THE EFFECTS OF DANCE EDUCATION
ON THE EMOTIONAL INTELLIGENCE OF
UNDERSERVED STUDENTS

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Thesis

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CHAPTER I

INTRODUCTION

In the history of public education in the United States, funding for arts education has never been a priority. Conversely, the tighter budgets become, the more frequently programs in the visual and performing arts are cut from schools. As the push for accountability in schools increases, the arts are treated more and more as if they are superfluous subjects – and with the move towards merit-based teacher pay and the growing significance of students’ standardized test scores, this trend does not seem to be changing. As a high school teacher in California, I experienced these types of cuts first hand. During the state’s budget crisis in the spring of 2009, thousands of teachers were laid off and school funding was drastically affected. At Mount Eden High School in Hayward, California, located just south of Oakland, this meant a change in the schedule, the laying off of many excellent art teachers, and a paring down of the visual and performing arts department that tore the community apart. The school’s concert band, dance team, and several of its choirs had won many of the highest awards in the state, and even in the country. In this diverse community of working class families struggling against poverty and gang violence, it is hard to quantify the immensity of the benefits that the arts provided for the students. Dance, especially, with its expressive qualities, its ability to show emotion and tell a story without words, helped shaped these students into powerful and motivated young adults, as evidenced by their positive attitudes and
increased confidence and interest in school. And yet the program that allowed them this success and accomplishment was taken away.

Currently, this country’s education trends are governed by research and data, with the accompanying measurable outcomes and statistics. Fortunately, there is a growing number of studies that scientifically or anecdotally demonstrate the social and cognitive benefits of arts education. While there are positive findings for all disciplines of art, I will be focusing specifically on dance education and its possible impacts on students who are underserved.

After discussing the currently existing research, and exploring different forms of existing programs, this paper will present a study of a dance outreach program in the Northeast Ohio area, “Reach Out and Dance” (R.O.A.D.). The research aims to measure how regular dance education effects the emotional intelligence of socioeconomically disadvantaged fifth grade students, studying the students’ levels of self-awareness, awareness of others, and personal meaning from the beginning of the dance program in October through its conclusion in May.

In the United States’ current educational climate, the time and money allotted to the arts is often being decreased in order to increase funding available for what are viewed as core subjects such as Math, Science, and Language Arts. As the “high-stakes” of standardized testing rise even higher, administrators, teachers, and students are pressured to present results, and classroom learning often focuses on these multiple-choice exams. This means spending precious instruction minutes teaching students how to test (my colleagues and I euphemized this as teaching “fine distinction”), in addition to covering the state standards. However, the rote learning, memorization, and irrelevance
inherent in this type of education do little to promote critical thinking, intrinsic motivation, inquiry, or life-long learning – qualities that colleges, companies, and communities look for and thrive upon. Therefore, this thesis looks to justify and prove what many educators already believe: that consistent dance education promotes positive personal development, specifically (in this case) within the area of emotional intelligence. This includes areas of intelligence which are directly linked to academic success, including intrinsic motivation and organizational and cooperative skills.

While advocates for dance education have long espoused the benefits of the art on social and academic intelligence, there have been relatively few empirical studies done that demonstrate the specific connections or transfer between exposure to dance and other aspects of education. Even more infrequently have studies been done about the benefits of dance and movement programs on children who are considered underserved. Children classified as “underserved” are those who are considered to have higher-than-average risk of health, behavior, and academic problems, and have limited access to resources available to prevent these issues, based on demographic information such as parent or guardian education and income level. This paper will address some of the existing research in this field, and then analyze its implications for disadvantaged youth, using several currently operating and successful programs as models. It is my hope that patterns will emerge that will encourage both more rigorous scientific research and the initiation of more programs that allow children of all backgrounds to experience the myriad benefits of dance education. Additionally, this study may bring arts organizations and arts educators a greater understanding of the importance of outreach education, and
give funding and grant-making organizations a greater incentive for helping organizations to implement this type of programming.

This project will follow two groups of fifth grade students at an urban elementary school where 100% of those enrolled are designated as “economically disadvantaged” (the basis for this designation will be discussed in Chapter IV). Through surveys and observation, the emotional intelligence of these students will be measured thrice during the year in which they will receive regular weekly dance instruction. The students’ regular classroom teachers will complete the surveys - rubrics measuring seven different aspects of emotional intelligence. I will be discussing and analyzing the results of the surveys in conjunction with existing research on the effects of dance education on the underserved student population. The data gathered will be analyzed in an appropriate statistical manner; however, the study is not meant to be rigorously scientific, as no control group will be used, and the nature of the surveys is somewhat subjective.

The main case (R.O.A.D.) findings will be augmented by observational and experiential information from several other organizations that provide regular dance instruction to underserved populations. These additional cases include the Everybody Dance! studio and Gabriella Charter School in Los Angeles, the National Dance Institute in New York City (with which R.O.A.D. is affiliated), Pointe West Performances, a ballet based program I teach for in Akron, Ohio, and Groundworks Dance Theatre, a modern company providing outreach residencies in Cleveland and Akron, Ohio.

Observations on these additional programs will help to color the information I gather from the two R.O.A.D. classes, and hopefully will serve to illuminate patterns in dance education that transcend discipline, age, and location.
CHAPTER II
EXISTING RESEARCH

Academic Intelligence

If an argument is to be made regarding the importance of dance education in today’s standards-based curricula, it is necessary to demonstrate how a structured movement program affects academic achievement. Verbal intelligence and reading, being the cornerstones of learning many different types of material, are the logical starting points. Several scientific studies have been done in hopes of proving the hypothesis that involvement in a regular dance program increases achievement in verbal areas such as Reading and Language Arts. Jenny Seham, in her 1997 dissertation entitled “The Effects on At-Risk Children of an In-School Dance Program,” carefully structured an experiment that included a control group and evaluators blind to the hypotheses of the study. After a thirty-week dance program (part of New York City’s National Dance Institute) was administered to the experimental group, Seham looked at the grades of the students from the previous year, and compared them with the grades the students received at the end of the year that included the experiment. It was found that students involved in the dance “intervention” showed significant gains in their grades in Reading, Language Arts, and Spelling (Seham 56). Scores on the annual state standardized tests were also studied, revealing significant increases for the experimental group in Reading Comprehension, Language Mechanics, and Language Expression in comparison to the
control group (Seham 74). It is evident that the group that participated in the dance program had a clear advantage over the control group.

Another study, this one not of scientific design, has looked at how dance and music can be used as “texts,” supplemental to the linguistic texts generally used in educational settings, to help students make connections and engage in the inquiry process. In her paper “Dancing Into Literacy: Multitext Inquiry Opens Doors for Urban Students,” Jeanette Allison found that when exposed to a variety of both traditional and “semiotic” texts (semiotic texts referring to field trips, dance instruction, video, and music) and allowed choice between them, students preferred the semiotic texts. In a project-based inquiry, students were able to synthesize information and “made meaningful links across various information sources which resulted in artifacts that represented these links” (Allison 8). This is a compelling conclusion, given that synthesis requires higher-order thinking, and that its mastery is necessitated by many state standards. Notably, the inclusion of music, video, and movement allowed students to combine aspects of “real-life” with both linguistic and semiotic texts. The students found that their “home and school lives did not have to be in opposition, which is often the case for non-mainstream students” (Allison 10), as they grapple to succeed within school environments that are rooted in middle-class values and expectations with which at-risk students are often unfamiliar. Additionally, meaningful learning, a buzz phrase in education today referencing concept mastery and ability to transfer learning in one subject to another area, is more likely to occur for students who observe real-life applications of the concepts being taught.
Mathematical Intelligence

Another important aspect of academic learning is non-verbal, or mathematical, intelligence. It would be unsurprising to find evidence of a link between the study of dance and achievement in math considering the crossover between the two disciplines. Dance requires constant awareness of numbers as they relate to patterns in music, movements, and among other bodies. However, there is essentially no supporting research on this issue aside from Seham’s dissertation. As Seham notes in her study, “[d]ance involves several mathematical processes. Dancers are perpetually engrossed, for example, in sequencing problems, counting, and grouping numbers for steps and choreography” (76). Seham’s experiment found that the students involved in the dance program made significant gains in their Math grades (56), and had improved standardized test scores in the areas of Math Concepts, Problem Solving, and Math Total (74), when compared to the control group.

