

Ahead in Air

Active Learning through Aerial Dance

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Abstract

Young children interact with the world physically as gymnasts, athletes, and dancers creating imaginative play. Provided the skills, resources, and the chance to express themselves, what kinds of kinesthetic understanding would children ages 6-11 create and learn for themselves within aerial spaces? Supported by the muscular strength of their teacher along with ropes, harnesses, and cables, children create 3-dimensional expressions of their relationship to the space in the Ahead in Air curriculum.

This public school-university partnership demonstrates young children's artistry beyond the expectations of traditional dance education curricula. Foremost in the Ahead in Air curriculum is the investigation of geometry of space and the development of communication skills, collaboration, and trust. Working with a trained aerialist, dance educators, and their university professor, twelve pre-service dance educators from the University of South Carolina participated in this unique practicum experience as part of their teacher certification coursework.

Keywords: Aerial dance, children, dance education

Introduction

Elementary school children are dangling from ropes performing aerial extensions, arches and spins celebrating their skills as gymnasts, dancers, artists and athletes. They are using every inch of the space around them stretching, bending, twisting and soaring in space. They are communicating, problem solving, working together and defying gravity as architects of space.

Dance is identified as aerial dance when it uses special apparatus, ropes, wires and harnesses to support the performers in the air. Aerial dance is a relatively new form of dance. It has been in practice since 1970s and is credited to the invention of professional dancer Terry Sendgraff.

Sendgraff, known for her low trapeze works produced a blending of dance and the circus elements. Sendgraff is the inventor of the single-point trapeze, an apparatus where the two ropes of the trapeze connect to a single attachment point, which allows an element of spinning as well as swinging.

Aerial dance has grown in popularity over the past thirty-five years. Currently there are aerial dance festivals and aerial dance studios which specialize in aerial fitness including working with trapeze, fabric, bungee and hoop and other with a more artistic, whole body approach focusing on body centering and flow, economy of movement, and choreography and aesthetics.

Additionally there are performing aerial dance companies, such as Project Bandaloop, which has been creating aerial dance since 1992. Project Bandaloop is known for a thrilling style of dance climbing in natural and untraditional spaces such as on the side of mountains, on bridges and between skyscrapers. Amelia Rudolf directs Project Bandaloop dance company which offers workshops, school programs and aerial dance performances using vertically dynamic

environments (Thomas, 2001; Browning-Blas 2010) to support skills of artistic collaboration and trust (Hunt, 2011). Aerial work can present engaging interactive environments for learners to explore, encourage active participation, teamwork and exchange, and can be a highly effective tool in teaching complex concepts and ideas (Hunt, 2011; Schreiber, 2004).

There is a growing body of research praising the value of critical thinking and creative problem solving found in dance. Multiple intelligence theory supports learning fostered through movement and collaborative learning, and further demonstrates that dance can be a powerful tool with the potential for transforming the learning experience (Armstrong, 2000; Rubado, 2002). Studies carried out by Howard Gardner with Project ZERO at Harvard University (Wolf et al. 1991; Fowler, 1996) using multiple intelligence theory have indicated a range of positive effects on learning, illuminating learning goals in the arts (Eisner 2002; Paulson 2010) that include creative readiness and social competencies such as communication, collaboration, and creative thinking in the arts (Deasy, 2003; Paulson 2010; Sterman, 2010; Barone 2001; Gage, 2012).

Insert Figures 1-2



Current back to basic educational initiatives have decreased the number of hours students spend in physical activity or involved the arts within the school day (Marshall & Hardman 2000; DeCorby et al, 2004). Further, budget cuts in many public schools mean schools are now unable to provide opportunities for hiring specialists or for training classroom teachers in methods of integration of kinesthetic expression and creative problem solving through the arts. Further, working within the demands of district, state and national curriculum initiatives and “teaching to the test” philosophies (Popham, 2001), few teachers are able to find the time and support to investigate creative, inquiry based, interdisciplinary and kinesthetically infused instruction found in twenty-first century best practice learning initiatives (Higgins et al., 2011).

