



Vermont Creative Schools Initiative
2016-17 Evaluation Report
Year 2

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Executive Summary

This document provides a summary and comprehensive report on the evaluation of the Vermont Creative Schools Initiative (VCSI) of the Community Engagement Lab during the 2016-2017 school year. This is the second year of the VCSI evaluation, which was funded both years through a Collaborations & Innovations Grant from the Vermont Community Foundation.

VCSI Year 2 Context

A growing urgency highlights the vital importance of creativity. Whether it be interpersonal problem-solving or widely used technological inventions, creativity is the necessary ingredient to discover, design and implement new solutions to some of our most intractable problems. In schools and especially Vermont, new policies (Act 77) encourage proficiency, personalization, and transferrable skills. In this context, Vermont educators are rethinking the way that they encourage students to engage in creative endeavors. The VCSI offers teachers job-embedded professional development to support this kind of learning.

The goals for the second year of the VCSI as identified by the Community Engagement Lab include:

1. Implement the VCSI Teacher Institute with accompanying teaching artist residencies and culminating events.
2. Implement a revised evaluation design from Year 1.
3. Disseminate findings from Year 2 for public use and program improvement.

As in Year 1, these foundational goals have been met. The research team implemented an evaluation system for the program and conducted multiple observations, focus group interviews, and pre- and post-program surveys in order to determine participant perceptions about the impact of the VCSI on teacher practice, student learning, and community engagement.

VCSI Year 2 Results

The 2016-17 VCSI produced eight deeply embedded cross-curriculum units of study across the State of Vermont. Each VCSI project brought together teams of teachers for sustained and intensive professional development in which teachers collaboratively developed their own projects suitable to their context with the support of a professional teaching artist. These eight projects all supported students' engagement with their respective communities and resulted in a culminating event or exhibit shared with parents, other students, and community members.

The impact of these projects deepened the perception among students and teachers that students' creative work is vital to the economic, social, and political life of their communities. The evaluation identified five key impacts:

1. **The projects amplified students' voices in conversations about food production, racial inequality, access to resources, and the value of their own achievements for the good of the community.**



2. **The VCSI created unequivocal positive change in participating teachers' capacities to develop, implement, and sustain creative engagement across their own curriculum.** Results of pre- and post-program questionnaires highlighted positive changes in fundamental areas such as curriculum design, assessment, and promoting student inquiry and reflection.
3. **Students own learning, engagement and achievement were positively influenced by their participation in a VCSI project.** Parents, school administrators, and students themselves recognized and valued the opportunities afforded them in this project. Many students suggested that the project changed the way they viewed school itself.
4. **Result suggests that future iterations of job-embedded professional development should pay particularly close attention to the organizational context in which curricular change occurs.** As teachers engage in risky changes to their practice, considering how this work reduces the time and energy for other aspects of the teacher work might provide a fruitful avenues to limit burnout and frustrations with what are inevitable starts, stops, and revisions of creative work.
5. **The program lead to important changes in practice among the professional teaching artists whose leadership and vision were essential to the process and completion of all of the projects.**

VCSI Year 2 Implications

Through the design and implementation of the VCSI, the Community Engagement Lab and its partners have made three major contributions to Vermont:

1. **The VSCI has contributed a successful model to the field of education that can be used to generate positive professional learning for educators as they develop capacities to teach creative dispositions and skill sets that live inside the creative process.**
2. **The VCSI has contributed new knowledge of how to facilitate and amplify student voices within their communities.** Young people are often disconnected from communal life, and moreover members of the community are often disconnected from the life of schools. The VCSI offers a successful process for connecting young people with members of their community.
3. **The VCSI has developed new understandings about the relationship between organizational capacities for creative learning, teachers' own creative capacities, and the resulting effects on student learning, engagement, and achievement.** This is especially true in the context of promoting Vermont's *transferable skills* graduation proficiency requirements. Teachers especially recognize that changes to their own practices do not occur in a vacuum and considering the ways that the learning environment must accommodate ambiguity, risk-taking, and students' multiple perspectives are key factors for successful creatively-engaged teaching and learning.



Program Overview

The 2016-17 VSCI served:

- 550 PreK-12 students
- 31 teachers
- 5 teaching artists
- 8 schools

Teaching artists and teachers designed and developed original projects resulting in performances and exhibitions across the state of Vermont. Throughout the initiative, teaching artists partnered with teams of classroom teachers from different content areas to integrate standards-based, creatively-engaged learning experiences into the core academic curriculum (Booth, 2014). The formation and implementation of these working teams are guided by an empirically supported teaching and learning pedagogy referred to as the artist-in-residency model (Burnaford, 2007, pg. 3; Rabkin, Reynolds, Hedberg, & Shelby, 2011).

A three part professional development process was implemented that involved PreK-12 teachers partnering with teaching artists to:

1. Design creative curriculum-integrated projects involving arts and core curriculum subjects.
2. Receive professional development during a five-day summer intensive and a two-day fall intensive.
3. Participate (co-teach) in teaching artist residencies that culminate in public events for the exhibition of student learning and heightened school/community engagement.

A full discussion of the evaluation overview, conceptual framework, and evaluation methodology is available in the VCSI Blueprint (Stroup, 2015). Results from VCSI Year 1 are available in the VCSI Year 1 Evaluation Report (Stroup & Denison, 2016).

Context and Goals

The VCSI goals are to enhance teaching and learning through creative engagement and to build sustainable relationships between community partners with schools. The VCSI infuses schools with resources to support students' engagement and achievement, and intrinsic motivation to learn, which is especially important for those in low-income areas that often lack resources and instruction needed for creative work (Catterall, 2009).

In Vermont, this work is particularly important. Legislation, known as Act 77, the Flexible Pathways Initiative, has entered its second full year of implementation and ushered in big shifts in teacher practice, grading systems and student voice, each of which the VCSI addresses directly.

The first big shift of Act 77 is the requirement that each student develop a Personalized Learning Plan (PLP)—in partnership with teachers and parents/guardians—which acknowledges their individual goals, learning styles, emerging abilities and dispositions. The PLP works to chart each students' scope and rigor of academic and experiential opportunities necessary to complete secondary school successfully,



attain postsecondary readiness, and be prepared to engage actively in civic life (Vermont Legislature, 2013, p.6).

Engaging creatively requires students to take control of their learning experiences—a core purpose of Act 77—so the VCSI’s focus on developing creative capacity, and the goals of Act 77 are fundamentally connected.

The second shift is a move from a Carnegie unit grading system, to a grading system based on demonstrated proficiency, which in Vermont is known as Proficiency-Based Graduation Requirements (PBGR). At the classroom level, PBGRs replace the current letter grade system by communicating students’ success towards meeting specific standards or objectives with words and phrases applicable to that performance goal. Act 77 required that PBGRs take effect in 2015-16 school year, for the graduating class of 2020. This meant that all 9th and 10th graders would address these proficiencies in the 2016-17 VCSI.

From the outset, the VCSI’s primary goal has been to support teachers in creating the kinds of learning experiences that address this shift to proficiency-based learning.

The third big shift inspired by Act 77 was the adoption of a set of seven newly codified *Education Quality Standards*, in which students must demonstrate proficiency before graduating. Those new graduation proficiency standards include *transferable skills*, which the Vermont Agency of Education (VT AOE) defines as “communication, collaboration, creativity, innovation, inquiry, problem solving and the use of technology” (VT AOE, Education Quality Standards, pg. 5, 2014). These skills “refer to a broad set of knowledge, skills, work habits, and character traits that are believed to be critically important to success in today's world, particularly in collegiate programs and modern careers” (VT AOE, 2014).

The implications of Act 77, and the accompanying transferable skills PBGRs, require schools to think differently about the ways that teachers teach and students learn. As these shifts are implemented, new models of teacher practice as well as new ways of engaging students in authentic experiences designed for personalized learning are necessary.

If the *transferable skills* of creativity, communication, collaboration and innovation are key graduation outcomes, then learning that merges and integrates experiences across subject areas is necessary.

The VCSI places at the center of its mission the interdisciplinary nature of knowledge and highlights creative learning experiences and outcomes that integrate and synthesize that knowledge.

Thus, the VCSI addresses professional development practices on teacher practices and student outcomes (Desimone, 2011).

Broadly speaking, the VCSI’s focus on creative engagement connects creative process and skills with core academic subjects, with the intent of promoting learning in and across multiple disciplines. Thus, this evaluation looks at student learning and achievements that are unlikely to occur without creative engagement in the core academic curriculum.



Finally, Act 77 requires flexible pathways that should move students into novel experiential situations that necessarily involve engagement with their communities. Thus, the VCSI focuses on building sustainable relationships between schools and their communities.

The VCSI uses collaborative professional partnerships between members of the community and the school members to address real-life issues and authentic problems.

RESULTS

The 2016-17 (Year 2) VCSI was implemented in eight schools across the state of Vermont, including elementary, middle, and secondary schools. The four elementary education projects included one project that spanned all 60 students in a single school from Kindergarten through 4th grade, another for all 70 3rd graders in a single school, another for all 25 3rd and 4th graders in a single school, and finally one for 60 1st, 4th, and 5th graders in a single school.

The two middle school projects included one that spanned all 60 students in the school in 6th, 7th, and 8th grades, and another project that included all 120 7th graders in the school. One middle school project included a collaboration between middle level students and children in a school-based pre-k.

Two projects occurred with high school students. One project included 70 students in computer science, biology, and sociology classes in 9th through 12th grades. The second high school project included all 120 9th grade students in the school and integrated English, orchestra and library studies.

- **In total, the 2016-17 VCSI directly engaged 550 students across the state.**
- **An additional 1,400 classmates and 600 community members attended public culminating events.**

Demographically, these schools represent eight rural school districts. According to the most recent Vermont Agency of Education data (2017a), the school population average for students eligible for free and reduced lunches is 44%. According to the most recent Vermont Agency of Education data (2017b), the VCSI during the 2016-17 year was implemented in schools with an average of 7% non-white population ranging from 2%- 15%.

The VCSI directly engaged 31 teachers over the course of the academic year. Three distinct professional development opportunities were implemented for teachers, and at each stage the number of teachers participating in VCSI-related projects expanded.