Issues of Causality

Although the results of these studies are promising, it is important to remember their individual and collective limitations. The observational, almost anecdotal study by Allison about “multitext inquiry” is interesting, but it does not offer any solid evidence about dance and academic achievement. Seham’s study is much more compelling; however, it falls prey to Lois Hetland’s and Ellen Winner’s assertion in their meta-analysis “The Arts in Education: Evaluating the Evidence for a Causal Link,” which is that studies such as Seham’s need to differentiate between correlation and causality. That is, while it has been shown that those who study the arts achieve at higher levels than their counterparts who do not study the arts, it has not been determined whether the
study of art causes this higher achievement. For example, a student involved in Seham’s experimental group may have experienced increased motivation to succeed due to his or her participation in a high-energy, positive activity. Seham considers this idea:

The impact of dance participation on academic standing might generally be attributed to an increased ability to concentrate, focus, and attend. Also, the experiences of mastery and success inherent to the dance training may encourage students to stick with a problem, or to seek challenges that might daunt those who had not had these experiences... (75)

As Hetland, Winner, and others agree, more statistical and scientific studies need to evaluate the relationship between dance education and academic achievement.

One possibility for the improved grades and scores, as Seham notes, could be an increased ability to attend. Recently the Dana Foundation, an organization focused on brain research, studied this particular concept. Their experiments have found some compelling evidence about arts education and its effect on the brain’s executive attention network. This network is part of the frontal cortex; it governs our capacity to attend to specific tasks or elements of our surroundings, and helps us in selecting what actions to take. Michael Posner and three of his colleagues studied how attention training affected cognitive processing, and found strong positive correlations between those who received attention training and increased cognitive processing. This led the researchers to hypothesize that “the enthusiasm that many young people have for music, art, and performance could provide a context for paying close attention. This motivation could, in turn, lead to improvement in the attention network, which would then generalize to a range of cognitive skills” (danafoundation.org). The study indicates that the strengthening
of the attention network may be the “missing link” between the ideas of correlation and causality.

**Intrapersonal Intelligence**

Since Howard Gardner’s theory of Multiple Intelligences was published in 1983, it has become widely accepted that the concept of intelligence includes far more than the “three Rs”: it is social, musical, personal, and more. Research has also indicated that teaching to multiple modes of learning is more effective than rote or lecture style learning. Both of these ideas seem to encourage inclusion of dance in education, as it offers obvious aural/musical and kinesthetic benefits (the two neglected modes of learning in our visual-based schools, and two of Gardner’s eight intelligences), but does it also encourage development of the social and personal skills involved in interpersonal and intrapersonal intelligence?

**Table 2.1: Howard Gardner’s Eight Intelligences**

<table>
<thead>
<tr>
<th>Type of Intelligence</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Verbal/Linguistic</td>
<td>Ability to use language, adept at reading, writing, telling stories.</td>
</tr>
<tr>
<td>Logical/Mathematical</td>
<td>Adept in logic, reasoning, and abstractions</td>
</tr>
<tr>
<td>Spatial</td>
<td>Ability to visualize, spatial judgement.</td>
</tr>
<tr>
<td>Body/Kinesthetic</td>
<td>Ability to control one’s movements, learn kinesthetically</td>
</tr>
<tr>
<td>Musical</td>
<td>Natural rhythm and sensitivity to tone and pitch</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Ability to read others’ emotions and motivations and to cooperate; extroverted</td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>Naturally intuitive; introverted, with deep self-knowledge.</td>
</tr>
<tr>
<td>Naturalistic</td>
<td>Ability to relate to natural surroundings.</td>
</tr>
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(“Theory of Multiple Intelligences.”)

The research project conducted for this paper focuses on emotional intelligence, which is defined by elements of both inter- and intrapersonal intelligence. Self-
knowledge (or intrapersonal intelligence) is an integral part of being able to succeed in our society. Regulating one’s behavior and emotions appropriately is the key to forming positive relationships and allows us to be contributing members of regular society.

It seems reasonable that the discipline of dance, with its controlled use of movement and space, would increase a student’s awareness of the effects of his or her actions on the surrounding people and landscape. According to Vygotsky, renowned for his research in child development, a child’s behavior is first regulated by its caregivers. Once the child learns language, he or she will also learn to self-regulate using self-talk. However, Vygotsky noted that any meaningful code of symbols may be used to do this; therefore, it follows that a child would be able to use the corporeal codes learned in dance to regulate his or her own behavior (qtd. in Lobo, Winsler 504). Since dance is, in essence, about controlling the movement of the body, it seems logical that this would transfer to experiences outside of the studio.

In Yovanka Lobo’s and Adam Winsler’s 2006 study “The Effects of a Creative Dance and Movement Program on the Social Competence of Head Start Preschoolers,” the authors comment on the fact that the children participating in the dance program became more comfortable with themselves and their abilities during the eight weeks of the experiment. The following was observed by the authors: “Initially, many in the class were reluctant to do the exercises, but after one to two weeks they became more confident and began to express themselves verbally and physically and enjoy themselves and each other more” (512). Lobo and Winsler found that this self-confidence incubated within the movement classroom carried over to students’ actions in the regular classroom,
noting that no such behavior changes were observed in students in the control group who
did not receive dance instruction (512).

Another empirical study, a dissertation by Susan Puretz entitled “Comparison of
the Effects of Dance and Physical Education on the Self-Concept of Selected
Disadvantaged Girls,” looks at a similar concept with older subjects. Puretz’s study used
75 matched pairs of girls (with one receiving modern dance instruction and the other
basic physical education), and self-concept was rated before and after the experiment by
the subjects themselves using the Lipsett Self-Concept scale for children. Both groups
gained in mean self-concept scores, but only the experimental group’s gain was
statistically significant. Furthermore, when tested again three and a half years later, the
increased levels of self-concept had been maintained by the experimental group (Puretz
qtd. in Seham 23-24). The longitudinal aspect of this study makes it particularly
interesting: not only does dance education have a strong impact, but the impact lasts over
time.

Interpersonal Intelligence

Slightly more research has been done about the way that regular exposure to
dance training impacts social competence, and those studies have found strong,
significant correlations. For the purposes of this paper, social competence refers to skills
related to sustaining positive relationships with peers and adults. Yovanka Lobo and
Adam Winsler published the results of their scientific experiment in their 2006 article
“The Effects of a Creative Dance and Movement Program on the Social Competence of
Head Start Preschoolers.” They examined the impact of an eight-week creative
movement program on randomly selected groups of students, using teacher and parent
responses to an 80-item survey, the “Social Competence Behavior Evaluation.” All evaluators were blind to both the hypotheses and the assignments of the children (i.e. whether experimental or control group). This study resulted in the authors’ conclusion that “children receiving the dance program made considerably greater gains in their social competence from the beginning to the end of the program relative to the control group” (Lobo, Winsler 510). Though the children were assigned randomly to groups, the control group began the experiment with significantly higher ratings of social competence from both their parents and teachers. Despite this difference, there were no significant demographic differences between the groups. When the study was completed, the experimental group not only met their peers in the control group, but surpassed them in their social competence scores.

A part of Seham’s study also looked at students’ social competence, although it was evaluated much differently. The participating fourth and fifth grade students completed a self-evaluation measuring their attitudes about their social acceptance and behavioral conduct both before and after the experiment took place. Teachers completed the same surveys about their students. While there were no significant changes found within the students’ evaluations of themselves at the conclusion of the study, the teachers’ responses (the teachers were blind to the hypotheses and the students’ group assignments) made it “clear that the experimental condition is superior to the control condition with respect to...perceptions of the students’ behavioral competence” (Seham 54). The conflicting data between the teacher and self appraisals can be explained in a number of ways. It seems likely that the survey used, the Harter Self Perception Profile for Children, is somewhat invalid for the students involved in the experiment (the test
sample for the profile was 90% white and all middle-class). Seham gives some other reasons, such as children in the fourth and fifth grades may not be able to “cognitively process and verbally articulate change, despite intrinsically felt effects,” or that the dance program simply did not effect them (Seham 65). Given the results of the teacher completed surveys, it seems more likely that there was an issue with the assessment used than that the program was ineffective.