The kinesthetic experience is further diminished when students return home from school and get “plugged into” a “digital babysitter” of TV shows, computer video games and online social networking. These activities further prioritize the digital experience above the physical experience (Kim & Lee, 2009; Janssen et al., 2005) While researchers have identified several interactive videogames, such as the Wii Fit, which are designed to help students build kinesthetic connections and support an active lifestyle (Graf, 2009; Graves et al, 2008; Graves et al, 2007), Ahead in Air believes the games too are kinesthetically limiting and often solely gestural, requiring little cardiovascular activity. The goal of Ahead in Air is therefore is to work with elementary school teachers and their students to investigate kinesthetic and creative teaching and learning opportunities for aerial dance and to develop and share practical strategies for use in the primary grades.

For the majority of public schools in the United States with limited budgets, diminished

resources and field trip restrictions there are practical challenges to implementing the project. Climbing walls, while found in some school cafeterias are large and expensive to install, and professional climbing facilities, found in health clubs and community centers, require costly transportation to and from the school. Playground equipment and the outdoor shade coverings presented a viable opportunity to explore and deliver the aerial dance curricula in the schools. After much investigation Ahead in Air selected to use the covered sports court, the Ramada shade covering and other playground structures for our aerial program.

Ahead in Air: Aerial Dance Research questions

Young Aerialists

- Provided the skills, resources, and chance to express themselves, what kinds of kinesthetic and geometric understanding would children ages 6-11 create for themselves?
- What kind of learning can emerge within such aerial dance works?
- What kind of social development emerge within such aerial dance works?

Pre-service Teachers

- Provided the training and support for aerial dance practicum, what kind of learning is fostered?

Ahead in Air is a university-school partnership designed to support children's aesthetic and kinesthetic awareness as well as the realization and evaluation of Aerial practicum instructional units. Ahead in Air also served as a teaching practicum for University of South Carolina Dance Education (USC-DE) students. Hands-on practicum experience supports the value and principles of constructivism for teacher education (Vygotsky, 1978; Von Glasersfeld, 1989; Gamoran et al,

2000) and the implementation of constructivist approaches for special needs students (Schirduan and Case, 2004; Armstrong, 2000, 2009). Further, the Ahead in Air curricular progression enables students and teachers to discuss issues, implement instruction and evaluate their pedagogical practice.

Constructivist theory views students as actively involved in the construction of their own representations of knowledge. Students build on past learning and define new knowledge by connecting previous and newly acquired ideas, concepts and thinking, leading to the development of new ideas. In so doing, we considered the role of the learner, the environment, and the knowledge construction process in the development of the curriculum (see figure 1-2). Specific theoretical principles of constructivism (DeVries, 2002) guided our process, which include:

- The collaborative group process is emphasized.
- Students are encouraged to reflect on their own process.
- The learning should be relevant to the students' lived experience.

Additional pedagogical constructs guiding this research include the importance of kinesthetic problem solving and self-expression as the result of creating art (Gardner, 1983, 1999, 2000; Armstrong, 2009) and the belief that collaborative problem solving and community is critical to learning (Vygotsky 1978, Karpov & Haywood, 1998).

Ahead in Air cultivates a climate where artistry, collaboration and communication are critical for project completion. Ahead in Air calls for the elementary school students to become the

directors, choreographers, performers and evaluators of the program. In so doing, Ahead in Air seeks to assess the student's collaborative thinking and problem solving in the discipline of aerial dance, and student knowledge construction from participation in the process.

Using encouragement and verbal cues, pre-service teachers guide elementary students toward engaged and personally meaningful expression of their ideas. In daily activities pre-service teachers describe what they see and encourage elementary students' innovation and exploration. Ahead in Air calls for the university students to work one on one with the elementary students; pre-service dance education students develop skills of clear communication and effective directives as well as application and the articulation of dance content in terms of Body, Effort, Space, Shape and Relationship.

The Ahead in Air curriculum was designed to connect USC-DE student coursework in their major to their future profession and to support student's ability to make a direct connection between theory and practice in dance education. During the program, university students maintained journals to assess their effectiveness leading the aerial dance activities under the following criteria: communication, inspiration, engagement and articulation. Daily wrap-up focus group discussions supported the exchange of ideas and were applied immediately, resulting in greater depth of subsequent reflection and observations. This practice led to the introduction of inquiry, feedback and problem solving strategies and was considered a valuable practice by the students. Communication, inspiration, engagement and articulation have all been identified as critical components of effective and successful teacher education (Schlaich, 1993; Gray, 1996; Penrod & Plastino, 2004; and Mirus, 2004).