The first series of professional development activities occurred during a week-long summer intensive, in which teams of classroom teachers worked closely with teaching artists and professionals in the field of arts integration. Thirty teachers attended the summer intensive. The intensive focused on developing the teachers' understanding of creativity and personal creative history by working with experts in this field, teaching artists from across Vermont, and world-renowned guitarist, John Jorgenson (<http://www.johnjorgenson.com/>).



In addition, each team of teachers and their partner teaching artist developed a unit plan that integrated the arts and at least one core content area. These units aligned with state and national standards included in the *Vermont Framework of Standards and Learning Opportunities* and *Vermont Early Learning Standards*.

The teachers varied in terms of their background and experience. In the pre-program survey, eight of the teachers reported having previously taught 15 years or more; all others reported teaching between 5 and 15 years. All teachers held a credential in their field and level of teaching. With the exception of the 7 arts and music specialists that participated, only one teacher reported having any experience providing arts instruction in the classroom; twelve teachers shared that they had little or no experience collaborating with an artist. Most educators, except the arts and music specialists, reported that they had never collaborated with an artist.

In sum, the teachers completing the Year 2 pre-program survey represented an experienced group of teachers who had not often engaged in collaborative arts/creativity-based instruction with teaching artists or fellow teachers and they also had limited in-class experience delivering such instruction. In general, this level of experience matched teachers in Year 1.

As in Year 1, these 30 teachers plus one additional classroom teacher reconvened for a two-day November planning retreat in which participants revised additional drafts of the integrated curriculum units, as well as planned and presented multiple lessons that would occur within each unit. Within a month of this November planning retreat, teacher teams and teaching artists presented complete drafts of unit plans to the VCSI faculty for final responses and revisions. All arts-integrated unit plans and lessons developed by teachers were assessed by the VCSI faculty in early January as having met curriculum design standards for cross-curriculum integration, selected appropriate state and national standards, and aligned assessments with curriculum goals and instructional activities.

The final piece of the VCSI Year 2 program included the direct planning for and the implementation of the eight curriculum units at the eight schools during the teaching artist residencies. These teaching artist residencies and co-teaching experiences had a average duration of 6 full co-teaching days, not including days in which final culminating events or exhibits were performed, for a total of 50 co-teaching residency days (Minimum = 5 days, Maximum = 7 days). As the final projects came to a close, a total of 35 teachers directly implemented a VCSI-developed curriculum unit (24 classroom teachers, and 9 librarians, art or music educators).

Each teacher team selected a primary art focus as part of their professional development project. The distribution of the various art forms across all eight VCSI projects in Year 2 were Drama/Theater Arts (2), Music (2), Puppetry (2), and Visual Arts (2). All projects resulted in original works that students, teachers and teaching artists discovered, developed, designed, and implemented. At all stages of the process, emphasis was placed on students creating their own dramatic, musical, or visual expressions for public presentation. A brief description of each completed project follows:

- An elementary school original puppetry project focused on activating children's voices with dramatic and visual arts aspects, resulting in a school-wide performance for the support of their community playground.



- An elementary school dramatic project focused on the science of sound that integrated narrative writing with choreography and music, resulting in multiple school-wide performances as well as inclusion within a community-wide musical performance featuring John Jorgenson.
- An elementary school musical and poetry project focused on exploring Vermont's natural and economic resources, especially Vermont's maple syrup ecology, that integrated science, social studies, and the language arts, resulting in a school-wide display as well as inclusion within a community-wide musical performance featuring John Jorgenson.
- An elementary school visual arts project focused on environmental responsibility and decision-making that connected to the sounds and artistic representations of emotions through wind chimes, resulting in school- and community-wide exhibitions as well as inclusion within a community-wide musical performance featuring John Jorgenson.
- A middle school musical and visual arts project focused on the concept of personal goals and identity development with original sonic compositions and dramatic arts performances, resulting in a school and community-wide performance.
- A middle school puppetry project focused on an exploration of identity, place, and students' role in making a welcoming community that integrated language arts with music, dramatic play and visual arts, resulting in multiple school-wide and community performances. This project included a mentoring program that incorporated pre-k children in the puppetry performance.
- A high school dramatic project focused on the responses to changes in one's community and the civic role that individuals play that integrated original dance, play-acting, visual arts, and music with sociology, biology, and computer science, resulting in a community performance.
- A high school visual arts project focused on the multiple identities that individuals have and how they are represented to others that integrated poetry and narrative reading and writing with visual arts and creative writing, resulting in multiple school-wide exhibitions as well as inclusion within a community-wide musical performance featuring John Jorgenson.

Impact

The data collected over the course of the Year 2 VCSI suggest that the program positively impacted students learning and teacher practices. Significant changes in pre- and post-program perceptions by teachers, focus group responses from students, and questionnaire responses by parents, administrators, and artists form a common story of successful creative learning opportunities for Vermont students.

In part, this section provides some insights beyond why creative engagement matters for positive education, suggesting why and how it works for the benefits of students, teachers, and communities. Feedback from participants informs implications for future practices including areas of strength and next steps for improved impact.



The Impact of Students' Artistic and Creative Work Within and For Their Communities

The VCSI is not just a school-based intensive project. The VCSI ambitiously uses a collective impact model so that positive change occurs not only within schools, but that whole communities will flourish as a result of this educational work (Kania & Kramer, 2011). Young people are often left out of community development plans. In doing so, their voices are diminished and their own sense of civic efficacy, the feeling that they have a role to play in the social and economic world around them, is left dormant (Beaumont, 2010). The VCSI maximizes student voice and civic efficacy by encouraging teachers and artists to engage in projects that connect students to authentic community issues (Lincoln, 1995). A third grade participant summed up how many students felt this project gave them a voice in their communities:

“This project helped me be creative and part of a community because I felt like everybody got a role in it, and people from the town could come see us perform, so the whole community could see what the kids at the our school could do.”

- 3rd Grade Student, Post-Program Focus Group

A high school student highlighted the parts of the project that resulted in a similar feeling of civic efficacy in a post-program focus group:

“You were talking about connecting and being a part of your community, that part of it? I think it helped us all with that because it kind of forced us to experience that in a way. Some people are maybe afraid to share their ideas about -- like we each got to choose topics that we wanted to communicate. We may feel a certain way about this issue, but we don't really feel comfortable communicating it with our community. Because maybe we feel like we're too young for people to value our opinion or various reasons why we would feel like we don't really fit into that role of being a citizen in our community, primarily because we're all young. So I think having that situation where we were able to go into the community -- even if it was just our parents that were there or some local community members. I think giving us that opportunity of being heard and being able to share our voices and being told, 'We do wanna hear what you guys have to say.' It kind of made us, at least it made me, feel like I have more motivation and more ability to go out and be an active member of the community.”

- 11th Grade Student, Post-Program Focus Group

Each VCSI project afforded students opportunities to address authentic community issues, and each project integrated students directly into their communities to advocate for and/or present their own unique perspectives to local residents.

The arts provide particularly strong avenues for student voice as they are inherently student self-driven to some degree, but teachers remain gatekeepers (Mwalimu, 2014). With limited resources and curricular pressures, teachers need not make the leap to move learning outside of the classroom unless they see the valuable impact that students' artistic and creative endeavors might have on both reaching goals and benefiting the community.

Participating VCSI teachers strengthened, often significantly, their previously held beliefs about the value of creative engagement in their practices and about its value to students, the schools they teach in,



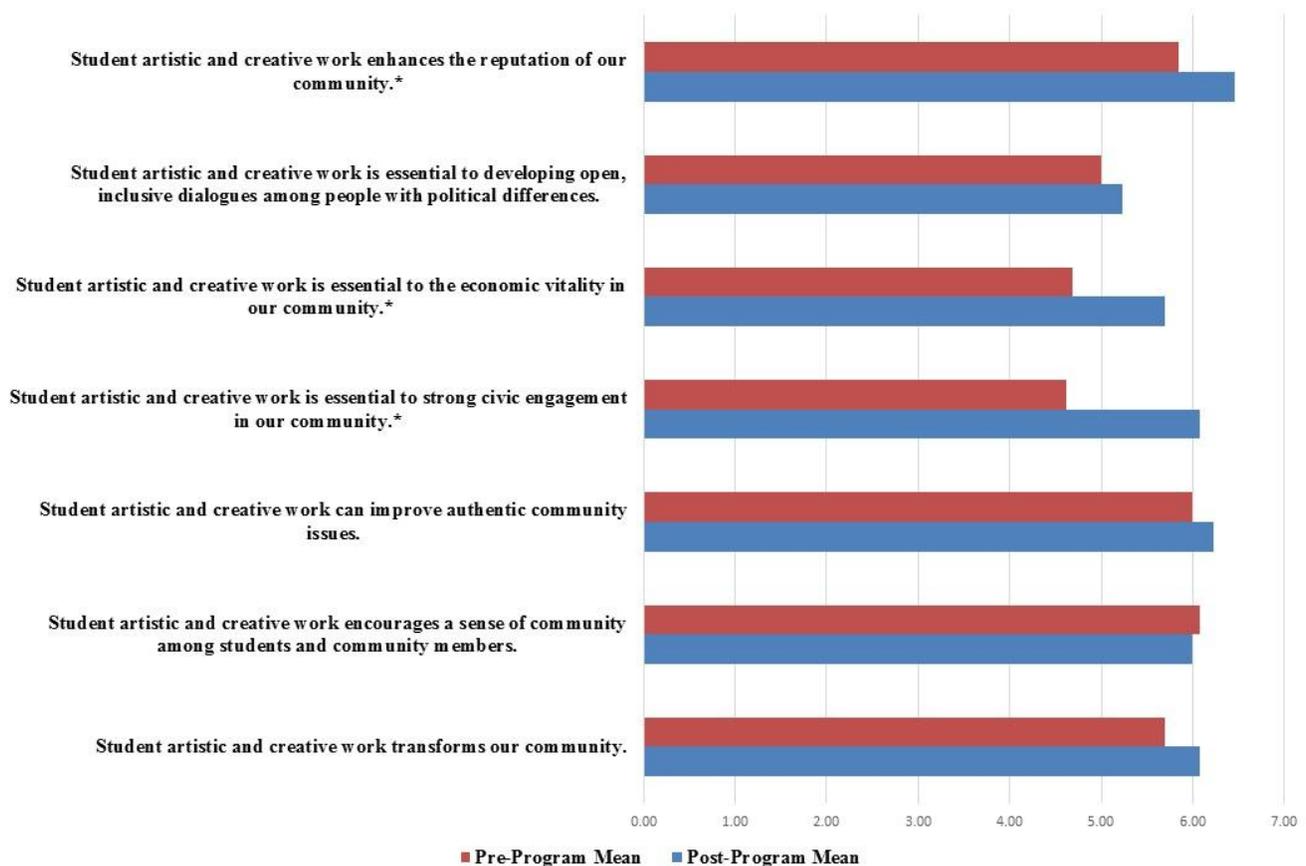
and the communities that they live in. Teachers entered with generally positive views that student work can have an impact on their communities, but they ended with more confidence that students' creative work is important for a healthy community. One teacher echoed this change in a post-program response:

“The VCSI has really reinforced my belief that the community has so much to offer our students beyond my own ability. I know how difficult it is to reach out and engage the community, but it pays huge dividends when it is successful.”