It is my hope that this study and my own research will be a positive addition to the current research regarding the effects of dance education on the inter- and intra-personal intelligence of underserved students, as emotional intelligence takes into account both knowing oneself and identifying and accepting others. By highlighting the significant impact of dance education, researchers such as Puretz, Seham, and Lobo and Winsler are helping to cultivate a more accepting environment for movement-based outreach programs.
CHAPTER III
DANCE OUTREACH EDUCATION PROGRAMS

This paper has already demonstrated many of the social and intellectual benefits of exposing children to the art of dance; however, these personal benefits are really only a part of argument for providing students with dance education. According to the National Endowment for the Art’s 2008 Survey of Public Participation in the Arts (SPPA), only 2.9% of American adults reported having attended a ballet in the last twelve months, and only 5.2% reported having attended a performance of another kind of dance. These low numbers had fallen from their 1992 levels of 4.7% and 7.1%, respectively (National Endowment for the Arts). Many dance companies engage in “outreach education” in an effort to develop their shrinking audiences, as researchers from organizations such as the NEA and the Dana Foundation have found that those who participate in an art form are more likely to attend performances of that art form.

Outside of audience development, outreach education is also used to supplement the art education provided in public schools – an increasingly crucial function, as states and school districts continue to feel the effects of slashed budgets. This latter purpose is the one which will be explored in this chapter, specifically as it relates to the discipline of dance. This chapter outlines and discusses the components and influences of stand-alone studio based programs, in- and after-school programs, and programs connected to professional dance companies.
Studios and Schools

There is an outstanding example of dance education for the underprivileged in Los Angeles, thanks to the Gabriella Axelrad Foundation and the parents of the passionate young girl for which that charity is named. When Gabriella Axelrad, a talented young dancer, was killed in a car accident at the age of thirteen, her mother, Liza Bercovici, realized quickly through her grief that she felt called to carry on the spirit of her daughter. Thus, the foundation was formed, and quickly raised enough money to open Everybody Dance!, a studio providing “free top-quality dance instruction to kids from low-income families in Los Angeles” (Frank 1). In its first decade of operation, the program has grown to three sites serving over a thousand students.

Everybody Dance! is funded in part by grants from state and national agencies such as the California Arts Council and the National Endowment for the Arts. These grants are generously supplemented by individual and corporate donations. Since the program charges an almost nominal fee for its programs ($5 a month per dance discipline studied; one-tenth or less of the cost at a private studio), they also have some service revenue. The Gabriella Axelrad Foundation is extremely successful, and operates with a surplus each year, allowing its continued expansion.

After expanding to three sites to accommodate the demand for the Everybody Dance! programs, in 2005 the Gabriella Axelrad Foundation opened a public charter school with a dance focus, one of the first in the country of its kind. All students dance for an hour a day, and dance is also included in the standards based curriculum. The Gabriella Charter School is also growing, moving from an elementary, K-5th grade school to include grades six through eight. In 2006, Los Angeles Magazine named the school
“one of the 60 great elementary schools you should know about” (“Everybody Dance!” home page).

The exponential growth is not the only facet of this organization that demonstrates its success. The artistic director of the school, Carol Zee, attests that she has “watched the self-esteem of the kids jump dramatically since we first began” (Frank 2). Once shy, quiet, or unsure students now have the confidence to perform in front of hundreds of people. And, as the research in this paper has shown, the students are leaving class with more than a workout and a dance vocabulary. Zee notes some of the peripheral benefits of this program, which “will serve these kids later in life when they run for class president, or interview for a job. It teaches them about discipline, accountability, and taking responsibility for yourself” (Frank 2).

Another successful program operating within the traditional school day is the National Dance Institute (NDI) of New York City. (This program’s benefits were examined in Seham’s 1997 study discussed in Chapter 2.) Founded by Jacques d’Amboise in 1976, NDI’s mission states: “Through in-school partnerships, workshops, and public performances, NDI uses dance as a catalyst to engage children and motivate them towards excellence. NDI strives to reach every child, transcending barriers of language, culture, and physical challenges” (“NDI at a Glance”). The teachers reach 35,000 students per year through assemblies, in-school workshops, and year long programs. The year-long programs allows children “to explore the process by which movement put to music becomes dance” (“NDI at a Glance”), and classes occur during the school day, putting dance on the same level as Math, Science, and English.
Students enrolled in the enormously popular NDI programs can strive for a place in the SWAT Team (Scholarships for the Willing, Achieving, and Talented) or the Celebration Team: advanced-level performing groups for students who show an aptitude and desire to learn more. When participating in NDI’s advanced dance teams, students are also required to serve as role models for the other participating students during their in-school dance classes, thus encouraging motivation and strengthening community.

NDI’s teams have performed in the venues of many performing artists’ dreams, including Lincoln Center, Julliard, the White House, and the Kennedy Center.

None of the children involved in NDI’s programs have ever paid a dime for their training, yet the program manages to pay hundreds of teachers and educate 35,000 children each year! This feat is made possible largely by funds received from foundations, which contribute 35% of the organization’s $3.5 million operating budget. Individual and corporate donor support are also critical (“2009 NDI Annual Report”). NDI is linked to the “Reach Out and Dance” program studied in this project, which is discussed in further detail in the following chapters.

Residencies and Professional Companies

Another type of outreach dance education is that conducted by professional dance companies. A wonderful example of this type of programming in the Northeast Ohio region is run by Groundworks Dance Theater, a modern dance company directed by David Shimotakahara. I had the opportunity to interview Mark Otloski, former Cleveland San Jose Ballet dancer and current outreach coordinator for Groundworks, who shared his experiences in developing and implementing successful dance programming. The company offers schools two types of outreach, both of which take
place within the regular school day: a one-visit performance related workshop, and a long-term residency program.

For the performance related workshops, the company members divide into pairs and visit schools near the location of an upcoming performance venue. The dancers have seventy-five minutes with students – during which time they introduce the concepts of axial (in place) and locomotive movements, some choreographic principles, and work with students on a movement project related to an upcoming repertory concert. These projects are also related to academic content standards. For example, when Groundworks premiered a piece based on the play *Our Town* by Thorton Wilder, the high school students in the workshops created dances to express the play’s central themes. Activities like this give students a chance to disseminate and digest information in a new and unique way, perhaps allowing a concept to be illuminated and understood for the first time. A student who has trouble understanding thematic relationships in a piece of literature may see these relationships clearly when they are explained through movement. By giving students a distinct form of body-language in which their choices express clear ideas, Groundworks members are giving students a new and positive form of expression.

After the in-school workshops, classroom teachers are given lesson plan ideas and are asked to follow up with students, preparing them for a field trip to the actual performance venue (often strategically within walking distance of the school). Here students learn about lighting and staging, and have the opportunity to light and perform their own works for the company. The students then take seats in the auditorium to enjoy a special company performance. These workshops are a great opportunity to expose students to the arts, particularly students who may never otherwise be onstage or
backstage; however, because of the short time frame in which the workshops are conducted, it is difficult to measure their real impact.

The long-term residency program offers twenty visits to a school, during which movement and choreography are explored in-depth. In this case, activities are clearly mapped and connected to content standards, particularly within the content area of English/Language Arts. With time being one of the most sought-after commodities within a school, however, it is sometimes difficult to find schools willing to host the residencies, regardless of their impact. This is particularly true of spring performances that fall within the standardized testing window.

Otloski discusses the varied impact the workshop programs have on students, focusing on the ideas of making choices and creative problem-solving. When students are given choreographic problems to solve in collaboration with their peers, they are being given a low-risk opportunity to engage in leadership and critical thinking, because as Otloski notes: their “subjective choices can’t be wrong.” (Otloski interview) This encourages students to overthrow their shyness and build self-confidence. The Groundworks program is yet another clear example of the positive effects of including dance in students’ education.

I will present a final example of outreach programming in the classes provided by Pointe West Performances (PWP), a performing arts consortium encompassing a professional company, a traditional studio, and extensive work in the Akron Public Schools. Funded by the Akron After School Program, which brings opportunities from theater games and poetry club to karate and science experiments to children enrolled in Akron’s urban elementary schools, Pointe West’s “Infinite Legacy Project” brings
traditional ballet classes to the underserved students in Akron and gives them opportunities to earn scholarships, attend free performances, and even to be a part of the company’s performances. The classes take place in eight-week sessions for two semesters a year. In the summer of 2010, PWP received funding to create a summer intensive program, as well. From about fifteen schools, where classes have between ten and sixteen students, instructors write recommendations for talented and enthusiastic students, who are then given the opportunity to continue their studies free of charge at the studio. Other students are chosen to become class assistants.