Round Top Elementary school is a K-5 public school in located in Blythewood, South Carolina. Blythewood is a 30-minute drive north of the state capitol in Columbia. The Ahead in Air partnership involved over one hundred and twenty children in second through fifth grade, their teachers and twelve USC-DE students from the University of South Carolina.

Round Top Elementary School is an ABC school with unique arts and science initiatives. Students have PE once a week and the opportunity to learn foreign language, computer applications, and experience three art disciplines (art, music and dance) during in the school day. The Round Top school curriculum centers on literacy, science and technology, interdisciplinary instruction and critical thinking skills. As an ABC school they have additional state funding to support educational research initiatives such as Palmetto Writing Initiative and the CLEAN environmental advocacy. The student body is 66 percent white and 28 percent African American with 21 percent students receiving reduced or free lunch and 12 percent identified ESL learners and special needs students. Ongoing issues in the surrounding community are similar to other communities just outside urban centers of crime, poverty, and drugs.

The University of South Carolina is the largest university in South Carolina with multiple campuses and over 45,000 students. The Dance Program offers a BA in Dance Education with K-12 teacher certification. USC-DE students enter the certification sequence as a cohort with extensive focus on service learning, research and practicum experiences in the schools. Ahead in Air USC student participants were enrolled in methods courses on dance pedagogy for children and final practicum studies prior to student teaching. The Ahead in Air partnership was made

possible by funding from an Arts Initiative grant from USC and an ABC Grant from the State of South Carolina.

In preparations for the Ahead in Air partnership, USC-DE students met with Nicole Hardenberg, the dance specialist at Round Top in order to learn about her curriculum, school, community, and students interests. As none of the USC-DE students were previously trained in aerial dance, they trained at a climbing facility with aerialist, climber, and professional dancer Eddie Ramirez (see figure 3-6). Ramirez worked with Project Bandaloop, one of the premiere performing aerial dance companies in the nation. USC-DE students learned about rigging, dynamic alignment balance and counterbalance while suspended in the air, the developing upper body strength and pelvic grounding. For over 30 hours they worked in teams getting physically prepared in order to support the younger students in the air. Over the course of the sessions with Ramirez they not only learned about safety and the equipment, but also explored partnering, improvisation, and choreography.

Insert Figures 3-5



The USC-DE students viewed, analyzed and discussed videos of aerial dance and shared concerns. Working closely with the teachers and specialists, a timetable was created that would coordinate with the USC-DE student pedagogy courses, school calendar for state tests and the USC-DE students schedule in order to encourage maximum participation by all partners. In terms of instruction preparations, the USC-DE students sharpened their skills of motivation for creative invention and studied the existing RoundTop dance curricula to understand what the students’ focus should be on in terms of dance structures and the Laban framework of Body, Effort, Space, Shape, and Relationship.

Our Ahead in Air sessions were fifty-five minutes with 20-25 students in each class. In order to efficiently deliver the content and provide optimum access to the aerial dance experience, four aerial suspension stations were created. To maximize the students’ time in the air and with specialists, students completed journal entries in their homeroom classes directly following the aerial session. Classroom teachers identified interested students for small focus group interviews, and upon completion of the research larger focus group interviews were conducted.

Insert figure 6 -7



Curricula

Ahead in Air leaders approached the curriculum as a creative yet flexible plan guiding the children.

The Ahead in Air partnership incorporated both traditional dance “done on land” combined with non-traditional dance “done in the air” in the curriculum. Curricular planning decisions were done as a team which allowed the sequence of activities to be informed by student interest, daily progress and the brainstorming session with the specialists and USC students following each session.

Participants used skills in aerial dance arts in combination with traditional dance activities such as shape relationships, shape forms, and the sequencing basic movement actions, initially within the context of improvisation and then extending them into choreographic forms. One of the primary goals of the project was to see what was possible in this environment. The team felt it was essential for the students to establish a sense of ownership of their creations and to allow each group of students the freedom to determine the theme and form of the final dances.

As preparation, students worked together in small groups, first watching partner demonstrations by specialists and then trying it out for themselves. Ahead in Air moved through the stages of creative process from observation, investigation, organization, discussion, creation, followed by more planning, designing and sharing, discussing, editing, and eventually performing and reflecting. This pedagogical method was effective for the third through fifth grade students; however, the second grade students needed additional assurance and guidance from the USC student leaders and aerial specialists. The second grade work was almost exclusively

improvisational in nature.