- Teacher, Post-Program Questionnaire

Overall, this perception was held for most teachers. Importantly, teachers participating in the VCSI significantly strengthened their views that students' creative work is important to the economic vitality of their communities, that it enhances the reputation of their community, and that it is important for strong civic engagement (Figure 1).

Figure 1: Change in Teachers' Perceptions about the Impact of Student Artistic and Creative Work within their Communities.



**Significant Result*

1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neither Agree nor Disagree, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly Agree



The projects themselves directly engaged these issues. Addressing economic vitality directly, one school project musically and lyrically expressed the importance of maple syrup among other Vermont economic products. Another project used a puppet performance to motivate civic action across their community. Still another used project-based dramatic performance to highlight the process and products of education for community members.

Nearly all projects resulted in performances and events in which participants viewed or heard student voices about their goals and impressions of their communities. Parents recognized this impact as well. One parent responded:

“She was so excited with each step of this process. She was eager to talk about how they were going to help change the playground, to the performance, to the seed sales. It made her feel important and connected to making a change for her school.”

- Parent, Post-Program Questionnaire

Another parent addressed student voice and civic engagement directly stating:

“My child learned by performing in front of an audience, gaining the empowerment to create change, and took civic responsibility.”

- Parent, Post-Program Questionnaire

Beyond connecting to family members, multiple projects directly addressed community issues and resulted in dialogues between community members and students about issues facing their communities from issues of racism and bigotry to the value of community-wide resources like a playground.

Responsive, connected schools are schools in which children feel empowered and engaged. Teachers, administrators, and parents know that school climate and sense of belonging matter to keeping kids motivated to attend school, learn, and contribute in positive ways (Goodenow, 1993). One student shared how mentoring younger students showed him how he was a valued member of his school:

“I learned that we can be a good community and school where everyone knows each other. Mentoring the younger students in our school really showed me that we can all be one community no matter what our ages are.”

- 6th Grade Student, Post-Program Focus Group

Every VCSI project required participants across grades or at least multiple classrooms to participate. Some projects supported a sense of belonging across entire class grades. One eighth grade student noted how the project encouraged her to feel more related to her classmates.

“The VCSI project kind of helped our class bond as one, really. And it made most of the kids feel like they belonged in that class. Because you have the quiet kids in your class, then you have the loud and hyper kids, and you’ve got some of the really energetic kids or like the people who are laid back. And it kind of brought everyone together, and they expressed themselves in their art.”

- 8th Grade Student, Post-Program Focus Group



Another student in a high school project suggested that the VCSI encouraged greater collaboration and cooperative learning that maximized their own and each other's learning (Johnson & Johnson, 1993).

"We were allowed to work together. We all had unique ideas, but we would all chip in to each other's ideas, like, oh why don't you try doing this and see how that looks? There were a lot of us there, but we all seemed to know what other people were doing and how we would work with certain things. It was just really good to have other people be helping and having you helping them."

- 9th Grade Student, Post-Program Focus Group

VCSI projects not only encouraged students to think positively about their own efficacy as community members but strengthened their sense of belonging to their own schools.

Teachers' Capacities to Integrate Artistry and Creativity

One area of clear impact was that this group of teachers suggested that they clearly came to understand the nature of creative engagement in their teaching and by their students. Moreover, teachers reflected upon specific changes within key fundamental aspects of all teaching, including the way that creativity must be embedded in planning, assessments, student reflection, and their own revisions and ongoing changes to their practices.

The VCSI is a job-embedded professional development program that requires teachers to branch out beyond their own disciplines and deeply ingrained habits that have been previously successful (Croft et al., 2010).

If teachers are able to integrate creative engagement into their teaching, they need to experiment with the new disciplines and practices. Many students observed and appreciated that their teachers were leading by example. One high school student suggested that her teachers' struggles aligned with her own:

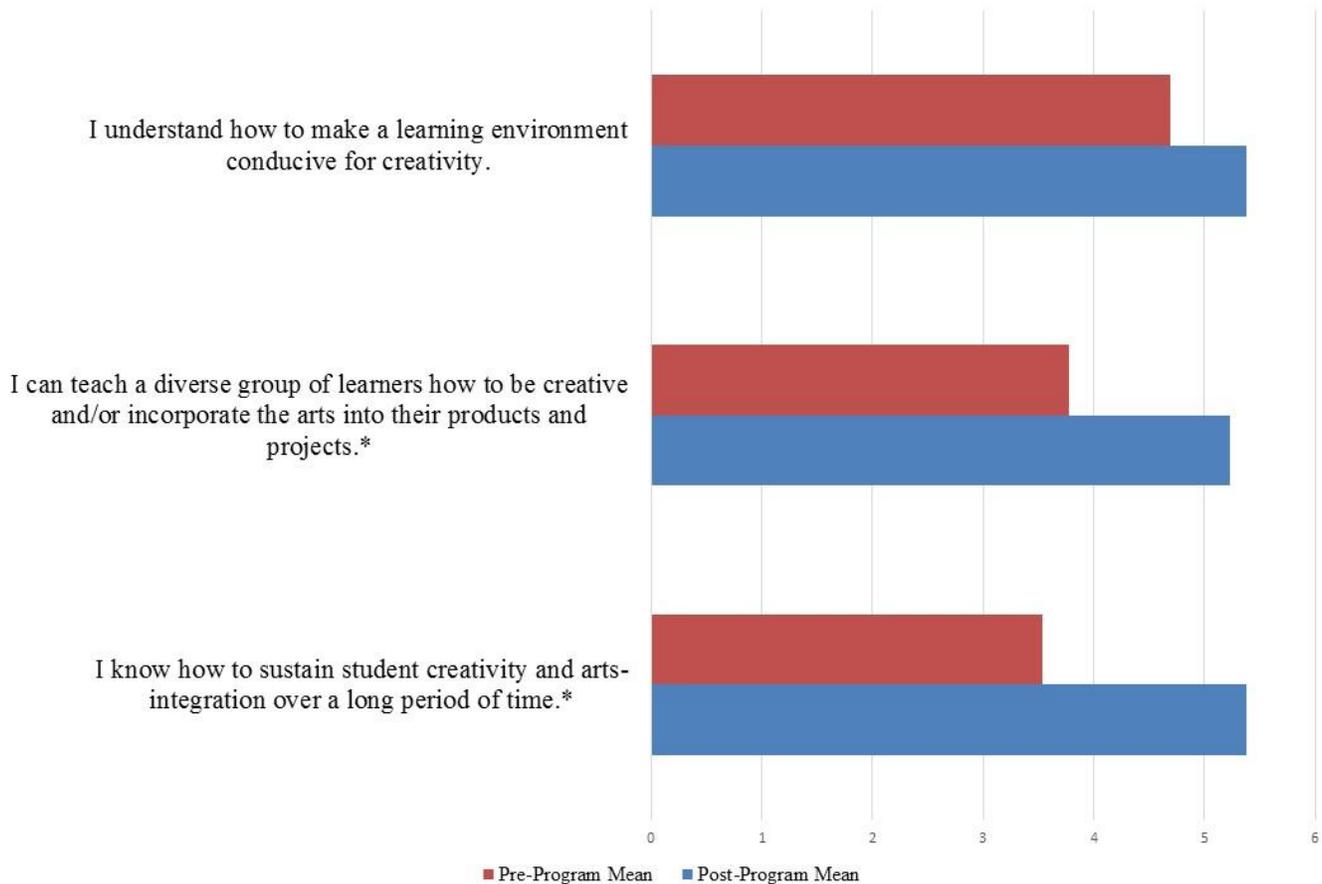
"I think what was also really nice was that our teachers were kind of leading by example, in a way, because this was all new to them. So by inventing this program, they were being creative and they were taking risks and were challenging their own normal plan. And by doing that, they were kind of leading us and giving us something to look up to and be like, 'Ok, I see them struggling, and I know that it's ok that I'm struggling.' Struggling is part of learning something new for a new way of doing things."

- 12th Grade Student, Post-Program Focus Group

This struggle paid dividends through the changes teachers reported in their ability to integrate creativity into their practices. Overall, the teachers' perceptions of their own preparation for teaching of creatively-engaged work increased from pre-program to post-program work (Figure 2).



Figure 2: Change in Teachers' Perceptions about their General Capacity to Integrate Artistry and Creativity into their Practices



**Significant Result*

1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neither Agree nor Disagree, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly Agree

These are big responsibilities that require sophisticated choices. Creative engagement requires a climate supportive of ambiguity tolerance, risk taking, and persistence. Without a creativity-conducive environment, teachers face an ongoing challenge in structuring flexible and open learning opportunities.

As a point of convergence, students also recognized that the VCSI supported teachers in making apparent to students the key components of the learning environment that are deemed necessary for creatively-engaged work. One student highlighted the illumination of these essential features of the learning environment:



“I mostly noticed the absence of things like this project. We don’t have enough of these things that get us thinking creatively, like at least for me right now, I’m noticing a lot of classes I’m in, you’re following a routine and you’re not learning the material, you’re learning the routine. And basically how to get by on these without really thinking about the material itself. So this was a really good way to get us thinking about what the class is actually about, what it is, instead of what we’re supposed to be doing.”

- 9th Grade Student, Post-Program Focus Group

The key here is that teachers needed to become more transparent about the choices they were making when designing the learning environment.

Moreover, issues of equity and inclusion face teachers every day. The difficulty in providing opportunities for creative work to all students adds another layer of complexity. VCSI teachers significantly changed their perception of their capacity to include a diverse group of students in creative work. A high school teacher talked about how this kind of creative engagement can be equitable for all students.