Having been an instructor for PWP for three sessions, in addition to working to create and implement the programming for the organization’s first summer intensive, I can speak firsthand to the positive impact these classes have on Akron students. The other members of PWP and I often use the word “hungry” to describe these students – who are certain to sign up for ballet class time after time, who remember the steps, the French terminology, and their choreography better than suburban children whose parents are paying to send them to Marley-floored studios three times a week.

Despite the different ways that each program is implemented, dance outreach programs from Los Angeles charter schools to Northeast Ohio residencies present clear benefits for underserved students. The rest of this paper will be take a precise look at some of those benefits, using the Reach Out and Dance program, a part of the Associates of the National Dance Institute (ANDI), and two fifth grade classes as examples.
CHAPTER IV
BACKGROUND FOR THE STUDY

Before taking a detailed look at the “Reach Out and Dance” program, this chapter will take a closer look at the school and community being studied. As previously mentioned, the students involved in this study have been classified as “underserved,” a term referring to a population’s lack of sufficient resources including things such as social and medical services. In order to fully understand the backgrounds of the students in this research and their families, this chapter will focus on demographic information from the greater Akron community as well as the neighborhood surrounding Portage Path Community Learning Center. This information will provide a solid context for the study by highlighting family and poverty statistics, in addition to school-specific data such as enrollment and test scores.

Akron is a mid-size city located in Summit County with a population of just under 200,000 being reported on the 2010 census, making it the fifth largest city in the state of Ohio (“Akron, Ohio”). Like Cleveland and other cities along what is now sometimes referred to as the “Rust Belt,” Akron enjoyed years of prosperity as an industrial town, notable mostly for the production of rubber, though also highly involved in the production of cereal. In the 1980s and 1990s, rubber manufacturers began to pull out of the city, taking thousands of jobs with them. Though the area is in many ways still recovering from its industrial boom, Akron has regained national notoriety for its
research and innovation in polymers. Most of this research is based at The University of Akron.

Overall, the population of greater Akron is 67.2% white and 28.5% black or African-American, with the remaining 4.3% of the population being comprised of nearly equal percentages of persons of Asiatic, Pacific Island, American Indian, or multi-ethnic backgrounds (“2010 Census”). The median income of the city as a whole is $31,835, with the percent of persons living below the poverty line at 17.5%.

Portage Path Community Learning Center, where the R.O.A.D. classes observed for this research took place, is located in the Highland Square neighborhood within Akron, though its enrollment boundaries also include parts of the neighborhoods of West Akron and Downtown. Interestingly, while the demographic information for the Highland Square neighborhood represents a nearly perfect microcosm of the entire city, these statistics vary sharply for the surrounding neighborhoods and for the school itself. For example, Highland Square reports that 27% of its residents identify as African-American, while the West Akron neighborhood is 80% African-American, and Downtown is 49% African-American. These latter two numbers, most especially the West Akron demographics, more closely match Portage Path enrollment, where 76.6% of students identify as black and 14.4% identify as multi-racial (“Ohio Department of Education”).

The education and income numbers for the neighborhoods of West Akron, Downtown, and Highland Square are just as strikingly different, as illustrated in the following table:
Table 4.1: Education and Income Data for Selected Akron Neighborhoods

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Percent of Residents with No High School Diploma</th>
<th>Percent of Residents with Bachelor’s Degree or Higher</th>
<th>Median Income</th>
<th>Percent of Residents Living Below the Poverty Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highland Square</td>
<td>12%</td>
<td>37%</td>
<td>$42,958</td>
<td>13.9%</td>
</tr>
<tr>
<td>Downtown</td>
<td>39%</td>
<td>9%</td>
<td>$21,676</td>
<td>34.9%</td>
</tr>
<tr>
<td>West Akron</td>
<td>22%</td>
<td>15%</td>
<td>$24,987</td>
<td>17.1%</td>
</tr>
</tbody>
</table>

(Akron. “Akron Neighborhood Profiles.”)

This information seems to indicate that the more educated and affluent Highland Square residents are either moving from the neighborhood when their children reach school age, or sending their children to schools other than Portage Path. It highlights a surprising amount of self-segregation, as well.

Portage Path Elementary School

Portage Path Elementary School is housed in one of Akron’s “Community Learning Centers,” in a building completed for use during the 2010-2011 academic year. The school enrolls about 250 students in kindergarten through the fifth grade (average daily enrollment according to Ohio Department of Education), and the student to teacher ratio is about 12.5 to 1. The ethnic make-up of the school is mostly black or African-American, with 8.6% of students recording their ethnicity as white, non-Hispanic, and 14.4% as multi-racial. There are few to no students labeled as “Limited English Proficient” (the exact number is not reported when there are fewer than 10 in a group).

This particular elementary school, despite its location in the relatively educated and well-to-do Highland Square neighborhood, is under several sub-standard federal designations. First, the building has a “High Poverty” status, referring to “those [schools]
ranked in the top quartile based on the percentage of economically disadvantaged students” (“Ohio Department of Education”). 100% of the students enrolled at Portage Path were labeled as “Economically Disadvantaged” according to the 2009-2010 School Year Report Card published by the Ohio Department of Education. This measure is based on the number of students receiving free or reduced-price student lunches. To be eligible for this federally subsidized program, a student’s family must have an income less than 185% (reduced price) or 130% (free) of the federal poverty level (fns.usda.gov). It is due to this designation that I was most interested in studying the effects of the R.O.A.D. program at this school.

Another telling piece of information regarding Portage Path is its overall government designation of Academic Watch, the second lowest designation out of six titles, coming in right above Academic Emergency. School designations come from a combination of four measures, which include a plethora of statistics such as the number of students testing at or above a “Proficient” level on state tests, grades, academic improvement from year to year, and AYP, or “Adequate Yearly Progress,” an incredibly complex calculation that takes into account things such as test scores and attendance rates, divided by subgroups including socio-economic status and race. Schools designated as being under Academic Watch have not met their AYP, and have met fewer than 50% of their testing indicators, among other factors. Portage Path Elementary School had the next highest rating (still the 4th lowest out of 6) of Continuous Improvement between 2006 and 2009, so the most recent designation of Academic Watch represents a definite decline from previous performance. And the high school which students attending Portage Path will eventually attend, Buchtel, is also designated
as being under Academic Watch, according to its Ohio Department of Education School Year Report Card for 2009-2010.

Aside from the scores earned by the school overall, the School Year Report Card also offers statistics on the specific group of students being researched for this case study. The students enrolled in the fifth grade at Portage Path Elementary during the 2010-2011 school year scored Proficient or higher on state tests at a 64% level in Math and 61% in Reading when they were in the fourth grade, down from 76% in both subjects while in the third grade. As 75% represents the necessary standard in the state of Ohio, these numbers represent a pivotal shift in these students’ achievement levels. This makes the fifth grade year, the last before students enter middle schools, an extremely important time. At this age, students are learning and practicing the personal and scholastic habits that they will need in order to succeed as they gain increasing independence in school.

Although it is not relevant to the hypothesis of this thesis to enter into a lengthy discussion of the comparative merits or failings of standardized tests and government measurements such as the AYP, the scores and labels earned by Portage Path Elementary School help to paint a picture of the group of students being studied in this research. This is obviously a group of students who, despite having access to a pristine physical school environment (this past year was the students’ first year in their completely new building), despite an average daily attendance rate of 94.4% (making it equal with that of the state of Ohio overall), despite a great student to teacher ratio, and despite its location within an culturally active and generally well-educated neighborhood of the larger Akron metropolis, are struggling to meet minimum academic requirements. Education research has indicated for years that gaps in achievement levels which begin in the elementary
school years only widen exponentially as students enter the larger, more autonomous middle and high schools. Certainly, the disparaging education statistics for the West Akron and Downtown areas of Akron indicate that the wider adult community does not place a high value on education. From my personal experience working with children in underserved communities around the country, I know how difficult it is to instill this value when there is little reinforcement of it outside of the school walls.