Integrating the Ahead in Air program within the context of classroom curriculum and familiar dance activities helped the students to establish a sense of ownership and allowed their creations to become personally meaningful for them. Using an interdisciplinary and collaborative model, Ahead in Air specifically aimed at identifying the ways in which students use aerial dance as an expression of imagination, problem solving, and their connection to geometric space, while making connections to science themes such as gravity, motion, action and reaction, and dynamic alignment in space.

Further, Ahead in Air examined how working in this non-tradition performance space informed the students' development of communication skills and support for collaborative learning and collaborative trust strategies. The Ahead in Air partnership focused on creating situations where children had to listen, observe, take initiative, and work together. Students considered the power of gravity, motion, action and reaction, and dynamic alignment in space while making connections to the environment, science, and collaborative trust.

Developing the Project

In aerial dance, you use every inch of the space around you while stretching, bending, twisting and soaring in space. Ahead in Air preparation and planning began in 2009 and was implemented in spring 2010. Hardenberg, a professional dance educator at RoundTop Elementary schools and Dr. Parrish, the Director of Dance Education at USC, discussed the possibilities of a unique community partnership investigating the potential of aerial dance in the

schools. With funding sources secured and Ramirez, a professional dancer and aerialist on board, the aerial dance initiative could be realized.

The dance curriculum at RoundTop Elementary school includes weekly dance classes; therefore students were familiar with Laban concepts of Body, Shape, Space, Relationship as well as concepts of collaboration, improvisation, and choreography. In preparation for the partnership Hardenberg introduced the work of Pilobolus Dance Theatre and discussed positive and negative space and responding to and reacting to a partner.

Parrish was eager for many students to participate in this one-of-a-kind community partnership; she therefore integrated Ahead in Air into the practicum sequence for two of her dance education methods courses: Methods of Teaching Children Dance and Integrated Curricula. USC-ED students were familiar with the conceptual elements of dance, constructivist pedagogy, curricular integration, twenty-first century learning goals, and developmental learning. Additionally, their training with Ramirez in aerial instruction, safety precautions, stance and muscular control, harnessing, support and suspension gave them a solid foundation for the partnership.

Each Ahead in Air class began with a demonstration of aerial dance and a discussion of safety precautions. Working in small groups, USC-DE students and Ramirez would set the harness for the elementary students and calm nerves before “flying.” This was a critical step as it helped the leaders learn the names of the children, assess anxiety levels and assess the students’ ability to listen. This moment of stillness and focus before soaring into space and the relationship it created was a critical building block for the youngsters establishing trust (see figure 8).

As the students became more self-assured in the aerial space, they were encouraged to feel core support, and to organize and stabilize their body. Once this step was attained they were encouraged to investigate kinesphere reach space by making big shapes, and dynamic alignment by finding balance between what the right and left sides of their body were doing (see figure 11). Once dynamic alignment and body control was attained, students were encouraged to focus on shape making and shape sequencing. This was a fluid transition from skill to skill and it appeared that with each rotation the students had grown exponentially.

Insert figure 8-9



The students' initial creations were interesting but did not express their knowledge of dance. The Ahead in Air team quickly realized that we needed a way to communicate and to describe the aerial dance movement to encourage student exploration. This was challenging, as there were many things for the USC-DE students to attend to ensure the safety of all participants. USC-DE students were unsure what to say and what the students needed to hear. After our first 55-minute session with the children, it became clear that the USC-DE students needed to communicate what they were seeing to the students in familiar dance terms such as stretch, twist, shrink, round

shape, etc.

The Laban Framework of Dance was relatively new for many of the USC-DE students, so at first they struggled with finding and applying the language correctly in order to guide the students' problem solving activities in the air. Working together to try out new relationships in geometric space, USC-DE students guided the students by verbalizing the concepts of Body, Shape and Space, with directives such as, "explore the ways you can make a round shape." "What happens when you tilt and twist that shape?" With practice, describing dance movement ultimately became an invaluable tool for describing both what was being observed and what to explore (see figure 10).