“This project had all students very excited. They felt ownership of the project in a variety of ways and that gave them a feeling of importance at school. It also allowed the students who excel in the arts to apply their skills in creativity and also helped students who were not as outwardly strong creatively focus their skills and have the same success.”

- Teacher, Post-Program Questionnaire

Finally, it is not just enough to build a learning environment and include all students. Teachers have to sustain that environment and those practices over the course of an academic calendar and beyond. One teacher talked about this sustainability of the arts- and creativity-integrated teaching and learning.

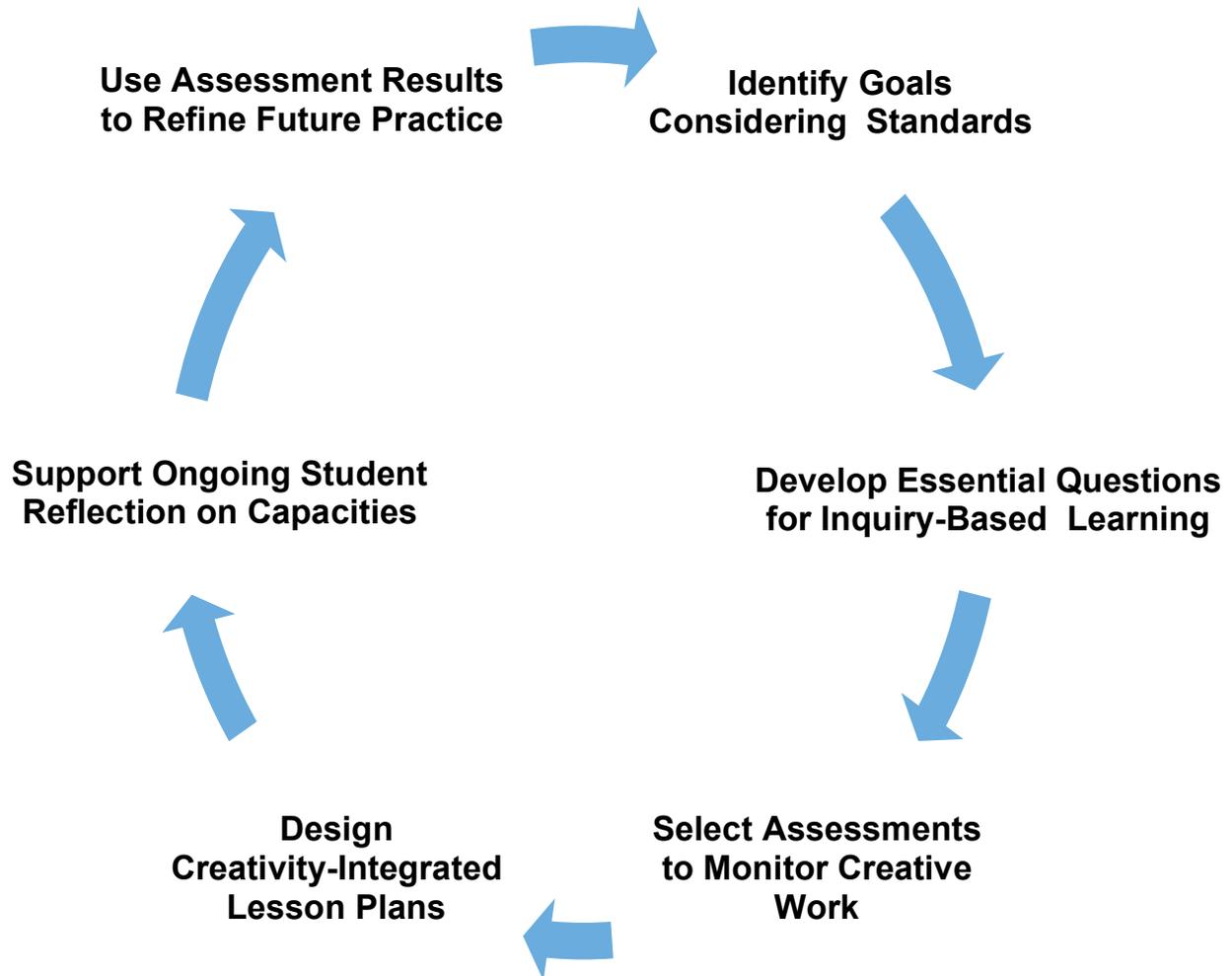
“I honestly believe that if we were able to teach throughout our day and the school year were like this – planning integrated units and hands-on real life learning – students would benefit so much and teachers would be thrilled to teach like this. It takes a lot of time and is a great deal of work, but it is so worth it!!!”

- Teacher, Post-Program Questionnaire

Setting up of the environment, considering how to integrate students with special needs and building in the persistence and discipline necessary to complete a long term project are necessary but teachers must still perform the fundamentals of their work setting goals, designing lessons, and using assessments effectively. The VCSI uses teacher best practices to support inquiry-based student learning (Bransford, Brown, & Cocking, 2000) by employing good backwards design planning (Wiggins & McTighe, 2005). Within this model teachers provide supports for ongoing student reflection and engage in thoughtful self-reflection themselves to improve their practice in the future. In the context of the VCSI, teachers must take these fundamental steps while transforming their practice to integrate pedagogical supports for creatively-engaged learning experiences. Figure 3 shows the recursive steps a teacher must take to address these foundational practices in the context of arts-integrated learning.



Figure 3: Recursive Model of Creative Engagement Teacher Pedagogy



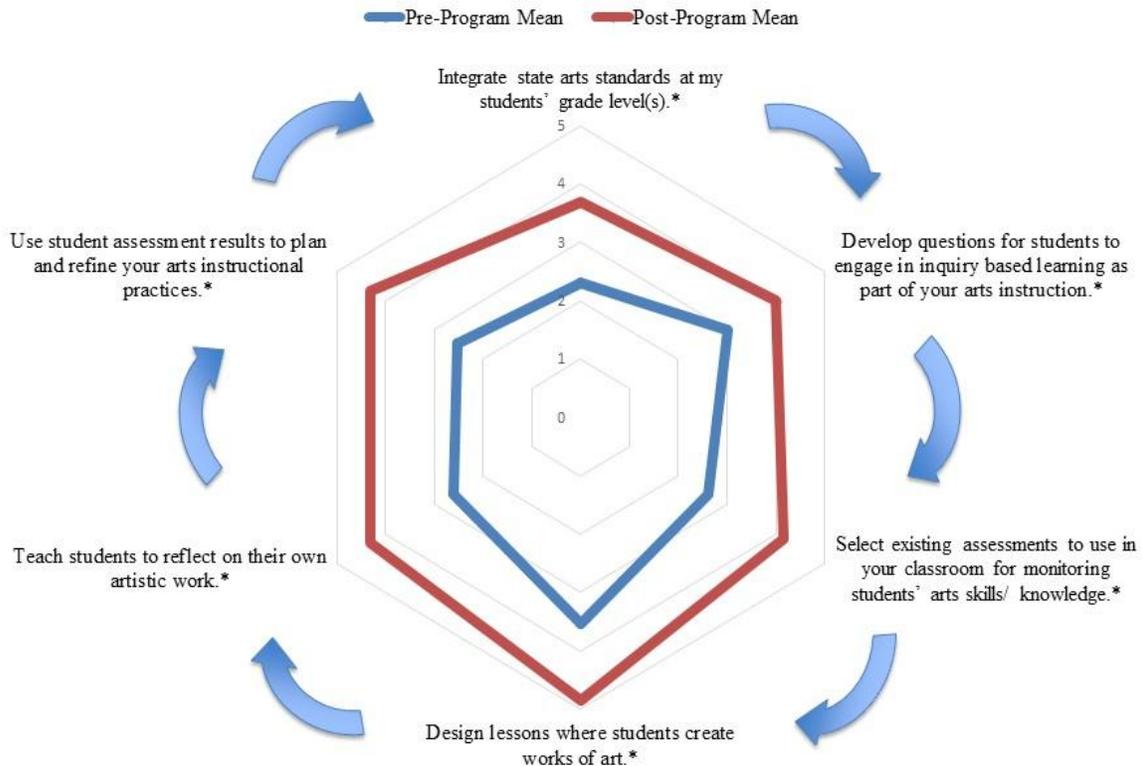
We asked teachers, many of whom had not worked in an artistic discipline, to discuss their confidence at each level of the process. Based on pre-and post-test results their responses suggest that they became more confident at each stage throughout the VCSI project. Figure 4 represents changes in teachers' perceptions of the capacities to integrate creativity into fundamental pedagogical choices of good reflective practitioners. One teacher described the impact:

“My VCSI work broadened my teaching toolbox and allowed me to “mess around” with concepts, ideas, and practices that were unfamiliar.”

- Teacher, Post-Program Questionnaire



Figure 4: Change in Teachers Confidence in Creative Engagement Pedagogy.



*Significant Result

1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Neither Agree nor Disagree, 5 = Somewhat Agree, 6 = Agree, 7 = Strongly Agree

Professional educators know that planning for student learning is as important as moments of classroom interaction. Moreover, they know that their practices do not take place in a vacuum but within a set of goals common to all Vermont children. As most of these teachers were classroom teachers from the core disciplines of math, social studies, science, and language arts, knowing, much less integrating, Vermont's goals for artistry and creativity is not often a part of their work. Teachers significantly increased their confidence to use those standards at their students' grade level.

As good designers of instruction, teachers translate those goals into instructional procedures and tasks guided by powerful questions for relevant and meaningful big ideas. Again, teachers significantly increased their confidence to develop guiding questions that integrate creativity. Good teachers also know that setting goals without a means to knowing whether they and their students have met those goals puts them in the untenable situation of not knowing students' progression at any given time. Choosing and using assessments that provide ongoing feedback to students and the opportunity to show their mastery are essential. Most history teachers know how to assess their students in their disciplines, but not necessarily for creative process, capacities, skill sets or products. Teachers in the VCSI significantly increased their confidence to access and choose assessments to monitor students' creative process and learning. Knowing where to go and how to know if you get there requires a path. For teachers, lesson plans are at the heart of their pedagogical work.



VCSI participant teachers significantly increased their confidence to design lessons where students were creatively engaged in their learning and produced creative outcomes.

Every teacher knows that all of those plans and assessments are challenged by reality at the moment of a classroom educational interaction. Outlining procedures for students is important pedagogical work, but noticing what your students are thinking in the moment, and providing feedback and guidance are the marks of highly skilled educators.