Other issues for these students include the literal implications of being underserved or economically disadvantaged, such as inadequate access to nutritious food, medical services, and access to entertainment, art, and culture – whether it be in the form of after school activities such as dance or music lessons, or tickets to games, performances, and events. One of the biggest problems often cited in regard to state standardized tests is that they assume a set of cultural norms which are simply untrue for students from economically disadvantaged families. By following the 2010-2011 fifth grade classes at Portage Path, this research aims to find out how weekly dance instruction can assist in narrowing this gap by raising students’ levels of emotional intelligence. The rationale for focusing on this aspect of intelligence is discussed in Chapter V.

R.O.A.D. Program

The primary research for this paper was conducted in conjunction with the “Reach Out and Dance” (hereafter referred to as R.O.A.D.) program, the outreach branch of the Cuyahoga Valley Youth Ballet. The Cuyahoga Valley Youth Ballet is a pre-professional company offering classes and performance opportunities to students in Canton, Ohio, just south of Akron. R.O.A.D. is a separate 501(c)(3) organization, with a separate artistic staff. The program is founded on the beliefs that dance is a basic skill which all children
deserve access to, and that dance has an invaluable impact on academic and social well-being (“Cuyahoga Valley Youth Ballet – R.O.A.D.”).

Beginning from a partnership with Jacques d’Amboise’s National Dance Institute (NDI) in New York City, Lori Klinger began the R.O.A.D. program in 1998, first offering week-long residencies to students in the Akron Public Schools. The program has since expanded, now offering eight-month residencies that reach about 1000 students each year, both in the city of Akron as well as in the suburbs of Cuyahoga Falls and Wooster. Classes are taught once a week, during the regular school day, to 4th or 5th graders, and all students have the opportunity to showcase what they have learned during an end of the year public performance. The 2010-2011 school year marked R.O.A.D.’s seventh year in residence at Portage Path.

As part of “A.N.D.I.,” Associates of the National Dance Institute, R.O.A.D. classes follow a precise structure: classes are always taught by three professionals, a teacher, co-teacher, and musician, they begin with a high-energy warm-up and end with a sung good-bye, and they promote physical activity while connecting to content areas such as math and science. For example, this year’s choreography told the story of the Cuyahoga Valley National Park, from its glacial inception to its current recreational and research uses. Being a part of A.N.D.I. allows dance outreach providers throughout different regions to collaborate on ideas and share choreography and teaching approaches (Stewart interview).

Students who participate in the R.O.A.D. program are eligible for scholarships to continue their dance training at the “Excellence in Dance” studio, and have additional
opportunities for performances. Several members of the Cuyahoga Valley Youth Ballet were former R.O.A.D. students (“Cuyahoga Valley Youth Ballet – R.O.A.D.”).

This project seeks to understand the implications of the R.O.A.D. program, specifically as it relates to the emotional intelligence of underserved students. In the following chapters, the research methods and then the research itself will be analyzed to determine what impact these classes have on students from Portage Path Elementary, where 100% of students are labeled as “economically disadvantaged.” It is my hope that the results will connect with those of other researchers, demonstrating the importance of including the discipline of dance in all children’s education.
CHAPTER V

METHODOLOGY

Although this project is not meant to be rigorously scientific, it is still necessary to closely examine the methods used in collecting and interpreting the data. The following chapter will review the foundations and creation of the emotional intelligence survey and discuss how it was administered. Then, the methods and rationale for collecting and analyzing the resulting data will be reviewed. Finally, I will review the most thoroughly subjective aspect of the case study, my personal observations of the students. Each of these aspects of the research will be looked at for its validity and accuracy, as well as for considerations of privacy.

Development of the Survey

Researchers around the globe and throughout time have been fascinated by the nature of intelligence: what comprises it, where it comes from, and why some people seem to have more of it than others. Today, what is considered “intelligence” covers a broad range of skills including the emotional, social, and spiritual, in addition to the academic. When I originally conceived of this project, I quickly ascertained that my research could only focus on one aspect of intelligence. I chose to focus on emotional intelligence for a variety of reasons, including the facts that I had come across no other studies on this specific type of intelligence (though as discussed in Chapter 2, there are several studies that touch on similar topics), and that the tracking of grades or
standardized test scores presented a greater privacy problem (as well as issues of subjectivity and relevance).

Studying students’ emotional intelligence allows for analysis of behavior that is both personal and social, most aspects of which feed directly into a students’ ability to “perform” – whether that be on a Math test, a basketball court, or a stage. By highlighting specific behaviors and habits relevant to school performance, the resulting information about students’ emotional intelligence presents a compelling companion to standardized test scores. After extensive research, I was not able to find a survey model that appropriately suited my purposes, so I decided to create the survey. The survey was modeled after emotional intelligence surveys by Gwen Doty in her book *Fostering Emotional Intelligence in K-12 Students*, which consisted of ten individual surveys and a rating scale.

Based on my background in Middle and Secondary Education, I determined that a rubric which included specific examples of behavior in each category, at each level, was both the best way to get the most accurate information and the most manageable for the classroom teachers. (Although the teachers both gladly agreed to participate in my research, I am highly sensitive to the value of their time.) Rubrics have become a popular and perhaps even necessary part of evaluating students, and their structure helps to eliminate some of the subjectivity and bias involved in assessing students.

The benefits of choosing to study emotional intelligence were also illuminated in my recently completed coursework in Management and Organizational Behavior. This type of intelligence is a measure of how well a person recognizes and copes with his or her own emotions, and how well a person recognizes and responds to the emotions of
others. In the survey, I consolidated Doty’s ten topics to seven (but still included information from all ten original concepts), and then broke each of the seven topics into four levels. At each level, I took statements from Doty’s book, such as “the student is organized,” and arranged them into levels based on my extensive experiences observing and working with children. For example, under the category of “Self-Approval,” a student rated at the highest level of four is observed as being “very comfortable with his opinions,” while a student rated at two under the same category “values the beliefs of others over his own” (Appendix A). Similar examples such as completing tasks on time and accepting blame when appropriate give the classroom teachers a more objective, concrete way to measure behavior in their students.

Focusing on emotional intelligence is particularly relevant in a socio-economically disadvantaged environment such as that of Portage Path (the rationale for this designation appears in Chapter IV). Because many of these students come from untraditional or unstable home lives, the school environment tends to have a larger influence on them than it would on students in a very affluent school. This is especially true of the personal and social behavior patterns covered on the emotional intelligence survey used for this research.

Although my survey has not been tested for validity among differing populations, it was scrutinized by several of my colleagues with education backgrounds, as well as the classroom teachers. All of the feedback has been positive, and the classroom teachers have decided to keep copies of the survey for their own future use.

The survey was administered three times throughout the academic year, spanning the duration of the Reach Out and Dance program at Portage Path elementary. The first
results were collected in October, only a few weeks into the implementation of the R.O.A.D. program, the second set of data were collected in January, and the final set of surveys were completed in late May, immediately following the culminating classes and performance of students in the R.O.A.D. program. Each of the three sets of data was collected in an identical manner.

During observation visits, I gave the classroom teachers copies of the surveys to use with their respective classes, with explanations and a suggested two week turnaround time. The teachers completed the surveys, noting only the first name of each student. I subsequently collected and entered the data into spreadsheet form; however, I chose to refrain from studying them closely during the time I was observing the students in class so as to keep my perspective separate from the classroom teachers’.

Collection of Data and Analysis

To supplement the data provided by the emotional intelligence surveys, I observed each class throughout the year, both in the weekly R.O.A.D. dance classes and in general education classes. Understanding that observation is yet another subjective measurement, I outlined a set of parameters prior to visiting the classrooms, and kept detailed and organized notes of each visit.

Each class was observed as a whole in the areas of behavior and listening skills. These observations included comparative analysis of a group from week to week and close monitoring of the students’ interactions with the dance teachers and accompanist, the classroom teachers, and one another. This aspect of the observations covers issues such as participation and engagement – in other words, group behaviors. It soon became
apparent that the teachers’ responses, reprimands, or praise were deeply connected to the issue of behavior. Therefore, these important interactions were also included.

During the observations, I was able to use the skills I developed as a classroom teacher to determine how engaged individual students were, while keeping in mind the students’ reception of a concept as a group. Therefore, another important aspect of the observations was the students’ response to the dance lessons. Between my experiences in dance and in education, I was well prepared to look for the signs of interest and boredom – were the students’ eyes following the teachers, or looking around for friends? Were they putting forth real effort? Did they remember previously introduced concepts? Throughout each visit, these reactions provided a way to measure aspects of both the students’ emotional intelligence and the possible implications of the material being taught.