Another benchmark early in the program was the young aerialists' ability to find and hold their balance in inverted shapes and the body control to transition from shape to shape. Socially, this benchmark centered on the development of listening skills, confidence in themselves and trusting their USC pre-service guide (see figure 8-11). Motivating children to move past their comfort zone and to try new things in the air was a challenge. Affirmations like "good job," were not effective, perhaps because they are so commonplace they went unheard. Feedback and specific praise provided useful information about what happened, what worked, and why it worked, which encouraged the students to think critically and to make conscious decisions about their work. Another benchmark for USC-DE students was their ability to use specific and effective words of encouragement and praise such as, "That was a wonderful big X shape", or "Wow! I have never seen that type of shape before; it reminded my of ____" to the aerial students.

Insert figures 10-11



Because only four students can be in the air at once, there was a lot of time where children were waiting their turn. In order to encourage focus, observation skills, and active participation for the waiting children, the Ahead in Air small group leaders discussed with the children things to look for and remember in each other's aerial dances. Also, waiting children were given digital cameras to take photos of their fellow aerialists in order to document the experience.

At the beginning of each day the Ahead in Air team discussed what happened, what worked, and what was a challenge with the students. By taking the time to prepare, actively participate, and reflect on the aerial experience within the process, the children were able to discuss and recall each other's achievements in great detail. Many students were able to attain a level of collaborative interplay that we had not yet considered possible.

However, not all students were able to maintain focus during the activity. Some students were able to sustain focus longer than others and some USC-DE teachers were more capable of managing their students, encouraging focus, and developing effective communication with the children than others. It became clear that additional strategies needed to be developed.

Imagery

The next stage in the Ahead in Air program was the integration of evocative language and imagery as creative stimulus. Imagery requires visualization, concentration and imagination.

Imagery in the dance experience provides a source for inspiration and a conscious way of expressing movement, which can be particularly helpful when working with younger students and those individuals with limited vocabulary in dance.

Insert figures 12 -13



In this stage children respond to evocative language, which in turn informs their movement choices in the air. Examples of imagery directives the USC-DE students used include, “Show me a powerful shape,” or “Show me a flat pancake shape...remember it is round, soft and hot with lots of syrup,” or “Can you show me the feeling of sunshine glowing all around you.” Imagery in the context of aerial dance was an unexpected and a very effective and creative way of directing the children toward new and highly personalized ways of moving.

After the children created responsive movements to the teacher's words, they made lists and developed their own imagery as inspiration to guide their own and each other's movements. By creating their personal imagery such as, Spiderman, butterflies, snowflakes, flowers, and frogs, not only did the students make powerful connections to the meaning behind their movement choices, but it also served to express a greater variety of interpretations and more 3-dimensional embodiment representations of the imagery (see figure 13).

Partnering

The final theme addressed in the Ahead in Air curricular unit was partnering. Partnering and relating to others is very important in dance, as it requires communication, listening skills, problem solving, and respecting the needs of the dancers in the air.

The goal of the partnering activity was creating a duet with one dancer on the ground and the other in the air. This was challenging for young dancers, as the person dangling is not in control of the movement; they are being tilted, turned and swung by the other person. Before entering this stage in the Ahead in Air program the team leaders discussed respect, touching, and caring for your partner.

The partnering sessions began with children being partnered with university students to demonstrate relationships, and the clear concepts of under, around, over, near, far, and negative and positive space. In small groups each student created a short dance with the USC-DE students. After sharing these initial partner dances, it became clear that close and respectful relationships between the children and the USC-DE students had been created. Both the children

and the USC-DE students enjoyed the activity as it provided a shared personal experience. This was one of the most highly discussed stages in the students' reflection journals. Dancing together with a "real professional dancer" who moved them safely, smiled, complemented their movements, and helped make beautiful complementary shapes gave the students a sense of purpose and personal commitment. This success was an essential step before the students proceed into their final dances.

To prepare for the partner dance, the USC-DE students discussed rules and options with the children regarding dance themes, relationships, and imagery. When it was clear that the rules of safety would be adhered to the children were free to employ their considerable skills of improvisation and new ideas were realized. However we began to notice that the students' ideas would quickly shift to another theme morphing from one theme to the next. For example, the students would begin with the theme of water and then when interesting movement options happened the students would transform into fish and moments later transform again into dolphins. The cognitive transformation of ideas from theme to theme in the dance-making process demonstrated the students' search for unique forms of meaning. It was remarkable to see.

Ahead in Air classes discussed the intersection of interdisciplinary and dance content themes, particularly science and cultural themes. During the Ahead in Air residency USC-DE students spent time with the students, analyzed the kinesthetic and developmental differences among grades, identified successful and unsuccessful creative problem solving methods, and developed evocative language for later use in non-aerial classes.