Providing feedback allows students to progress which is the essence of learning. These responses are the bridge between students working as novices and becoming experts in practice. Teachers know how to bridge that gap in their own disciplines but not necessarily in creative domains. The teachers in the VCSI significantly increased their confidence in providing the feedback on their students' own creative work. One parent echoed this impact when she stated:

“My daughter was very excited to share with me what she was creating during the residency and how the teachers and visiting artist responded to her work.”

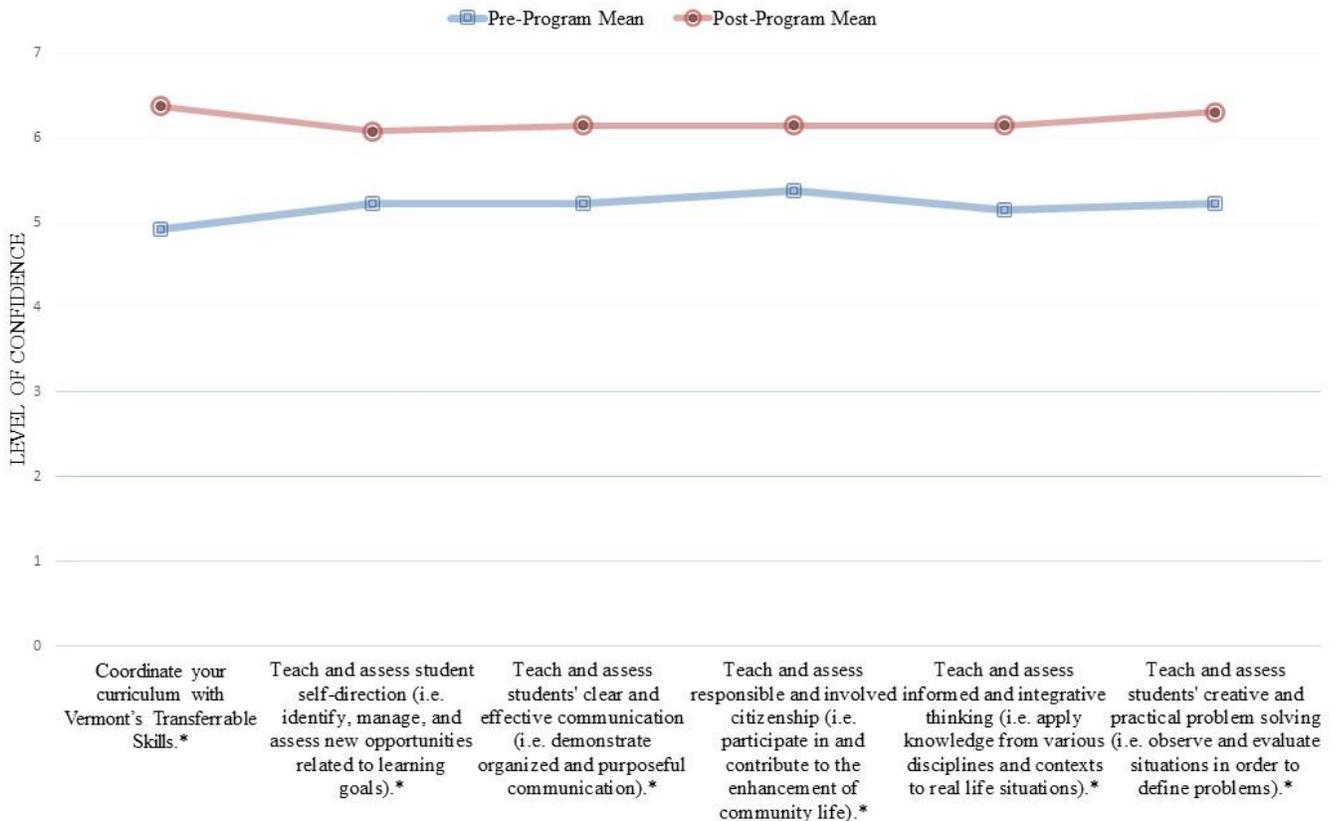
– Parent, Post-Program Questionnaire

All good teachers know that their own learning does not stop at implementation. Using the results to make changes in one's practice shows that one is a reflective practitioner, and in that reflection, a virtuous spiral of teachers' own professional learning can emerge. The VCSI participating teachers significantly increased their confidence to use the results of their students' creative work to improve their future planning, assessment, and teaching.

Finally, the VCSI positively impacted teachers' confidence to develop interdisciplinary links, especially focusing on Vermont's Transferable Skills (Figure 5). Areas of particularly strong change included coordinating their own curriculum with the VT Transferable Skill standards, especially gaining confidence to teach and assess students informed and integrated thinking and their creativity and problem solving. Other significant differences emerged in VCSI teachers' confidence to encourage student self-direction, develop clear and effective communication skills, and promote responsible and involved citizenship.



Figure 5: Change in Teachers Perceptions about teaching and assessing Vermont's Transferable Skills



* Significant Result

1 = Not at all Confident, 2 = Slightly Confident, 3 = More than slightly Confident, 4 = Moderately Confident, 5 = Somewhat Confident, 6 = Confident, 7 = A great deal of Confidence

Thus, based on responses by teachers participating in the program, the VCSI positively impacted teachers' capacities to integrate creative engagement and the teaching and assessing of transferable skills into their practice.

Student Learning, Engagement and Achievement

The VCSI positively impacts student learning, engagement, and achievements that are unlikely to occur without the integration of artistry and creativity into the core academic curriculum. As one parent noted,

"The integration of arts, education, and community brought a full circle connection to inspiration, interest, and what it takes to make wishes come true! My daughter gained confidence and exposure to the arts."

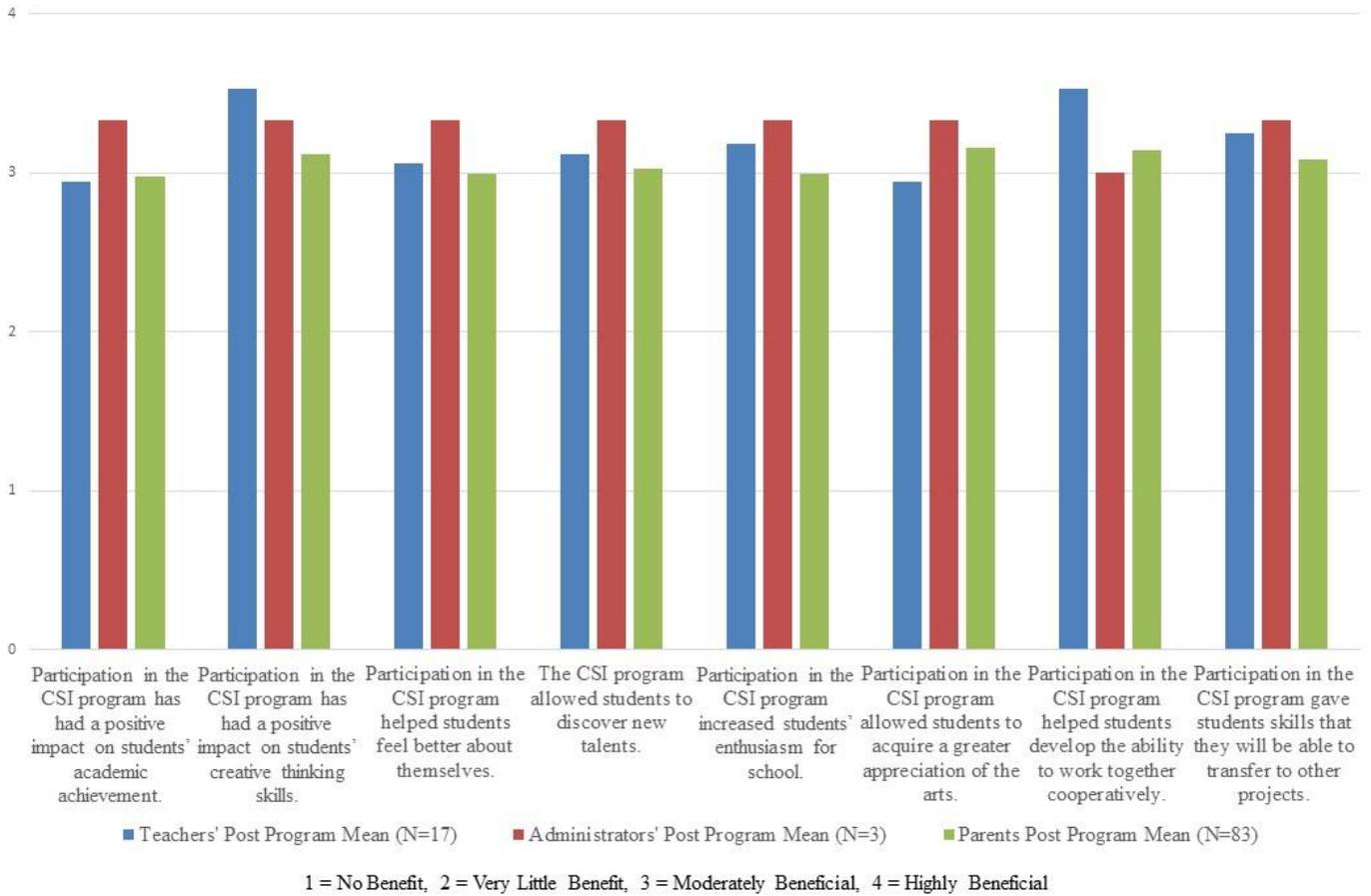
- Parent, Post-Program Questionnaire

Parents, teachers, teaching artists, and administrators generally agreed that the VCSI projects had positive benefits across a wide variety of important student outcomes including their academic achievement, creative thinking skills, and self-confidence. Moreover, these adults agreed the VCSI projects helped students discover new talents, acquire a greater appreciation of the arts, increase their



enthusiasm for school, and work cooperatively. Finally, they all generally agreed that students would be able to transfer what they’ve learned during their VCSI projects to other projects (Figure 6).