Although I am constantly engaging and working with children in studios and schools, for the purposes of this research I remained a silent observer at Portage Path. The students remained unaware of the purpose of my presence, and although at first they questioned me with sideways glances, as their interrogations went unanswered they began to completely ignore me. Aside from one classroom visit during which one of the regular classroom teachers announced my entrance to her class, I remained as unnoticed as possible.

Despite the subjective nature of the subject matter, every effort has been made to objectify the collection of data and to maintain the privacy of the individual students. The survey and observations have been structured to provide as meaningful and standardized data as is reasonably possible.
CHAPTER VI
R.O.A.D. PROGRAM STUDY

I was thrilled when Kara Stewart, the artistic director of the R.O.A.D. program, agreed to let me work with her two classes at Portage Path Community Learning Center, and was even more excited when the classroom teachers of each group acquiesced to completing the surveys and having me in for additional general education observations. I feel truly fortunate to have found and been invited into precisely the type of environment I was looking to study.

The Reach Out And Dance classes were being held during the last two periods of the school day on Fridays – each class being forty minutes long – in the cafeteria. All R.O.A.D. classes have a similar set-up and structure. Each is taught by three professionals: a lead teacher, a co-teacher, and an accompanying musician. A teacher must go through two years of training to become a lead teacher, which is of course in addition to the years of training in their artistic disciplines. The class material is structured loosely from the model of a traditional ballet class: there is a more or less stationary warm-up, followed by a “barre” during which key movement principles are introduced, then “center,” and finally a “révérence,” a formal farewell sequence in which the students and teacher express gratitude for one another. The style of dance taught in R.O.A.D. classes is similar to that which could be seen in any N.D.I.-style class: very
high-energy, aerobic movements which are given colloquial names like “wash the tables.” It can be categorized as general dance/movement, closest in discipline to jazz.

The following sections of the paper will detail the progress made by the students in each of the seven areas covered by the emotional intelligence surveys throughout the year long project.

Self-Awareness

For the purposes of this project, each student was rated three times in each of the seven categories. The highest rating for Self-Awareness reads as follows: “Student has high awareness of his emotions and their origins and engages in appropriate reactions to his feelings. Student recognizes when a reaction is inappropriate” (Appendix A).

Teachers’ ratings for students’ self-awareness throughout the year are detailed in the following table.

Table 6.1: Self-Awareness.
Number (and percent) of Students Scoring at Each Level. Percent values in parentheses.

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>13 (36%)</td>
<td>10 (25%)</td>
<td>14 (38%)</td>
</tr>
<tr>
<td>3</td>
<td>13 (36%)</td>
<td>21 (53%)</td>
<td>18 (49%)</td>
</tr>
<tr>
<td>2</td>
<td>5 (14%)</td>
<td>7 (18%)</td>
<td>4 (11%)</td>
</tr>
<tr>
<td>1</td>
<td>5 (14%)</td>
<td>2 (5%)</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>

As the year progresses, more students are rated at the higher levels of three and four. Although the number of students scoring a four only increases by 2%, the number of students scoring the lowest rating of 1 decreases quite significantly, by 11% from the Fall to the Spring. A rating of one included “Inappropriate behaviors are triggered easily” (Appendix A).
Awareness of Others

The second category rated was “Awareness of Others,” in which the highest rating is described as: “Student recognizes/accepts others’ emotions, attitudes, and tastes, and can evaluate the emotional responses of others” (Appendix A). Students were scored as follows:

Table 6.2: Awareness of Others. Number (and percent) of Students Scoring at Each Level. Percent values in parentheses.

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>14 (39%)</td>
<td>12 (30%)</td>
<td>13 (35%)</td>
</tr>
<tr>
<td>3</td>
<td>13 (36%)</td>
<td>21 (53%)</td>
<td>19 (51%)</td>
</tr>
<tr>
<td>2</td>
<td>6 (17%)</td>
<td>5 (13%)</td>
<td>5 (14%)</td>
</tr>
<tr>
<td>1</td>
<td>3 (8%)</td>
<td>2 (5%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

As with the Self-Awareness scores, the percent of students scoring at the highest two levels increases. In this case, the number of students scoring the lowest rating goes to zero. For this particular category, the number of students scoring at the highest rating actually decreases over time, although the numbers still show an overall positive outcome.

Self-Approval

In my opinion, this category is probably the most important one included in the survey. To be rated at a level of four, the teacher had to observe that the “Student places a high value on his physical, academic, and social attributes, is very comfortable with his opinions and acceptance level among peers” (Appendix A). Having confidence in his or her own abilities is a crucial aspect of a students’ success both in and out of school.
Table 6.3: Self-Approval.  
Number (and percent) of Students Scoring at Each Level.  Percent values in parentheses.

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10 (28%)</td>
<td>8 (20%)</td>
<td>13 (35%)</td>
</tr>
<tr>
<td>3</td>
<td>11 (31%)</td>
<td>22 (55%)</td>
<td>14 (38%)</td>
</tr>
<tr>
<td>2</td>
<td>11 (31%)</td>
<td>9 (23%)</td>
<td>9 (24%)</td>
</tr>
<tr>
<td>1</td>
<td>4 (11%)</td>
<td>1 (3%)</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>

Again, when looking at the total percentage of students rated at three and four versus those rated at one and two, the outcome is favorable yet again.  This time, however, the number of students receiving lower ratings, particularly at level two, does not decrease as much by the spring as did other categories.  It still decreases by over ten percent, but as more students were initially rated lower it does not appear to be as great a change.  While there is a 7% increase in students receiving ratings of four, by the spring over one-fourth of the students are still scoring low on self-approval.

Approval of Others

Students scoring at the highest level in the Approval of Others category were observed by their teacher to be “very accepting of others’ emotions, feelings, beliefs, values, and opinions: looks past differences to create understanding” (Appendix A).  These are skills not explicitly taught in school which are nonetheless crucial to a students’ success both inside and outside the classroom.
Table 6.4: Approval of Others.  
Number (and percent) of Students Scoring at Each Level. Percent values in parentheses.

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>9 (25%)</td>
<td>14 (35%)</td>
<td>11 (30%)</td>
</tr>
<tr>
<td>3</td>
<td>19 (53%)</td>
<td>18 (45%)</td>
<td>18 (49%)</td>
</tr>
<tr>
<td>2</td>
<td>5 (14%)</td>
<td>8 (20%)</td>
<td>7 (19%)</td>
</tr>
<tr>
<td>1</td>
<td>3 (8%)</td>
<td>0 (0%)</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>

This category illustrates the smallest amount of change over the course of the year. Scores at the highest two levels and lowest two levels only changed by one percent from the fall surveys to the spring surveys. In the fall, 78% scored three or four, compared to 79% in the spring. 22% of students were in the lower half of the ratings for fall, compared with 21% in the spring.

Self-Responsibility

The highest level of self-responsibility was described on the rubric as: “Student demonstrates excellence in organization, time management, and neatness, and is an effective communicator and problem-solver” (Appendix A). The skills covered in this category relate most closely to academics, and included the behaviors most observable by the classroom teachers.

Table 6.5: Self-Responsibility.  
Number (and percent) of Students Scoring at Each Level. Percent values in parentheses

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3 (8%)</td>
<td>8 (20%)</td>
<td>11 (30%)</td>
</tr>
<tr>
<td>3</td>
<td>16 (44%)</td>
<td>19 (48%)</td>
<td>12 (32%)</td>
</tr>
<tr>
<td>2</td>
<td>13 (36%)</td>
<td>10 (25%)</td>
<td>14 (38%)</td>
</tr>
<tr>
<td>1</td>
<td>4 (11%)</td>
<td>3 (8%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
Under the category of Self-Responsibility, the percentage of students scoring at the highest two levels increased by 9% (indicating the lower levels fell by 9%). Most interestingly, the number of students scoring in the very lowest quadrant dropped to zero. These numbers indicate an overall shift of the group’s self-responsibility as a whole.

