development as “professional learning” for the



Photo by Jak Media, LLC

¹⁸ Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. p. 191; Huser, J. and Hockman, R. in Diaz and McKenna, p. 120; McAlinden, U. “Principals arts leadership program.” In Diaz and McKenna, pp. 91-101; Gabriel, J. (18 June 2018). “Supporting students with disabilities by preparing arts teachers.” Education Commission of the States. Retrieved from <https://www.ecs.org/supporting-students-with-disabilities-by-preparing-arts-teachers/>.

¹⁹ Diaz, G. and McKenna, M., eds. (2017). *Preparing educators for arts integration*. New York: Teachers College. pp. 190-191.

²⁰ Diaz and McKenna, pp. 185, 1; See also Charleroy, A. and Paulson, P. “Arts integration and standards alignment” in Diaz and McKenna, p. 38.

²¹ Best, J. (17 June 2017). “What ESSA will mean to your community’s arts education.” Washington, D.C.: Arts Education Partnership. Retrieved from <http://slideplayer.com/slide/13015928/>.

²² Donahue, D. and Stuart, J., eds. (2010). *Artful teaching*. New York: Teachers College. p. 11; Barnum S. “Professional learning in and through the arts” in Diaz and McKenna, p. 131; See also Hendrickson, J. “Whole-school models of arts integration” in Diaz and McKenna, p. 56.

enrichment of teachers themselves and to promote their effectiveness. Evidence shows that improved student outcomes result from supporting teacher autonomy.²³

- Teach “studio habits” and “creative processes” in teacher preparation to raise awareness of the distinction between arts education (art content) and arts integration (employing artistic and creative processes in the classroom).²⁴
- Include opportunities for effective networking and collaboration, such as professionally facilitated arts integration curriculum development meetings at local levels; an online forum for arts integration educators to share research, best practices, and questions (an example would be the Albuquerque Public Schools ARTS Center Arts Integrated Curriculum collection of classroom activities/lesson plans, mentioned above); or an annual onsite conference on arts integrations and STEAM.
- Bring artist-mentors into classrooms as coaches, helping educators plan, teach, and assess “arts-infused” lessons.²⁵ (See Appendix A: The Impact of Support from Artists.)

RESEARCH AND ASSESSMENT

- Emphasize the role higher education plays in interpreting, disseminating, and facilitating research on arts integration theory, strategies, and outcomes.²⁶
- Compile data on pre-service courses and in-service training opportunities in arts integration. These data could help inform or support several of the above strategies, such as “Include opportunities for effective networking and collaboration.”
- Collect feedback from various constituents to ensure professional development that is valued and transformative. (See Appendix B: Professional Development Evaluation.)
- Collect feedback on pre-service preparation and coursework from alumni of state colleges of education who are now in-state teachers, providing that feedback to the respective colleges.

LOCAL NEW MEXICO BEST PRACTICE IN ACTION

One local example of the efficacy and importance of teacher training in the methods and practice of arts integration is the collaborative work of The School Zone Institute’s Architecture and Children program in two Albuquerque schools, Eubank Elementary and Mark Twain Elementary. Anne Taylor, who launched the program, is ACSA Distinguished and Regents Professor Emerita of the UNM’s School of Architecture and Planning. She is also the founding president of the School Zone Institute, which produces the curriculum and sponsors teacher training internationally for the Architecture and Children program. The School Zone Institute also collects research on how learning is affected by the physical environments of classrooms and schools.



Photo by Jak Media, LLC

Taylor’s work with both Albuquerque schools has encompassed teacher training in arts and design integration as well as curriculum development that makes explicit the connections to standards in core areas such as math, physics, and biology. The training exhibits many of the best practices listed in this report and addresses all four major areas of **Diversity and Equity, Regulations and Licensure, Teacher Support, and Research and Assessment:**

²³ Barnum S. “Professional learning in and through the arts” in Diaz and McKenna, pp. 125-135; See also Ryan, R. and Deci, E. (2017). *Self-determination theory*. New York: Guilford Press. p. 375.

²⁴ Diaz and McKenna, p. 4; See also pp. 19-28 on creative process pedagogy.

²⁵ Barnum S. “Professional learning in and through the arts” in Diaz and McKenna, pp. 125-135.

²⁶ Diaz and McKenna, p. 78; Huser, J. and Hockman, R. “Championing the way to effective arts integration” in Diaz and McKenna, pp. 119-121.

