

Running Head: WEAVING THE CORE CURRICULUM THROUGH SPECIAL SUBJECTS

Teacher Action Research Project

Weaving the Core Curriculum through Special Subjects

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Abstract

The purpose of this action research project was to determine if weaving core curriculum content through the special subjects of art, music, and physical education would indeed increase student success on standardized tests. By creating a sense of collaboration and of developing common teaching practices among the special subject teachers, the students experience deeper learning and make connections to core content curriculum which will better prepare them for the GEPA and NJASK. Essential learning can be supported in the special subject classes of art, music, and physical education. Character building also has a positive influence on the students test taking abilities. This researcher wanted to know if, by establishing common practices, the special subject teachers would play a significant role in improving test scores through authentic teacher collaboration and weaving the core curriculum through art, music, and physical education. The creation of a collaborative team within the school would end the isolation of, give validation to, and connect the special subject teachers to student learning by supporting core curriculum concepts through their unique areas of study.

Table of Contents

Cover Page.....1
Purpose Statement.....2
Table of Contents.....3
Introduction (Chapter I).....4
Review of Literature (Chapter II).....9
Focus Statement (Chapter III).....18
Factors Chart.....21
Essential Questions.....22
Design and Methods (Chapter IV)23
Triangulation Chart.....25
Action Research Timeline.....26
Data Analysis/ Results (Chapter V)27
Action Plan (Chapter VI)34
Appendix A.....37
Appendix B.....38
Appendix C.....39
Appendix D.....40
Appendix E.....41
References.....42

Introduction – Chapter I

Motivated students have often sought to master the basics in order to weave their learning into a specific skill. Reading, writing, and mathematics remained essential subjects used by students to make sense of information. During the latter half of the twentieth century, brain research on how knowledge is acquired and processed created a new paradigm with theories of learning (Teaching with the Brain In Mind, 1998). During the last three decades there has been an explosion of theories that connect learning in the core content classrooms with other subjects taught in school, namely music, art, and physical education. In the early 1980's Howard Gardner's Multiple Intelligence Theory and learning styles began to emerge, arguing that links to the arts were necessary and meaningful learning experiences in the student's life. Yet for the past five decades advocates for arts education have fought against its whittling down without concrete evidence that teaching the special subjects fostered a deeper understanding of core-content curriculum (Rabkin, Redmond, 2005). Gardner's Multiple Intelligence Theory gave arts educators the foot-hold they needed to justify music and art class, refreshing the commitment to maintain and grow programs that allowed students to cultivate these specific interests.

What also surfaced was a fierce debate on whether to teach "the arts for art's sake" or to support core curricular subjects (Arts with the Brain in Mind, 2001). When one goes out of the core curricular classrooms and walks the separate floors of the school building which house the gym, the art studio, and the music room, students, teachers, and administrators enter an entirely different world. Students may be grouped cooperatively, yet in seemingly unsystematic fashions that best serve the specific special subject. Sports teams or art tables are noisy, often appearing undisciplined, but the budding athletes or artists remain on task and learn many important skills. These classes are filled with creative and often foreign-looking activities that engage marginal students, and special learners, as well as advanced proficient students, promoting collaborations that satisfy all individuals involved in the special subject classes. Challenged learners may flourish and honor students may stumble.

Unlike the classroom scenario where presentation of new material is often interspersed with seatwork or quiet activities, the special subject classes are filled with constant movement or conversation, and a variety of activities that are new experiences during weekly classes. Lesson material is often encapsulated and succinct. Unlike the 'ster-

ile classroom' described in Alfie Kohn's article *Feel-bad Education* (Education Week, September 15, 2004) a palpable sense of joy and excitement is attached to the valuable learning through art, music, and physical education. Although the teaching areas may be isolated and random, learning is not. When one has a deeper understanding of teaching the arts and physical education, it becomes clear that these three subjects not only support core curricular learning, but also require application of core content in most meaningful ways.

The researcher has taught general/vocal music and piano since 1974 and has been employed in a Paterson, New Jersey K-8 elementary school since February 1998. The students in her school had not experienced general music class with a certified teacher since 1991. Art education had been reinstated only the previous year. Physical education had remained untouched by budget cuts. This was one of the lowest performing schools in a district that had been under state control since 1991.

In September 1999, the administration of the building changed dramatically. The new, conscientious, and innovative principal systematically assessed the many needs of the ailing school and immediately instituted learning programs that consistently raised test scores. Student population continues to remain diverse, ethnically and economically. This has created a unique blend of students living in a dangerous run-down housing project as well as children of home owners and house renters. During daylight hours, the neighborhood where the school is located appears safe and quietly suburban. Located on the outskirts of the city, the darkened streets provide cover for drug and gang activity. The K-8 school continues to serve over 720 students with an in-class student/teacher ratio of 25:2. The mobility rate is 27% and the student population is approximately 58% Hispanic, 29% African American, and 13% Caucasian, a group which includes Turkish and Arabic. Eighty-five percent of the students qualify for the federal school lunch program. In the winter of 2000 the school adopted the Comer School Development model which supports children's physical, cognitive, psychological, language, social, and ethical development (NJ Report Card 2003-04). The campus houses a child study team, drug and family abuse specialist, and two guidance counselors.