Figure 6: Teacher, Administrator and Parent Perception of VCSI Program on Students



Student engagement was a key impact of the VCSI, according to teachers. Echoing these responses, a number of students reported positive responses on their self-efficacy, engagement in school, and enthusiasm for learning:

“So I think that project-based learning really changes school, like you said, how we think of school. Usually, you come to school and the teacher says, ‘Hey, you have a surprise test.’ Instead, we come to school and say, ‘Hey, we’re gonna do project-based learning today.’ And how much more fun does that sound? I mean, we get to interact with each other, we get to just be more ourselves instead of sitting in a chair doing a test all day. And I think that that really changes a lot, and that I know I am more happy (sic) with project-based learning.”

- 3rd Grade Student, Post-Program Focus Group



They also suggested that they experienced strong academic learning by integrating creative skills, artistic mediums, and their content knowledge:

“I mean, most people get scared to be vulnerable - to be like humiliated or something like that. And our class didn’t really pick on anybody’s art if they did something wrong or how it looked, kind of like everybody was giving each other pointers. And it made people feel comfortable instead of making them feel vulnerable to humiliation. It made them comfortable to make a mistake and fix it or go onstage and perform.”

- 8th Grade Student, Post-Program Focus Group

Finally, the students commented that this program encouraged them to be creative, supported their confidence to take chances in their artistic work, and encouraged their own identification as artists:

“This project had all students very excited. They felt ownership of the project in a variety of ways and that gave them a feeling of importance at school. It also allowed the students who excel in the arts to apply their skills in creativity and also helped students who were not as outwardly strong creatively focus their skills and have the same success.”

- Teacher, Post-Program Questionnaire

Another student talked about the impact that the VCSI had on students’ willingness to see school as an opportunity for active, cooperative engagements:

Student: *“It was hard, we had to work on it. I thought this school work was different after because it changed our perspective of school. When I think of school, I think of learning and math and stuff, and we got to kind of come up with a song. That changed my perspective of school.”*

Interviewer: *“To what?”*

Student: *“To like a fun, active, cooperative experience.”*

- 3rd Grade Student, Post-Program Focus Group

One parent noted that the VCSI project gave students an opportunity to explore their own learning, to develop a greater appreciation for artistic work, and to work on skills that will allow them to transfer that learning to other fields and projects:

“My son learned about a long and multifaceted creative process. His class worked on different aspects of the topic and really developed an understanding for all that goes into the process. He learned about writing poetry collaboratively, how that poetry can be turned into music, how to compile a book, and then to top it all off, he learned how great it is to perform with professional musicians. He was so proud of the music, the performance, the book; and he was right, they were all excellent!”

- Parent, Post-Program Questionnaire



Echoing responses across student focus groups, one student talked about how important it was that VCSI process and curriculum encouraged them to take ownership of the work they were doing rather than simply seeking out ready-made answers from authority figures.

“I found out that I can be self-directed and I like that my teachers didn’t tell me exactly what to do but told me to figure it out myself. It was hard but I did it. We worked together especially hard on our script.”

- 6th Grade Student, Post-Program Focus Group

Finally, students recognized that the VCSI projects encouraged their own creativity. One student talked about the value that these skills will have for him in his future professional experiences:

“I think that I initially was not a big fan of the creativity side of things, just because I also did not have that much interest in improv and had never done it before and stuff like that. But when I’m sitting here looking back and listening to it, I’m kind of figuring out, like I’m just noticing that the whole creativity and risk-taking -- that scenario -- kind of is important for us to be put in and learning about. Because in any situation, if you find yourself working in a lab, you have to take risks and you have to be creative, or you’re not gonna make any progress with your work. And I feel like, in a lot of situations, that’s true, no matter what the field is.”

- 11th Grade Student, Post-Program Focus Group

Organizational Capacities For Creative Learning

The Community Engagement Lab recently outlined a vision for developing creative capacities of Vermont students (Booth & Gambill, 2017). In this guide, the authors outline some key foundational aspects of a learning environment conducive to high-powered creativity-infused education. The VCSI Year 2 offers insights into two areas including establishing creativity-conducive environments and crafting effective partnerships.

Students build patterns of learning that are deeply ingrained, and creativity-conducive environments require different strategies for different developmental levels. In other words, what works for elementary grades may or may not be appropriate for older students. By the time students arrive in high school their assumptions about the nature of school are persistent. Among these are the notion that creativity happens in art classes and not in the core curriculum classes, especially mathematics and the sciences.

The vocabulary of creative engagement does not match students’ deeply held expectations about what is supposed to happen in school.

“Relevance across the curriculum is weak. I teach a world language and making the connection is/was difficult.”

- Teacher, Post-Program Questionnaire

Organizationally, teachers, especially those in the high school grades, are tasked with rearranging students’ deeply held assumptions.



“I loved working with the teaching artist, but at the high school level, we struggled a lot with buy in.”

- Teacher, Post-Program Questionnaire

Overwhelmingly, the VCSI teachers valued their common planning time and collaboration. Many teachers discussed the value they gained from their opportunities to work together to think about teaching and learning. One teacher stated unequivocally:

“This project would not have worked without the time you gave us to work with each other during the summer and the fall retreat.”

- Teacher, Post-Program Questionnaire

But they also clearly wanted more. Organizationally, a learning environment conducive for creative engagement requires experimentation, planning, and risk taking. It also means that teachers need the time to respond and make changes when there are problems. One teacher echoed many of her teachers’ struggles:

“This course was fantastic, but we invested so much time into it that it seems as though it should be a three-credit course just for the summer work and three more credits for the work during the year.”

- Teacher, Post-Program Questionnaire

Where is the additional pay-off for that investment to come, on the back end with more course credit for their relicensing? In extra pay? In decreasing other tasks to focus on this process? Future iterations of job-embedded professional development such as the VCSI should consider ways to transform the organization such that teachers do not perceive the efforts of their own learning to be just another add-on to the many other aspects of their work.

On the other hand the professional development supported teachers’ making changes to their practice that offered important partnerships both with the artists and among their colleagues. One teacher acknowledged what others found beneficial when she wrote the:

“Focused professional development over time is so beneficial, and having teachers collaborate on specific projects together keeps everyone connected and moving forward.”

- Teacher, Post-Program Questionnaire

Another teacher stated how difficult this collaborative work was organizationally:

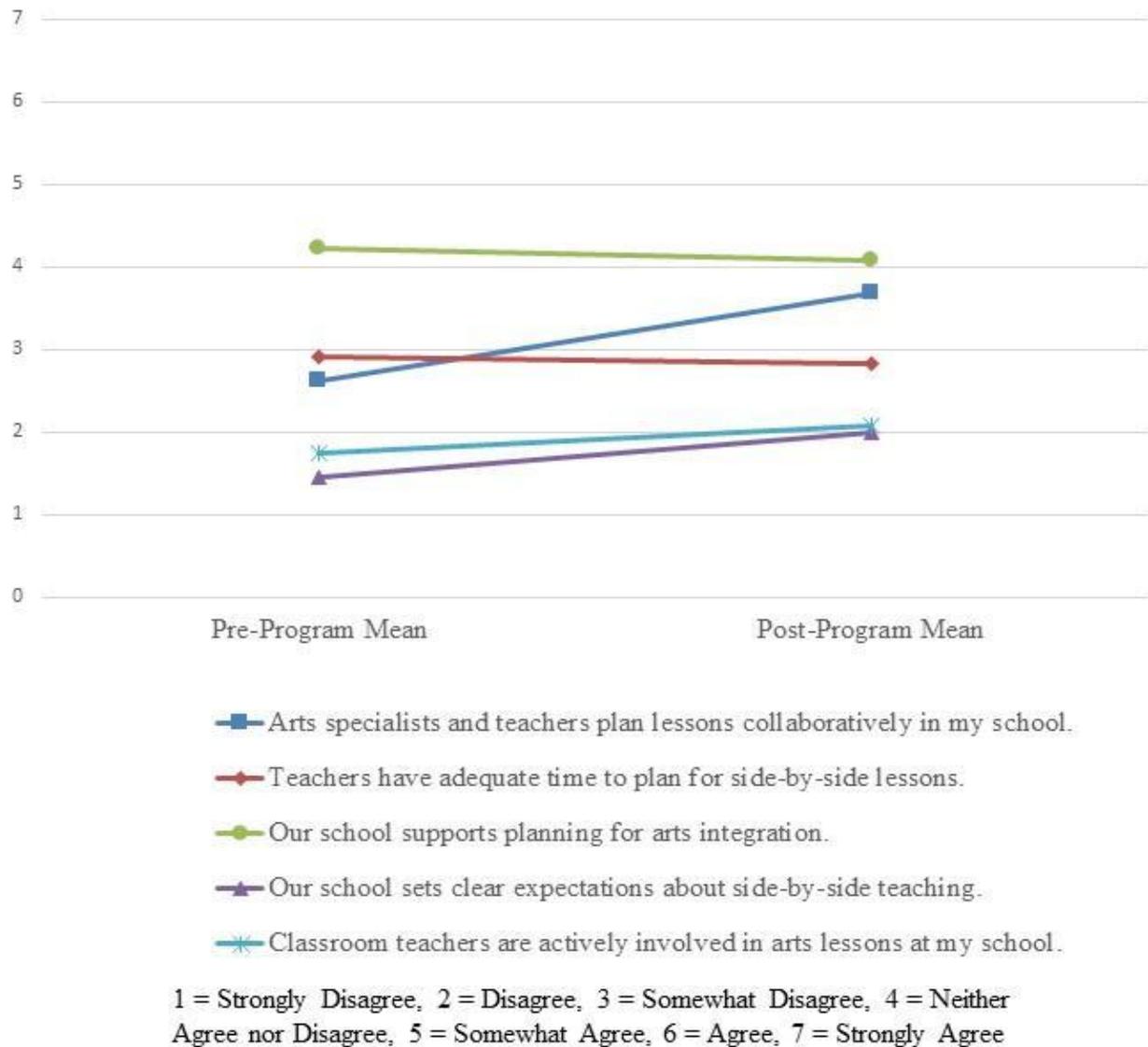
“Teacher collaboration would be a wonderful thing, and I enjoyed working with those teachers who are outside my field. Professional development would have to give/allow us time to create, test, and assess different lessons. One of our greatest issues in our VCSI project was not having common planning time except for small chunks periodically. Common class times would also have been useful and productive.”

- Teacher, Post-Program Questionnaire



Quantitatively, pre- and post-test results suggest that teachers look for support to create the conditions organizationally that allow for creative learning (Figure 7).