- In the area of **Diversity and Equity**, the participation of professional architects, architectural educators, principals and teachers ensured “inclusive training and professional development by collaborating ‘across disciplines and within the community’” at Eubank. Professional architects work with students in Mark Twain classrooms, and an exploration of training architecture students at UNM to work in schools as part of their own service learning is underway.
- Additionally, as a 100 percent Title I school with a diverse student population representing many countries and languages, Eubank is the sort of site called for in piloting in-service training. Indeed, a successful pilot, it has been renamed the Janet Kahn School of Integrated Arts and is now a Kennedy Center partner. It is billed as “The Turn Around School” in the School Zone Institute’s report of the three-year pilot program. The school’s principal speaks of the “transformation and growth” resulting from the arts integration program.²⁷
- Addressing **Regulations and Licensure**, professional development at both schools has included “teach[ing] standards-based arts-integration curriculum design.” Programs at both schools have produced extensive curricula with lesson plans and activities mapped to standards in multiple areas, including physical science, math, and social science as well as in visual arts and architectural skills and concepts. (A sample lesson plan keyed to standards appears Taylor’s report on Eubank, p. 44.)
- In terms of **Teacher Support**, the training for these teachers has itself modeled arts integration pedagogy, providing opportunities for hands-on, experiential learning. Additionally, architects participate in classroom activities and instruction, a version of “bringing experienced artist-mentors into classrooms to help plan, teach, and assess ‘arts infused lessons.’” In the words of one participating architect, “the Architecture and Children curriculum is backed by educational philosophies, research, understanding and programming of educational concepts and projects. Many of us spent an entire semester in the Architecture and Children class to learn how it works.”²⁸
- The comment above also speaks to the **Research and Assessment** area of best practices. The teacher training for these school programs applies best practices by 1) “emphasizing the role higher education plays in interpreting, disseminating, and facilitating research on arts integration theory, strategies, and outcomes,” and 2) compiling feedback and information about the professional development activities and their resulting impact on student learning.

The immediate payoff of these arts integration programs is the high-level of student engagement and enthusiasm for example, student would express, “Yay! The architects are here!” Taylor also points to long-term benefits: students develop their capacity to participate in their communities responsibly and intentionally, and they learn to convert “thoughts into things, and things into thoughts” both responsibly and accurately. After decades of experience using architecture and design as the door to teaching and learning in diverse core areas, Taylor is excited to see New Mexico “on the brink” of implementing arts integration on a statewide scale: “We have the technology. We have the people. It needs that tipping point.”²⁹ The success of this collaborative local effort suggests the potential positive impact statewide professional development in arts integration could have.

In addition, in May 2018, the Roswell, New Mexico, Arts Connect Program hosted a two-day teacher professional development workshop on K-12 visual and performing arts integration and the National Core Arts Standards. Speakers at the event included a representative of the National Arts Educators Association.

Conclusion

Studies show that students who are exposed to the arts benefit both academically and socially. However, the path to experiencing those benefits narrows if K-12 students do not have fine arts teachers in their schools as well as teachers who know how to integrate the arts into core subjects. This report identifies areas in which the arts can be more explicitly integrated into pre-service and licensed teacher training and professional development in New Mexico. This

²⁷ Taylor, A. (2016). “Eubank Academy of Fine Arts: The turn around school, 2013-2016.” Albuquerque: School Zone Institute and the Architecture and Children’s Program. p. 6.

²⁸ Taylor, A. (2016). “Eubank Academy of Fine Arts: The turn-around school, 2013-2016.” Albuquerque: School Zone Institute and the Architecture and Children’s Program. p. 9.

²⁹ Interview with Anne Taylor by the authors, 20 June 2018.

report also provides local and out-of-state best practices on how to realize arts integration in K-12 classrooms that could ultimately benefit students, teachers and their communities.

Bibliography

ArtsEdSearch.org

The Arts Education Partnership research database on the impact of the arts in education, including research on teacher training and professional development.

Diaz, G. and McKenna, M. (eds.). (2017). *Preparing educators for arts integration: Placing creativity at the center of learning*. New York: Teachers College Press.

Analyzes and describes arts integration professional development programs in the U.S. Follow-up online at artsintegration.us.org with interactive blog, new research, and live conversations with chapter authors.

Donahue, D. and Stuart, J. (eds). (2010). *Artful teaching: Integrating the arts for understanding across the curriculum, K-8*. New York: Teachers College Press.

Describes intensive teacher-education and principal-training programs underway in several higher educational institutions, includes exemplary integrated arts education practices.

Goldberg, M. (2016). *Arts integration: Teaching subject matter through the arts in multicultural settings*, 5th edition. New York: Routledge.

Useful survey of arts integration, especially for pre-service training.

Joyce, B. and Calhoun, E. (2010). *Models of professional development: A celebration of educators*. Thousand Oaks, CA: Corwin.

A resource for designing and implementing effective professional development in education.

The Kennedy Center Arts Edge. artedge.kennedy-center.org

Drawing on the Kennedy Center's long-running work with teachers and teaching artists, this collection of arts integration materials includes professional development opportunities, advocacy information, and examples of programs and practices.

Mardirosian, G. and Lewis, Y. (eds.) (2016). *Arts integration in education: Teachers and teaching artists as agents of change – theory impact practice*. Chicago: University of Chicago Press.

Section two, pp. 89-260, contains articles by scholars on teacher training in arts integration. A useful collection especially for pre-service teacher-training.

National A+ Schools Consortium, <http://www.nationalaplusschools.org>

NASC, with over 160 member schools, supports whole-school arts education and integration through collaboration and active guidance for individual schools and statewide networks.

Reeves, D. *Transforming professional development into student results*. Alexandria, VA: ASCD.

A guide to creating high-impact professional development, does not specifically address professional development in arts integration.