Assessment

The five aerial dance sessions were designed to support critical competencies necessary to create personally expressive aerial dances. The sequence of sessions supported the acquisition of basic aerial dance tools of how to balance and establish dynamic alignment, create and sequence shapes, use imagery as inspiration for dance making, and communicate and relate to a partner safely, as well as communication skills necessary to exchange ideas.

Multiple methods of assessment were used to provide a data record. The Ahead in Air team worked together to develop and implement a range of assessment strategies: e.g., peer and self-assessment, critique, portfolio, and video analysis. The children were an active part in the assessment process. Ahead in Air projects and assignments were designed to support knowledge of the expressive possibilities in a kinesthetic aerial dance artistic experience. Daily journaling, focus group interviews and brainstorming sessions with the children and USC-DE students informed the curricular planning and provided valuable accounts of the RoundTop Elementary school students and the USC-DE students' experience. Photographs and videos of the process, aerial dance improvisations, choreography, performances and interviews were analyzed for emergent themes.

It was anticipated that both the children and the USC-DE students would struggle with the physicality, communication, focus and limitations of time. Specifically, the USC-DE students struggled with the rigor of physically hoisting the children while at the same time guiding the children verbally through the Laban movement framework and using imagery to guide improvisational responses. One USC-DE student described the challenge: "trying to move a

piano as you continue to play the piano.” However, the daily sense of accomplishment served to motivate all participants to persist and to push past the immediate challenges. It was fascinating to see the level of closeness and community formed each day in the process of problem solving, refining, analyzing, describing, and re-creating aerials dances.

As the children practiced and became more skilled and confident in the discipline of aerial dance they were able to unite previous kinesthetic knowledge in both dance and art and to create connections to their own interests (dolphins, waves, superheroes, aspects of nature such as tornadoes and even dragons) to create work which was memorable and personally satisfying.

Insert Figure 14-16



Discussion -

During the Ahead in Air project a number of themes became evident that will be investigated more closely in future collaborations. It is hoped that this research may encourage alternative approaches to dance teacher education in university dance education courses. The analysis of

data suggests that the following issues need to be considered when designing similar university community partnerships. These include:

1. There were strong indicators that pre-service dance education students benefited from applied learning in the real context during the Ahead in Air dance practicum.

Successful communication in dance requires knowledge of the discipline and the ability to think, observe, listen, respond and articulate ideas. Without the ability to communicate through a common language it is nearly impossible to guide a student. In support of the children, the USC-DE students needed to determine what to say, how to clearly say it, how to look and listen so as to know when would be the most effective time to communicate, and how to guide and support the students' efforts.

Effective verbal communication in dance requires the (a) skillful application of the elements of dance, (2) knowledge of inquiry and problem solving approaches, (3) access to imagery examples and evocative language to inspire and motivate, as well as (4) expressions of praise to guide students in the aerial experiences. While the USC-DE students had successfully passed a formal examination on the elements of dance (Body, Effort, Space, Shape and Relationship) as a part of a preliminary pedagogy course, when asked to apply the BESSR vocabulary to guide the young aerialists, it was very challenging. This practicum was a highly effective examination of BESSR content, far more effective than any paper and pencil examination. One student describes it as, "being thrown into the deep end of the pool; you just had make connections and use the language to swim and to succeed." The USC-DE students identified the Ahead in Air as a very

effective way of covering these critical competencies in guiding student's knowledge constructions in the dance discipline.

Pre-service dance teachers must learn strategies to encourage participants to experience dance from different perspectives, including the body, points in space, forming relationships with others, partnering with others and exploring the environment in order to help students come up with new ideas and new connections that they can share.

2. The Ahead in Air project demonstrated the potential for the development of collaboration and communication skill with and among all participants.

Through participation in the Ahead in Air partnership, young children developed skills of collaboration and communication as they problem solved, improvised and created aerial dances with the USC-DE students and peers. The collaborative partner dances were a highlight in the program and provided a sense of mutual authorship and ownership in the aerial dance making.

Having only one USC-DE student leader per group of 4-6 students was challenging for USC-DE students as it necessitated clear management strategies to ensure not only the safety of the aerialists but also of the children on the ground. The USC-DE students quickly realized that they had a big job on their hands, one that required stating their expectations firmly in clear language while at the same time illustrating what to look for in the dances of others and physically leading the aerial movement activity.