Personal Meaning

To score a rating of four in the category of personal meaning, the teachers had to observe that the “Student is engaged and involved in schoolwork and outside activities; demonstrates intrinsic motivation, and has some metacognitive awareness. Parents are involved in school” (Appendix A). Like the previous category, this one includes behaviors highly observable to classroom teachers, and is closely linked to academic success.

Table 6.6: Personal Meaning.
Number (and percent) of Students Scoring at Each Level. Percent values in parentheses

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>16</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(44%)</td>
<td>(28%)</td>
<td>(30%)</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(33%)</td>
<td>(55%)</td>
<td>(62%)</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(14%)</td>
<td>(15%)</td>
<td>(8%)</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(8%)</td>
<td>(3%)</td>
<td>(0%)</td>
</tr>
</tbody>
</table>

The results for personal meaning show a 14% increase in higher scores with a connected decrease of the same percent in the lower scores. As in the categories of awareness of others and self-responsibility, there are no students scored at the lowest rating during the spring term.
Valuing Honesty and Ethics

The final category included on the rubric used for this research project was valuing honesty and ethics, wherein the highest level is defined as “Student demonstrates responsibility, integrity, and cooperative skills (including accepting blame) in regards to both authority figures and peers” (Appendix A).

Table 6.7: Valuing Honesty and Ethics.
Number (and percent) of Students Scoring at Each Level. Percent values in parentheses

<table>
<thead>
<tr>
<th>Score and Term</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td>4</td>
<td>11 (31%)</td>
<td>9 (23%)</td>
<td>14 (38%)</td>
</tr>
<tr>
<td>3</td>
<td>15 (42%)</td>
<td>22 (55%)</td>
<td>19 (52%)</td>
</tr>
<tr>
<td>2</td>
<td>7 (19%)</td>
<td>6 (15%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>1</td>
<td>3 (8%)</td>
<td>3 (8%)</td>
<td>2 (5%)</td>
</tr>
</tbody>
</table>

This category shows the highest rate of change for students scoring at level four, with an increase of seven percent at that score point alone. In this case, there is a 17% change between the higher and lower scores from the fall surveys to the spring surveys, the highest rate of change out of all of the dimensions covered in the study.

Analysis of Collected Data and Limitations

In the case of each of the individual dimensions of emotional intelligence rated by the classroom teachers for this research project, there was an increase in students scoring in the top half (and a concomitant decrease in students scoring in the lower half). While the amount of change differed for each of the seven dimensions studied, there was positive change reported in each category. Looking at the data across all dimensions of the survey, in the fall, 69% of all students were rated in the higher two levels. The spring
data shows 81% of all students rated in the higher two levels: a twelve percent positive change.

Therefore, the data positively supports the hypothesis set forth in this research project: that regular dance instruction positively impacts the emotional intelligence of underserved and/or economically disadvantaged students. As discussed in other areas of this paper, there are significant limitations inherent in this project’s findings, which do more to suggest subsequent studies than to discount the information found herein.

The limitations of the study have mostly to do with causality, as was acknowledged in Chapter V. While the survey results make it clear that both classes made significant gains in their emotional intelligence during their fifth grade year, the project’s lack of a control group makes it impossible to ascertain whether these gains were made due to the R.O.A.D. program, the year-long influence of the classroom teachers, or any of the myriad other programs and activities available to these students throughout the year. For example, both classes participated in a variety of field trips, including an overnight camping experience and a bike trip on the towpath through Cuyahoga Valley National Park. It would be very difficult to separate the effects of these other programs in order to highlight the impact of the R.O.A.D. program. Even in the instance of using a control group not participating in R.O.A.D. classes, the issue of causality would be raised: was it the high-energy instructors? The musical accompaniment? The physical exercise? A particularly mature group of students?

An additional problem raised by the results is that of the classroom teachers’ level of expectations for their students. It is likely that the teachers both expected slightly different things from their students to begin with, and that these expectations changed
over the course of the year. Of course, high expectations are critical to student success, and it is both natural and advantageous to students for these expectations to rise over time. Assuming the teachers had higher expectations of their students in the spring than they did in the fall increases the significance of the survey results. This assumption leads to the conclusion that not only did more students receive ratings at the higher two levels, but that these ratings were also given on a slightly curved or biased scale.

Observations

As described in Chapter V’s discussion of methodology, my observations of the two R.O.A.D. classes at Portage Path constituted another important piece of data collection. Reviewing and reflecting upon the notes taken at each observation reveals changes in behavior and teacher expectations over the course of the school year. These changes support the surveys’ findings that students’ emotional intelligence increased from the fall to the spring, keeping in mind the same set of limitations.

At the beginning of the year, both classes – A and B – had similar behavioral issues. Of course, each classroom teacher handled these issues in her own way – Class A’s issues were addressed by whole class reminders, while Class B began the R.O.A.D. program with several students not participating due to poor behavior. These behavioral issues demonstrate lower levels of self-awareness, awareness of others, and self-responsibility – for example, acting out in class would be an inappropriate reaction to an emotion (low self-awareness). During this time, the R.O.A.D. teachers focused on getting the students acclimated to routines and procedures, while constantly rewarding positive behavior and noting negative actions with swift and stern reminders.
By the middle of the year, all students in Classes A and B were participating in the dance lessons – there were several observations during the winter in which all students seemed engaged and proud to be doing the right things at the right times (thereby receiving praise from both the R.O.A.D. teachers and their classroom teachers). The R.O.A.D. teachers were all extremely and remarkably consistent when it came to discipline: noting and correcting negative choices quickly and without dwelling, and continuously rewarding “excellence” either verbally or through actions (i.e. moving particular students to the front, having a student demonstrate a skill, etc.).

As the year’s dance lessons progressed, students were asked repeatedly by the R.O.A.D. instructors to demonstrate responsibility for themselves and one another, by cooperating in class and recalling movements, timing, and places. With repeated practice of these skills, students became more proficient over time – in the first few months, for example, students would have difficulty repeating a four-count phrase learned the previous week, while over time, they were able to remember longer patterns of movement. Students became proud to show what they could recall, and how much they could learn. Cooperative skills were constantly needed to learn choreography wherein the overall success depended on the individuals working together to get timing and spacing just right. This highlights growth in the emotional intelligence categories of valuing honesty and ethics (responsibility, integrity, and cooperative skills) in addition to self-responsibility. These new skills in turn led to a perceivable increase in self-approval from the majority of the students in each class.

I use the term majority, because a few students in each class had a nearly converse experience. These students – nearly all of whom exhibited behavior problems from the
beginning of the year – displayed an inability to show positive self-awareness and responsibility or to cooperate with their teachers and peers, were in turn given less responsibility, and therefore had less opportunity to grow in areas such as self-approval and personal meaning. During my observations, I noticed that the students given the lesser parts or roles were less engaged and took less pride in what they were doing. However, this could always be reversed – if the R.O.A.D. instructors noted a student who had been placed in the back doing exceptionally well, he or she would be praised and perhaps moved forward, or given another special responsibility. This is not to say that students were constantly being ranked; however, it does seem that the tangible outcomes of behavior in the dance classes promoted positive behavior in the students, similar to the impact of placements on a sports team.

It was fascinating to watch the students’ progress from my removed and neutral perspective. When the program was coming to its end, marked by a May performance consisting of all the R.O.A.D. classes throughout the Akron Public School District, I could see that both Class A and Class B had come a long way. The performance represented the culmination of their practice in responsibility and cooperation, and participating in the performance itself allowed students to engage in building self-approval and personal meaning.

However, for as far as they had come since October, they did not always meet the higher level of expectations held for them by their instructors in the spring. Evidently the Portage Path classes had failed to progress as much as many of the other R.O.A.D. classes (Stewart interview). Both the dance teachers and classroom teachers made mention of these fifth grade classes having a greater deal of behavior problems than most
classes, when compared with other fifth grade classes in Akron, or with previous fifth grade classes at Portage Path. While there were positive strides made by students across the board, they were perhaps not as great as their instructors had expected them to be as they prepared to move on to middle school.

While it is nearly impossible to determine exactly how much of an impact the dance classes provided by R.O.A.D. had on the students, the program was certainly part of the positive changes occurring in Portage Path’s fifth grade students during the 2010-2011 school year. As a whole, the two classes grew in all dimensions of emotional intelligence, as measured both by the survey data and by my observations.
CHAPTER VII

CONCLUSION

From the studies discussed in Chapter II, and the various programs looked at in Chapter III, to the R.O.A.D. program research completed for this project, it is clear that dance education has a positive effect on students who are underserved. The results of each study, whether scientific or purely observational, demonstrate the multiple and varied benefits of dance education for at-risk children. From increased grades and standardized test scores in academic subjects such as Math and English, to significantly improved levels of emotional intelligence, dance education seems truly to speak to at-risk populations.