Figure 7: Change in Teachers' Perceptions about their School's Organizational Capacity for Arts and Creativity Integration



Organizational changes that facilitate creative engagement into the core curriculum include opportunities for side-by-side teaching, collaborative work time with arts-focused colleagues, and opportunities to plan for arts integration.

Artistic and creative leadership by teaching artists.

Responses from the parents, teachers, and students about the teaching artists overwhelmingly provided positive feedback on their work. Two teachers in post-program responses stated that the particular



teaching artist that they worked with did not match up to their proposed goals but overwhelmingly, teachers valued greatly their work with these teaching artists for their engagement and leadership.

Administrators universally praised the work of the teaching artists. They acknowledged the professionalism of these individuals. When asked directly to comment on the work these artists, administrators gave universal praise.

Table 1: Percentage of school administrators commenting on artist professionalism (n = 3)

Measure	Yes	No	Unknown
The artist followed school district policies and procedures.	100%	0%	0%
The artist was punctual.	100%	0%	0%
The artist was well prepared for each session.	100%	0%	0%
The artist was an effective role model.	100%	0%	0%
The artist was available at times other than the workshops.	100%	0%	0%
The artist was involved with the faculty.	100%	0%	0%

Tabulations by the Author

The artists discussed ways that the VCSI impacted their learning and how organizational support for their work would improve creativity-infused education. Teaching artists specifically highlighted their own learning around three big issues.

First, learning school cultures and systems takes time, and finding ways to learn about the hidden curriculum requires pre-planning and effort. For example, teaching creativity and the nature of schooling are often at odds. Improvisation is necessary for creativity. Scaffolds and structure are necessary for student learning (Vygotsky, 1978). Scaffolds and structure are a part of all schools but improvisation is not necessarily, so considering that context before rather than after entering the school might be helpful. Each of the teaching artists discussed their own flexibility in making adjustments to the structure of their schools. One teaching artist wrote:

“I forget how regimented an organization a school can be. I kept being thanked for changing and flowing due to ever-evolving circumstances, when I didn’t think I was doing anything remarkable. So keep flowing easily with change!”

- Teaching Artist, Post-Program Questionnaire

Second, the artists talked repeatedly about the differing dynamics between elementary schools and high schools. It is especially important, the teaching artists suggested, that the arts and creativity are not necessarily an engaging endeavor in and of themselves especially at the high school level. Ingrained assumptions about what is supposed to happen at school create challenges when looking for buy-in from students. One teaching artist wrote:

“The model for high school is completely different to the elementary model, and should be treated a little differently during intensives.”

- Teaching Artist, Post-Program Questionnaire



In part that difference may be that older children are not expected to act creatively, and in fact, it may be actively suppressed. Sternberg & Williams (1996, p. 2) suggested that creativity “may be harder to find in older children and adults because their creative potential has been suppressed by a society that encourages intellectual conformity.” Specifically, another teaching artist commented on the difficulty of integrating creativity and arts at the high school level when she wrote:

“I have often made the assumption that the art form creates a gateway for engagement with the curriculum subject matter. However, in this case I think the opposite was true for many students.”

She continued:

“In the artistic disciplines it does not work to be only partially committed. A large part is committing to what you are saying and doing. A student cannot present themselves in a half-hearted way. So, it was incredibly important that students were truly on board with our piece and part of its creation. It simply would not work to tell them that they had to do it. In younger grades student buy in is not usually an issue. At the high school level and in these particular classes it was enormous! What I really learned or am still wrestling with is in a discipline which requires buy in, how do you engage and hook students who are innately opposed to what you are offering? How do you create avenues for all to participate and learn in meaningful ways?”

- Teaching Artist, Post-Program Questionnaire

There are some possibilities for addressing this issue. The teaching artist above believed that showing students successful end results would help resolve these difficulties for students. In the cognitive apprenticeship model of education (Collins, Seely Brown, & Holum, 1991, p. 3), the key to helping novices think like experts is to “identify the processes of the task and make them visible to students.” Exploring the structure of end products opens up the production strategies necessary to get there. Another possibility with older students is to bridge the nature of creativity between the artistic discipline and the core content discipline. Sawyer (2015, p. 8) discusses the situated nature of learning that, “The consensus among creativity researchers is that although there are domain-general creative strategies, creativity is primarily domain specific.” The implication is that fruitful engagement might occur by highlighting how creativity occurs similarly or differently in the specific core disciplines and in the artistic disciplines. That is, we might see improved buy-in from high school students by showing them how scientists, mathematicians, and social scientists are creative.

Finally, the teaching artists talked specifically about their own learning regarding the importance of laying out roles for teachers and collaborators. All of the artists talked about how difficult it is to plan for side-by-side teaching and that sometimes they were left alone with students so that no connector to the school was available. In search of an avenue, one teaching artist suggested:

“A VCSI trained teacher always be present with teaching artist during teaching. In addition to being present, that teacher should be engaged in the learning as both a leader and a learner.”

- Teaching Artist, Post-Program Questionnaire



Ultimately, the importance of clarifying those roles is a key understanding that the teaching artists took away from this project.

Conclusions

Overall, the results from the Year 2 evaluation suggest that the VCSI has been primarily a positive experience for nearly all participants:

- Students generally saw the program as a unique opportunity afforded to them by teachers they admired for experimenting and by teaching artists under whose expertise and support they thrived.
- Teachers found the professional development to be a powerful learning experience that increased their confidence to integrate creative engagement and creativity into their classroom teaching.
- Parents of participating students were appreciative of the kinds of experiences that their children were afforded in this program. They reported important positive changes in their students' engagement in school and their personal development and growth as creators.

Finally, students generally saw the program as a unique opportunity afforded to them by teachers they admired for experimenting and by artists under whose expertise and support they thrived. Importantly, students and their teachers viewed their VCSI projects as a way to make a meaningful impact on their schools and communities. Participants made clear that the VCSI project resulted in the kinds of knowledge and skills embedded in the Vermont transferable skills proficiencies, especially the students' capacities to communicate clearly, to integrate and synthesize across disciplines, to creatively problem-solve, to become more self-directed, and ultimately to grow as responsible citizens.

As in Year 1, the VCSI in Year 2 was implemented across all school sites and among all teacher teams with fidelity. Again, investments made by teachers and schools for this professional development program resulted in robust collaborative, job-embedded professional development experiences and deeply engaging learning experiences at all sites. Major community- and school-wide performances and exhibitions were developed and implemented that incorporated all participating schools.

Additionally, one of the stated goals of the VCSI is to bring opportunities to students for whom artistic and creative learning are not readily available. The program was implemented at multiple levels and across multiple communities throughout the state. These findings suggest that the VCSI did follow through on its effort to implement a collective impact strategy to advance teaching and learning through sustainable capacity building within and across multiple organizations, as well as on the level of the individual practitioner (Kania & Kramer, 2011). The intervention continued to build momentum resulting in the cumulative statewide exhibitions and performances incorporating whole communities into the educational experiences.



The VCSI's final performances remain a source of strength even though they are the most time-consuming and stressful aspect to the program. Teachers especially voiced frustration with the logistical difficulties of connecting their work with a performance that highlighted a professional musician with their students built in as segments of the overall show. On the other hand, the performances excited participants, including many teachers, and offered powerful moments of academic and personal learning for students who gained confidence and school pride. Parents, administrators, and students all recognized these moments as a source of pride for residents in a community, especially students who often feel ignored from public proceedings.

Teachers reported that the VCSI was a powerful and engaging professional development experience that resulted in increased confidence for powerful cross-curricular teaching and learning. Prior research shows that effective professional development will lead to improved teacher knowledge and practice, which will in turn improve student engagement and learning outcomes (Yoon, Duncan, Lee et al., 2007). Teachers reported increased levels of confidence in implementing large, complex, and integrated cross-content curriculum.

All results pointed to deep and sustained collaborative work by teachers among themselves and with the community artists. Teachers desired more organizational resources such as time to plan for side-by-side teaching and opportunities to do so. The teaching artists were praised for their capacities to make connections between the creative process of their artistic domain and the core curriculum within which the creative engagement occurred.

Previous research (Rabkin and Redmond, 2004) described by Ludwig and her colleagues (2014, pg. 3) suggests six key features of good arts integration education. Based on results from all stakeholders, the teacher-artist team linked an art form and an academic discipline in deep ways. The teachers' pre- and post-program results indicate that they became more fluent in the artistic disciplines. The content of the curriculum included material related in meaningful and direct ways to students' experiences.

Students reported in focus group interviews that the VCSI experience afforded them the opportunity to direct their own learning and find their passions and unknown interests.

Teachers incorporated basic skills and vocabulary of the artistic disciplines and creativity into their work. All of the units culminated with an artistic performance or exhibition. These results suggest that VCSI did, in fact, incorporate the key features of effective arts integration and creative engagement in education.

Across all participants in the evaluation, the strength of the teaching artists as teachers, creators, and models of creative engagement and community building emerged as a consistent theme.

Universally, the teaching artists participating in this project were perceived to be highly invested in the work that teachers and students were doing. Individually and as a group, they modeled integrative thinking and creative work for students, explaining and engaging the insights of their disciplines while finding unique paths for cross-curriculum integration, student engagement, and deep experiential learning opportunities.



All stakeholders also valued the opportunity to work closely with a world-class musician such as John Jorgenson. Teachers voiced frustration only when they thought their project did not match their desired goals or their own skills, but these responses still highlighted the skills and dedication of the teaching artists.

The Year 2 VCSI provided valuable supports to schools across the state of Vermont to support students' engagement and achievement, especially those in low-income areas who often lack resources and instruction needed for creative work (Catterall, 2009).

With the ongoing implementation of Act 77, teachers, schools and community leaders are going to require professional development and resources that support Vermont's move to personalized learning, proficiency-based assessments and a new focus on the transferable skills of creativity, critical thinking, communications and collaboration.

Developing students' creative capacities through innovative educational opportunities like the Vermont Creative Schools Initiative offers a fruitful avenue to achieve those goals.



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Appendix A: VCSI Year 2 Evaluation Methodology and Technical Results

Data Collection

Here we present a brief overview of the evaluation and data collection activities. The Year 2 evaluation included interviews, focus groups, surveys, video analysis, and analysis of student work and teacher plans. Schools were located in Washington County (Cabot School Board, Harwood Unified Union School District, Montpelier School District, and Washington Central Supervisory Union), Lamoille County (Lamoille South Supervisory Union), Essex County (Essex-Caledonia Supervisory Union), Orange County (Orange Southwest School District), and Caledonia County (St. Johnsbury School District). As in Year 1, no attempt has been made to make comparisons of any kind either within schools or among them.