However, working in small groups was also advantageous as it encouraged observation, listening and communication during the process, and sharing of ideas and guiding student observations while the children waited for their turn in the air. Based on their final reflections, the USC-DE students learned by necessity how to communicate clearly and manage the students while the children learned the value of observation and cooperation. Daily reflection time and feedback sessions following each sharing was considered essential by the team leaders as it served to guide curricular modifications and the sharing of discoveries in the process.

In the upper grades clear themes emerged alongside the development of trust, attentive listening, confidence, and communication skills as the Ahead in Air residency sessions unfolded. A high point on session 2 happened when a classroom teacher stepped out of her comfort zone and into the Ahead in Air harness and was lifted high off the ground to dance in the air in hopes of helping a shy child gain confidence to participate in the activity.

Insert Figure 17 -18



3. The Ahead in Air program and curricula confirmed the potential for human character development such as caring for others, collaborating and beginning to trust other students and themselves.

One of the primary goals of Ahead in Air was to be able create an atmosphere of trust and personal growth. After a short safety demonstration and reminders during the process, the Ahead in Air team was amazed that for the most part the children were able to treat their peers with care and respect. As the sessions progressed so did the students' ability to support, care and guide fellow dancers safely. Quickly the students moved from shadowing and relating activities to more advanced partnering which included touching, turning and with one group, climbing onto a partner (see figure 17).

Without prompting from the Ahead in Air team, students created aerial dances based in curricular and academic content from other classes and interests. An example of this was when the students created aerial dances about the water cycle seamlessly transferring and extending their knowledge from the classroom into three-dimensional space in the air.

4. As a result of this investigation, there are strong indications that Ahead in Air can be situated within interdisciplinary classroom contexts.

As the sessions progressed it became evident that the students were naturally expressing interdisciplinary connections through their aerial dance making. Hardenberg's students were able to easily adapt to and transfer problem solving and thinking strategies into the aerial dance

environment, a testament to her high quality and embodied dance instruction. During improvisation and later partner work, students selected themes and demonstrated their ability to use the aerial dance form to express new ideas in imaginative ways. As a result of this unfolding curricula it became apparent that students were able to use combined and interdisciplinary knowledge through this integrative and constructivist approach.

5. Based on the project evaluations from teachers and students the centralized location for Ahead in Air supported visibility, access, and participation by all members of the school.

The Ahead in Air team struggled with the location of the activity but after much discussion and trial and error, using the shade Ramada on the Round Top playground was decided upon as a low cost centralized location. The unexpected benefit of being at the nexus of school social activity was an increased interest from all members of the school, including support from administration and fellow teachers. However, it remains to be seen if this experience can be replicated in student teaching contexts.

6. Based on the project evaluations from teachers and students, the kinesthetic self-expression was a valuable tool for the demonstration of ideas and proved to be successful with children with learning difficulties.

The majority of students were highly motivated to participate in the Ahead in Air sessions. The study confirmed research in the field, supporting the value of constructivist pedagogy and active learning (Gage 2012; Coté 2006). It is particularly notable that children with learning differences

such as ADD and ADHD, who might have been unengaged or disruptive in the session, were more focused and attentive during the sessions.

This may be due to the physical exertion required to successfully complete the activity or the high student-teacher ratio and the ability to work in small groups with USC-DE students that can explain this beneficial result. Over the course of the sessions classroom teachers noted that there was a significant increase in students' ability to focus following the aerial dance activities. As a result, students created highly focused aerial dance improvisations with adults and peers. The aerial partnering was particularly successful, as the students were able to choose the theme and collaboratively create an aerial dance that was personally meaningful.

Challenges

Overall there were many positive outcomes from the Ahead in Air partnership, however, there were challenges which should be addressed which need greater consideration.

Access to experts: Ahead in Air would not have been conceivable without the commitment and devotion of specialists to the program. Finding a trained aerialist and dancer with knowledge of rigging and safety is very hard to do. Ramirez provide not only the training for the USC students but also set up all the rigging for the program. Motivated to bring the discipline of aerial dance to these young students, his efforts went above and beyond what could have been expected. His skill, passion and capacity for training the USC-DE students cannot be underestimated. The ability of most schools to afford an aerialist for several weeks will require grant writing and fundraising.