The 2003 Grade Eight Proficiency Assessment (GEPA) scores had been a cause for celebration. Although still under the state average, the Language Arts Literacy scores

rose 15.9% and exceeded the district average by 8%. Mathematic scores rose 13%, again placing the school over the district average, and Science scores were reported at 14.5% above the district average. The excitement, however, was short lived as the 2004 GEPA scores indicated a decrease of over 10% in each category, thus placing the school into a “needs improvement” status. The school is now in year three of Category I status according to the No Child Left Behind Act of 2001 (NCLB). The school did not meet Adequate Yearly Progress (AYP) in 2003-04 and it has an achievement gap of more than 25% in attaining the state standards in both math and language arts (NJDOE Office of Title I Program Planning and Accountability). One of the consequences of Category I (Year Three) is that a school improvement plan must be developed and initiated. The pressure placed on the administration, the staff, and the urban students to meet state and district goals on standardized testing is enormous. While the eighth graders (2004 GEPA) appeared to be weaker students, it was the current eighth grade (2005 GEPA) that would determine the school’s future. If AYP was met, the school would extricate itself from Category I.

In the fall of 2004, the principal instituted the Instructional Leadership Council (ILC). The ILC is different from the School Leadership Council since chairpersons were appointed instead of elected by the staff of the school. With the hope of bringing everyone’s focus into alignment, the chairpersons, individuals chosen by the administration to represent every grade level as well as special subjects, act as liaisons to specified staff and personnel to make sure that student learning is paramount, and that cohesiveness exists within subject matter taught to the student population. The special subject teachers are represented by this researcher, who is the music teacher for the K – 8 school population. In addition, this researcher interacts with the entire teaching and professional staff of the school including the child study team, guidance counselors, and administrators.

The special subject area teachers are aware that, although the Instructional Leadership Council has been established, they continue to experience isolation and remain on the sidelines of instructional change. They do not have a weekly common meeting period and are not included in workshops about teaching and learning strategies unless such programs are school-based in service activities. With standardized tests and the rigorous demands of NCLB determining a school’s future, the special area teacher’s importance has

been marginalized in the student's school and life experience. Yet it becomes evident when observing these classes that the engaged and focused students must work in cooperative teams, practice good citizenship, and exhibit moral and ethical character in the special subject areas. Students must make important connections with core content curricular learning in these subjects as well. In addition to improved student learning, the specials needed to have a legitimate voice with the ILC. It was not educationally acceptable for the special subject teachers to experience a lack of validity or a lack of common purpose.

This researcher feels passionately about collaboration and the sharing of ideas in a democratic atmosphere to encourage life-long learning. It is also this researcher's belief that, when core curriculum concepts are woven into special subject areas, the students experience deeper learning, making meaningful and useful connections to spark further queries that sustain their interest. There are a variety of ways to incorporate core content subject matter in the art, music, and physical education classes. Many innovative learning theories and teaching techniques exist to enhance classroom learning through these subjects. The special subject teachers are just as concerned about deeper student learning, character development, and successful test scores as are their regular classroom colleagues.

The key terms in this action research project will be "weaving", "brain-based learning", "core curriculum", and "intellectual character". The term *weave* is defined as the concept of introducing [an item] into a connected whole (Thorndike-Barnhart Student Dictionary, 1991, p.1245). *Brain-Based Learning* is a learning theory that reflects contemporary understanding of the structure and function of the brain and written about extensively by Eric Jensen. *Core curriculum* refers to the set of courses taught and tested in the classroom. They include language arts, writing, social studies, math, and science. *Intellectual character* is "an umbrella term to cover those dispositions associated with good and productive thinking" (Ritchhart, 2002, p.18).

The initiation of weaving core curriculum content through the subjects of art, music, and physical education benefits the climate of the school by encouraging special subject teachers to focus on student learning and performance. Through ongoing representation on the Instructional Leadership Council, the special subjects become part of the

whole, resulting in a better understanding of what purpose the special subjects serve in the formation of our students' characters. A necessary link was forged between the special subject teachers, the staff, and the administrators of the school. This researcher set out to explore the connections between special subject teachers and deeper student learning in preparation for standardized testing in a Category I school by weaving the core content curriculum through the subjects of art, music, and physical education.