Taylor, A. (2016). "Eubank Academy of Fine Arts: The turn around school, 2013-2016." Albuquerque: School Zone Institute and the Architecture and Children's Program.

A report on a model arts integration program piloted at Albuquerque NM's Eubank Elementary School to teach interdisciplinary design thinking in grades 3-5. The program included preparatory workshops for teachers.

Winner, E., Goldstein, T. and Vincent-Lancrin, S. (2013), *Art for art's sake? The impact of arts education educational research and innovation*. Paris: OECD Publishing. <http://dx.doi.org/10.1787/9789264180789-en>

This internationally-informed report by the Organisation for Economic Co-operation and Development (OECD) examines empirical knowledge and research about the impact of arts education and arts integration on students' cognitive outcomes in a wide range of areas including reading, non-native language learning, math, visual-spatial skills, memory, attention, observational skills, social skills, problem solving, creativity, IQ, and general academic achievement. While the report does not address teacher training specifically, it provides extensive evidence of the value of training teachers in arts education and integrative teaching strategies and "can help education decision makers to design or give incentives for the design of appropriate curricula," namely integrative arts curricula (p.261). The OECD is a global forum that researches, recommends, and promotes "policies designed to improve the quality of people's lives" to government decisionmakers.

Appendix A

The Impact of Support from Artists

The Wallace Foundation commissioned a 2017 report on impacts of arts integration interventions. The portion of Table D.3 excerpted here examines how the magnitude of arts integration effects varied depending on several factors.³⁰

The BBER report underscores New Mexico’s large number of active artists. The table from the Wallace Foundation report lists several possible modes for incorporating artists in schools and raises the question of how artists could be incorporated into professional development offerings.

Table D.3. Variation of Effect Sizes by Characteristics of Arts Integration Interventions (Moderator Analysis)

Intervention Characteristics	Number of Studies ^b	Average Effect Size	Improvement Index	95% Confidence Interval	Favors Comparison Group		Favors Arts Integration		
					-1.0	-0.50	0	+0.50	+1.0
Number of program components^b									
Single component	6	0.09	4	-0.26 to 0.43					
Multiple components	20	0.11 ***	4	0.07 to 0.15					
Whether professional development provided to school staff^b									
Professional development included	14	0.14 ***	6	0.07 to 0.21					
Professional development not provided	13	0.09 **	4	0.03 to 0.15					
Type of artist support^a									
None	11	-0.01	0	-0.10 to 0.07					
Varied levels of support	1	0.16 ***	6	0.10 to 0.21					
Arts specialists	1	0.86 ***	31	0.57 to 1.16					
Resident artists	4	0.33 ***	13	0.23 to 0.44					
Teaching artists	9	0.12 ***	5	0.06 to 0.19					
Resident artists with arts specialists	1	0.13 *	5	0.02 to 0.24					

Note. The midpoint of each diamond indicates the point estimate for average effect, the width of the diamond indicates interval between the lower bound and the upper bound of the 95% confidence interval (which reflects the amount of uncertainty about the average effect). Average effect sizes with diamonds that cross the line for 0 are not statistically significant at the .05 level. For each value of a given moderator, effect sizes were first averaged within study, allowing each study to contribute only one effect size to the average effect size across studies. Improvement index indicates the percentile point growth that would be expected for a student at the 50th percentile in the comparison group, had the student received the intervention.

^a Average effects across categories of moderator variable vary, per Hedges’ Q statistic, $p < .05$.

^b Readers should exercise caution in interpreting effects based on single studies.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Source: Authors’ analysis of effects from arts integration studies that meet design requirements for ESSA Tiers I–III.

³⁰ Ludwig, M.J. et al. (2017). “Review of evidence: arts integration research through the lens of the Every Student Succeeds Act.” Washington, D.C.: American Institutes for Research.

Appendix B

Professional Development Evaluation

Thomas R. Guskey, a researcher of staff and professional development, suggests “five critical stages or levels of information” necessary to evaluate professional development offerings effectively.³¹ In the following list, adapted from Guskey pp. 79-81, “participants” refers to educators engaging in professional development, and “students” refers to the educators’ students:

1. **Participants’ Reactions**—At the end of each professional development session, participant reactions are collected using questionnaires. This information will be used to improve program design and delivery.
2. **Participants’ Learning**—In order to improve program content, format, and organization, assess acquired knowledge and skills through participant reflections, demonstrations, and/or portfolios.
3. **Organization Support and Change**—To document and improve organizational support and inform future change efforts, conduct structured follow-up interviews with participants and provider administrators, assessing organizations’ advocacy, support, accommodation, facilitation, and recognition of implemented change.
4. **Participants’ Use of New Knowledge and Skills**—Direct observations, structured interviews, portfolios, and participant reflections will provide information about the degree and quality of implementation, allowing administrators to document and improve the implementation of program content.
5. **Student Learning Outcomes**—The impact on students’ performance, achievement, confidence, and participation can be evaluated through student or school records; questionnaires; structured interviews with students, parents, teachers, and/or administrators; or participant portfolios. This information supports improvement of all aspects of program design, implementation, and follow-up, and helps demonstrate the overall impact of the professional development program.

³¹ Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin. p. 78.