This paper has demonstrated the vast impact that dance education can have on children, in particular for those who are least likely to have access to it for financial or other reasons. The physical and mental discipline taught by learning movements and practicing them over and over again fosters motivation, and as the Dana Foundation’s research has proven, this type of focus trains the brain’s attention network and transfers directly to other learning. As discussed in the R.O.A.D. study, cooperative skills are inherent in dance training in a way that can simply not be replicated through group work in another subject. In programs like Groundworks Dance Theatre’s, creative problem-solving is presented in a unique way. In each of the dance outreach programs – whether it be the after school offerings of the Everybody Dance! studio in Los Angeles and Pointe...
West in Akron, or the in school residencies of groups such as the National Dance Institute and R.O.A.D. – social and personal benefits abound. Dance provides an alternative language, a code of expression, an opportunity to take risks, to lead, and to succeed. Regardless of the specific type of outreach programming, participating students will reap these benefits, and as Susan Puretz’s longitudinal study illustrates, will maintain them over time.

As the limitations of the data suggest, however, a whole litany of studies could be done to explore this issue further, to determine precisely what aspects of dance education provide these benefits. Recurring patterns in the research indicate that the musicality of dancing, the social aspect of dancing in a group, and the opportunity dancing provides for individuals to express emotions could be reasons why dance speaks to at-risk children. Involvement in movement education also provides an important sense of belonging for children: Seham notes that “children are immediately given a social identity when, from the moment of admission, they are collectively referred to as ‘dancers’” (9). That sense of social identity for a child from a socioeconomically disadvantaged background is invaluable, for as these children reach their teen years, negative options for social identity will present themselves frequently, and often with great pressure. Next to food, water, and shelter, Maslow documented belonging as a basic human need: dance is another way to provide this, along with the aforementioned benefits. Where poor school and healthcare systems and overworked or unprepared parents have failed these students, movement can help them succeed.

Despite mounting evidence that dance education (and arts education in general) has a positive impact on so many aspects of intelligence, financial resources to support
this remain scarce. While there are some programs currently available to meet the needs of at-risk children, many of these programs are too short lived to have real effect. Successful programs such as Everybody Dance! and the National Dance Institute are far too few in number. It seems apparent that programs such as these are needed in cities nationwide, and they should be viewed as exactly that: needs, and not extraneous special programs for which there are never enough funds. Hopefully, further research will continue to support the patterns seen here, giving advocates for dance education the support needed to sustain more dance outreach programs.


Otloski, Mark. Personal Interview. 11 February 2011.


Stewart, Kara. Personal Interview. 27 July 2011.


## APPENDIX A. EMOTIONAL INTELLIGENCE SURVEY

### EMOTIONAL INTELLIGENCE RUBRIC – FALL 2010

<table>
<thead>
<tr>
<th>Self-Awareness</th>
<th>Awareness of Others</th>
<th>Self-Approval</th>
<th>Approval of Others</th>
<th>Self-Responsibility</th>
<th>Personal Meaning</th>
<th>Valuing Honesty and Ethics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student has high awareness of his emotions and their origins and engages in appropriate reactions to his feelings. Student recognizes when a reaction is inappropriate.</td>
<td>Student recognizes/accepts others’ emotions, attitudes, and tastes, and can evaluate the emotional responses of others.</td>
<td>Student places a high value on his physical, academic, and social attributes, is very comfortable with his opinions and acceptance level among peers.</td>
<td>Student is very accepting of others’ emotions, feelings, beliefs, values, and opinions: looks past differences to create understanding.</td>
<td>Student demonstrates excellence in organization, time management, and neatness, and is an effective communicator and problem-solver.</td>
<td>Student is engaged and involved in schoolwork and outside activities; demonstrates intrinsic motivation, and has some metacognitive awareness. Parents are involved in school.</td>
<td>Student demonstrates responsibility, integrity, and cooperative skills (including accepting blame) in regards to both authority figures and peers.</td>
</tr>
<tr>
<td>Student has some awareness of where his feelings/emotions originate, but may not always understand how to react to them appropriately.</td>
<td>Student is somewhat aware of others’ feelings/emotions, and can sometimes recognize responses as appropriate or inappropriate.</td>
<td>Student is somewhat unsure of one or more personality aspect, looks past differences to create understanding.</td>
<td>Student is somewhat accepting of varying emotions, beliefs, and opinions. May sometimes have difficulty bridging such differences.</td>
<td>Student is fairly organized and neat, and communicates well. Developing time management and problem-solving skills, and may need to learn strategies in these areas.</td>
<td>Student is somewhat engaged, but may not pursue outside opportunities. Parents are limitedly involved.</td>
<td>Student understands the value of honesty, but may not always follow through in action, especially in regards to authority or accepting blame.</td>
</tr>
<tr>
<td>Student has little understanding of why he feels a particular way and does not have many coping strategies.</td>
<td>Student seldom notices others’ emotions, and may not consider others’ values or interests.</td>
<td>Student is unsure of himself, values the beliefs of others over his own, and has uncertain social standing.</td>
<td>Student seldom respects the emotions, beliefs, and/or opinions of others. May have trouble accepting opposing viewpoints.</td>
<td>Student has difficulty remaining organized and completing tasks on time, and/or completed tasks are “messy.” Communication lacks clarity.</td>
<td>Student is rarely engaged or interested in learning, and lacks intrinsic motivation. Parents are limitedly involved.</td>
<td>Student takes little responsibility for actions and emotions and has trouble accepting blame and maintaining positive interactions with peers and authority figures.</td>
</tr>
<tr>
<td>Student has little self-control and little self-awareness. Inappropriate behaviors are easily triggered.</td>
<td>Student does not seem to recognize others’ feelings.</td>
<td>Student may have negative feelings about himself, few opinions, and may be either anti-social or socially inept.</td>
<td>Student is uncomfortable with others’ beliefs, emotions, and opinions, especially when they oppose his own.</td>
<td>Student is disorganized and often off task, and may have trouble communicating needs or ideas.</td>
<td>Student lacks involvement and motivation, and has difficulty maintaining interest. Little to no parent involvement.</td>
<td>Student is not accountable for his actions or emotions. May resent authority figures.</td>
</tr>
</tbody>
</table>
NOTICE OF APPROVAL

November 17, 2010
Regina Pietracola
2386 Professor Avenue, Back
Cleveland, Ohio 44113

From: Sharon McWhorter, IRB Administrator
Re: IRB Number 201010110 "The Effects of Dance Education on the Emotional Intelligence of Underserved Students"

Thank you for submitting your Exemption Request for the referenced study. Your request was approved on November 16, 2010. The protocol represents minimal risk to subjects and matches the following federal category for exemption:

☐ Exemption 1 - Research conducted in established or commonly accepted educational settings, involving normal educational practices.

☒ Exemption 2 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior.

☐ Exemption 3 - Research involving the use of educational tests, survey procedures, interview procedures, or observation of public behavior not exempt under category 2, but subjects are elected or appointed public officials or candidates for public office.

☐ Exemption 4 - Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.

☐ Exemption 5 - Research and demonstration projects conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine public programs or benefits.

☐ Exemption 6 - Taste and food quality evaluation and consumer acceptance studies.

Annual continuation applications are not required for exempt projects. If you make changes to the study’s design or procedures that increase the risk to subjects or include activities that do not fall within the approved exemption category, please contact me to discuss whether or not a new application must be submitted. Any such changes or modifications must be reviewed and approved by the IRB prior to implementation.

Please retain this letter for your files. This office will hold your exemption application for a period of three years from the approval date. If you wish to continue this protocol beyond this period, you will need to submit another Exemption Request. If the research is being conducted for a master’s thesis or doctoral dissertation, the student must file a copy of this letter with the thesis or dissertation.

☐ Approved consent form/s enclosed

Cc: Dursand Pope - Advisor
Cc: Stephanie Woods - IRB Chair

Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
330-972-7666 • 330-972-0281 Fax

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