Time and cost: It is very important to use high quality equipment that fit the children perfectly. Good aerial equipment is costly. Hardenberg and Parrish spent considerable time preparing for the program which included writing grants, securing additional fundraising, scheduling, planning, writing the curriculum and coordinating specialists. Without Hardenberg's remarkable efforts the Ahead in Air partnership would not have been possible.








Space and Location: Finding the correct location for aerial work can be difficult. An indoor climbing gym was secured for the training of the USC-DE students. Fortunately fees were waved, as Ramirez is a local climbing instructor. We were also fortunate to have access to the playground Ramada that could serve four aerial stations at the same time. While Ramadas for shade are somewhat common, only an aerial specialist can determine the suitability for aerial work and the amount of weight a structure can hold.

Practicum: The Ahead in Air partnership required a minimum of 8 adults present during all sessions. This was a challenge. The USC-DE student's commitment to Ahead in Air waned when the students realized the time needed for training, the rigor of the aerial dance instruction and the distance from USC to Round Top. Other issues also hindered participation as one student had an issue with an examination and another with automotive trouble. Off campus practicum experience require planning, maturity, dedication and communication which for some university students is more difficult to attain than others.






Conclusion

This paper described the Above in Air aerial dance program, a university community partnership, and illuminated children's experience as well as an approach to dance teacher preparation. Feedback from professionals, university students and children has provided valuable insights surrounding the realization of future university community partnerships and may provide support for the reshaping the practicum experience in university dance education programs. By sharing the challenges and successes of the program, we hope to assist others. Aerial dance requires training, focus, athleticism, artistry and trust. Participants of different ages, body types, athleticism, and kinesthetic awareness in Ahead in Air participants begin to realize that anything is possible with hard work, creativity and collaboration.

Figure captions

<p>Figure 1</p>		<p>Figure 1. Ahead in Air fifth grade student explores the freedom of flying in Ahead in Air.</p>
<p>Figure 2</p>		<p>Figure 2. Session 1: RoundTop Elementary student demonstrates core support soaring in the sky in a big “X” extended shape.</p>
<p>Figure 3</p>		<p>Figure 3. Ramirez teaching aerial fundamentals.</p>
<p>Figure 4</p>		<p>Figure 4. Ramirez with dance education student creating a mirror counter balance.</p>
<p>Figure 5</p>		<p>Figure 5. After 20 hours of training, USC Dance education students performing duet.</p>
<p>Figure 6</p>		<p>Figure 6. Aerialist Ramirez and USC Dance education student creating duet.</p>
<p>Figure 7</p>		<p>Figure 7. Session 3: Partner dance activity with USC-DE students relating and creating complementary shapes.</p>

<p>Figure 8</p>		<p>Figure 8</p> <p>Session 1: USC-DE Student in quiet moment discussing proper safety precautions with second grade student.</p>
<p>Figure 9</p>		<p>Figure 9</p> <p>Session 2: USC-DE student establishes trusting relationship with children completion of inverted shape.</p>
<p>Figure 10</p>		<p>Figure 10.</p> <p>Session 2: Ahead in Air fifth grade student in a tilted ball shape while suspended in the air.</p>
<p>Figure 11</p>		<p>Figure 11</p> <p>Session 2: USC-DE student directs child using Laban language. Child extends his kinesphere reach space into a balanced layout.</p>
<p>Figure 12</p>		<p>Figure 12</p> <p>Session 2: Roundtop student with Ramiez beginning to trust inversion and suspension in the air.</p>
<p>Figure 13</p>		<p>Figure 13</p> <p>Session 3: Roundtop students “snowflake” expanding her body to create a wide shape that reaches to the edges of her kinesphere.</p>

<p>Figure 14</p>		<p>Figure 14</p> <p>Session 4: USC DE student performing partnering dance with third grader.</p>
<p>Figure 15</p>		<p>Figure 15</p> <p>Session 4-5: Two third grade students making connected shapes while collaborating on partner dance.</p>
<p>Figure 16</p>		<p>Figure 16</p> <p>Session 4:</p> <p>Children investigate positive and negative space in relation to their partner.</p>
<p>Figure 17</p>		<p>Figure 17</p> <p>Session 5: Partner dance investigations with two third graders suspended at the same time.</p>
<p>Figure 18</p>		<p>Figure 18</p> <p>Session 5: USC-DE student verbally guiding student's aerial partner explorations.</p>

The photos will be sent as separate Jpgs.

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