Teacher Plans: Reviewed Lesson Plans ($n = 27$), Reviewed Unit Plans ($n = 7$). All teacher teams and each individual teacher were required to complete two lesson plans for their integrated units and to develop a complete unit plan in collaboration with their artist partners. As part of the evaluation, 27 lesson plans and all seven unit plans were reviewed and analyzed for patterns, themes, and shared practices.

Interviews and Focus Groups: Students (8 events; $n = 80$). The evaluation team completed the focus group interviews with a group of students at the completion of the artist residency periods. All focus group interviews occurred one or two weeks following the final performance or exhibition. Focus group interviews ranged from 20 minutes to 37 minutes for a total of 289 minutes of student perceptions. The researchers completed focus group interviews at all sites and for all curriculum units. During the focus group interviews, the researcher used semi-structured interview questions with students and also audio-recorded and transcribed the interviews that were ultimately coded into themes and patterns.

Direct Field Observations: Visits ($n = 7$). The evaluator completed the observations with a research assistant at multiple points during the artist residency periods. Three observations occurred early in the artist residencies during the first or second co-taught lessons. Three other observations occurred during later lessons such as dress rehearsals. Observations ranged from 60 to 180 minutes with an average observation time of 120 minutes for a total of 840 minutes of direct observations. The researchers visited all sites and observed the implementation and co-teaching of 7 of 8 curriculum units. During the observations, the researcher used semi-structured interview questions with artists, teachers, and students and recorded field notes that were coded into themes, practices, and patterns.

Post-Program Surveys including Open-Ended Questions: Teachers ($n = 18$), Artists ($n = 4$), Administrators ($n = 3$), Parents ($n = 83$), and Students ($n = 230$). All VCSI participating teachers were asked to complete a pre-program and post-program survey. Thirteen teachers completed both a pre-program survey at the outset of the summer intensive and a post-survey after their final performance and the student focus group in which researchers were able to match teacher data between the two questionnaires. An additional five teachers completed a post-program survey in which teachers were asked about their knowledge and practice of arts standards, instruction, and assessment, as well as their perceived efficacy to integrate the arts into their curriculum. The post-program survey also queried teachers' satisfaction with the professional development program. The survey included both closed- and open-ended items.



All participating school administrators were asked to complete a post-program survey. Three school administrators completed post-program surveys about their understanding of the impact of the program on students, teachers, and their school's climate. The post-program survey also queried administrators' satisfaction with the professional development program. The survey included both closed- and open-ended items.

All parents/guardians of students participating in VCSI programming were asked to complete a post-program survey. Eighty-three parents with representation from all sites completed post-program surveys about their understanding of the impact of the program on their children's academic learning and capacities for creative problem solving. The survey included both closed- and open-ended items.

All participating students were asked to complete a final set of short answer reflection questions about their understanding of the impact of the program, their artistic and creative learning, and their perception about the ways that this program changed their understanding of their own learning and school in general. 230 final reflections/post-program surveys were received from students across all sites and all grade levels.

All participating teaching artists were asked and completed a final set of short answer reflection questions about their understanding of the impact of the program.

Data Analysis

Descriptive statistics were calculated for all the quantitative items on the pre- and post-program surveys (See Table 1 and Table 2). One-way ANOVAs were conducted to examine the differences between the pre- and post-program measures for teachers. In order to protect against Type 1 errors, all one-way ANOVAs were evaluated at a higher threshold ($p < .15$). Graphs and tables were prepared to illustrate the combined results for all items. To analyze the qualitative data, a multi-step process was carried out in stages outlined in Vermont Creative Schools Evaluation Blueprint (Stroup, 2015). All data in this evaluation are reported at the aggregate level (i.e., parents, administrators, teachers, students, etc.).

Table 1: Pre- and Post-Program Change in Teachers Perceptions (N=13).

Measure	Pre-Program Mean (SD)	Post-Program Mean (SD)	F (1, 25)	Sig.
I know how to sustain student creativity and arts-integration over a long period of time	3.54 (1.81)	5.38 (1.56)	7.783	$p < .05$
I can teach a diverse group of learners how to be creative and/or incorporate the arts into their products and projects	3.77 (1.83)	5.23 (1.36)	5.321	$p < .05$
I understand how to make a learning environment conducive for creativity.	4.69 (1.75)	5.38 (1.39)	1.249	None
Arts specialists and teachers plan lessons collaboratively in my school.	2.62 (1.66)	3.69 (1.44)	3.128	$p < .10$
Teachers have adequate time to plan for side-by-side lessons.	2.92 (1.44)	2.82 (1.25)	0.036	None



Measure	Pre-Program Mean (SD)	Post-Program Mean (SD)	F (1, 25)	Sig.
Our school supports planning for arts integration.	4.23 (1.48)	4.08 (1.80)	0.057	<i>None</i>
Our school sets clear expectations about side-by-side teaching.	1.46 (0.88)	2.00 (1.35)	1.448	<i>None</i>
Classroom teachers are actively involved in arts lessons at my school.	1.75 (0.93)	2.08 (1.61)	0.358	<i>None</i>
Student artistic and creative work transforms our community.	5.69 (1.66)	6.08 (0.76)	0.612	<i>None</i>
Student artistic and creative work encourages a sense of community among students and community members.	6.08 (0.95)	6.00 (0.71)	0.055	<i>None</i>
Student artistic and creative work can improve authentic community issues.	6.00 (1.15)	6.23 (0.60)	0.409	<i>None</i>
Student artistic and creative work is essential to strong civic engagement in our community.	4.62 (1.71)	6.08 (0.95)	7.244	$p < .05$
Student artistic and creative work is essential to the economic vitality in our community.	4.69 (2.02)	5.69 (1.38)	2.181	$p < .15$
Student artistic and creative work is essential to developing open and inclusive dialogues among people with political differences.	5.00 (1.63)	5.23 (1.36)	0.153	<i>None</i>
Student artistic and creative work enhances the reputation of our community.	5.85 (1.07)	6.46 (0.78)	2.824	$p < .10$
Integrate state arts standards at my students' grade level(s).	2.31 (1.75)	3.69 (2.21)	3.130	$p < .10$
Employ techniques for using works of art as an educational tool in other curricular areas (e.g., language arts, math, and science).	2.69 (1.65)	3.85 (2.41)	2.027	$p < .15$
Develop questions for students to engage in inquiry based learning as part of your arts instruction.	3.00 (1.58)	4.00 (1.83)	2.229	$p < .15$
Teach students to reflect on their own artistic work.	2.62 (1.39)	4.31 (2.21)	5.459	$p < .05$
Design lessons where students create works of art.	3.54 (2.44)	4.85 (1.99)	2.243	$p < .15$
Select existing assessments to use in your classroom for monitoring students' arts skills/ knowledge.	2.62 (1.45)	4.15 (1.72)	6.076	$p < .05$
Use student assessment results to plan and refine your arts instructional practices.	2.54 (1.05)	4.31 (2.10)	7.399	$p < .05$
Use assessment results to help select arts instructional materials.	2.31 (1.65)	3.85 (1.86)	4.959	$p < .05$



Measure	Pre-Program Mean (SD)	Post-Program Mean (SD)	F (1, 25)	Sig.
Artistic perception (i.e., ability to understand and communicate about key visual arts concepts).	3.38 (2.22)	4.85 (2.19)	2.854	$p < .10$
Artistic Analysis (i.e., analyzing and making judgments about works of art).	2.46 (1.76)	3.77 (1.74)	3.628	$p < .10$
Coordinate your curriculum with Vermont's Transferrable Skills.	4.92 (2.18)	6.38 (0.96)	4.900	$p < .05$
Clear and effective communication (i.e. demonstrate organized and purposeful communication).	5.23 (1.42)	6.15 (1.14)	3.323	$p < .10$
Self-direction (i.e. identify, manage, and assess new opportunities related to learning goals).	5.23 (1.54)	6.08 (1.12)	2.584	$p < .15$
Creative and practical problem solving (i.e. observe and evaluate situations in order to define problems).	5.23 (1.36)	6.31 (0.85)	5.822	$p < .05$
Responsible and involved citizenship (i.e. participate in and contribute to the enhancement of community life).	5.38 (1.61)	6.15 (0.90)	2.265	$p < .15$
Informed and integrative thinking (i.e. apply knowledge from various disciplines and contexts to real life situations).	5.15 (1.34)	6.15 (0.55)	6.145	$p < .05$

Table 2: Post-Program Teachers', Administrators', and Parents'/Guardians' Perceptions that VCSI Participation Benefited Students.

Measure	Teachers (N=17) Mean (SD)	Administrators (N=3) Mean (SD)	Parents (N=83) Mean (SD)	Artists (N=4) Mean (SD)
Participation in the VCSI program has had a positive impact on students' academic achievement.	2.94 (0.75)	3.33 (0.58)	2.98 (0.71)	2.00 (1.41)
Participation in the VCSI program has had a positive impact on students' creative thinking skills.	3.53 (0.51)	3.33 (0.58)	3.12 (0.73)	4.00 (0.00)
Participation in the VCSI program helped students feel better about themselves.	3.06 (0.83)	3.33 (0.58)	2.99 (0.77)	3.33 (0.58)
The VCSI program allowed students to discover new talents.	3.12 (0.70)	3.33 (0.58)	3.03 (0.73)	3.75 (0.50)
Participation in the VCSI program increased students' enthusiasm for school.	3.18 (1.01)	3.33 (0.58)	2.99 (0.75)	3.33 (0.58)
Participation in the VCSI program allowed students to acquire a greater appreciation of the arts.	2.94 (0.66)	3.33 (0.58)	3.16 (0.68)	4.00 (0.00)



Measure	Teachers (N=17) Mean (SD)	Administrators (N=3) Mean (SD)	Parents (N=83) Mean (SD)	Artists (N=4) Mean (SD)
Participation in the VCSI program helped students develop the ability to work together cooperatively.	3.53 (0.62)	3.00 (0.00)	3.14 (0.71)	4.00 (0.00)
Participation in the VCSI program gave students skills that they will be able to transfer to other projects.	3.25 (0.58)	3.33 (0.58)	3.08 (0.73)	3.75 (0.50)

SOURCE: Tabulations by the Author.