Review of Literature – Chapter II

The connections among student learning, teacher collaboration, and commonality of purpose are paramount to weaving core curriculum concepts through the special subject areas of art, music, and physical education. Ritchhart (2002) used the metaphor of

“the red thread” for central goals and guiding purposes that connect, bind, and unite our practices. This metaphor is used in various cultures to mean binding, connecting, or uniting. Ritchhart connected the meaning of the metaphor to education by suggesting that the underlying message in education is our curriculum. This researcher identifies the *curriculum*, the course to be run, as a complex collection of skills and knowledge that must include important information for an individual to function successfully within a given society. Joseph (2000, p. 13) further recommended that we look beyond patterns of thinking to include the framework that curriculums are placed in when he suggested “we must do more than perceive composites of activities and interactions. We must understand the visions and belief systems that support the norms of classrooms and schools as individuals, groups, and communities make choices about the curriculum.” Instructional values and goals should take precedence over other less meaningful agendas in our public schools. When “the red thread” exists as a solid connection that nurtures thinking and intellectual character, our classroom goals become the priority (Ritchhart, 2002, p.181, 182, 207). Although standards are tested, the ideals motivate both teachers and students to make connections in their learning. The teacher’s passion for teaching is married with the student’s desire to understand.

Ritchhart (2002, p. xxiii) defined the term intellectual character as “the overarching conglomeration of habits of mind, patterns of thought, and general dispositions toward thinking that not only direct but also motivate one’s thinking-oriented pursuits”. Schools need to create a safe place for inquiry, intellectual dialogue, and mutual respect in order to build relationships between students, teachers, and deeper learning. Teachers need to answer the question “What are we teaching for?” and then, in turn, ask the students “What do you think is going on here (in this story, math problem, etc.)? What makes you say that?” across all disciplines (Ritchhart, 2002, p. 90-92). In order for creative, reflective, and critical thinking to occur in all subject areas Ritchhart believes that a common environment must foster the following conditions:

- Students must have on-going models of deeper thinking
- There should be a consistency of expectations
- Instructions should be explicit and understandable
- There must be an opportunity for practice and reinforcement in a meaningful way

Standardized tests can't measure moral character, nor are they an effective measurement of success as a person. "Parents want their children to develop virtues and values that we can all agree on, like diligence, honesty, tolerance, fairness, and compassion" (Wolk, p. 38). High scores on a series of written tests do not necessarily indicate that the student becomes a life-long learner. In many instances, it is the teacher's attitude toward exploring subject matter that encourages deeper understanding and life-long learning. When teachers model moral and intellectual character and are highly knowledgeable in the subject area that they teach, the students will model patterns of behavior and develop a level of trust with the educators they see practicing what they preach. Gardner explained that, when teachers themselves show a mastery of subject matter students remain engaged. This is especially evident in special subject areas such as art, music, and physical education. "That is why young musicians love to watch their teachers perform, and tennis students want to play with their instructors. And that is why students soon become disenchanted with teachers who fail to 'walk the talk' " (Gardner, 2000, p. 133). This is especially critical in urban centers where many students who are lacking in emotional support within the community and home environment, look to the teacher as an authentic role model of life-long learning.

Have we sacrificed the joy of self-expression, creativity, and individual health and wellness for a few percentage points? Anything not directly related to contributing to higher test scores goes on the chopping block and becomes fair game for budgetary cuts (Meier, 2004, p. 43; Loschert, 2004, p. 20; Carroll, 2004, p. 3, Allen, 2004, p. 3). With the blitz of state and national assessment many of today's students are being denied art and music classes. In addition, physical education classes are also being cut back even though we are facing a national crisis in regards to obesity and diabetes in today's children. New York City recently eliminated over two hundred athletic, visual-arts, and music programs while student health problems are on the rise. "Many studies show that cognitive performance is improved by aerobic activity, which increases the number of capillaries in the brain and thus facilitates the transport of oxygen and the removal of waste products such as carbon dioxide" (Allegrante, 2004, p. 38).

Across the nation, schools with a majority of poor urban or rural students or diverse immigrant populations, are most likely to be labeled as "failing" or "inadequate".

“This scenario of scaling back or cutting non-tested subject areas is repeated in district after district with art, music, shop, and other “elective” programs – often the very programs that keep kids connected with and in school” (Meier, 2004, p. 2). Category I status, imposed on urban schools, has forced minority populated schools and their administration to already reduce arts education by 35% across the nation while 42% are expecting future decreases in special subject areas (Loschert, 2004, p. 28). Foreign languages, social studies, nap time for kindergarteners, field trips, and recess are among the “frills” – a label that previously has been attached to art and music exclusively (Meier, 2004; Loschert, 2004; Carroll, 2004). In the current climate of education, NCLB elevates standardized test scores above deeper student learning. Fiscal restraints tied to school budget defeats and state mandated programs that take precedence over the arts add to the tendency to cut aesthetic programs in order to implement, supplement or maintain core-content learning.

Loschert (2004) suggested that deeper levels of thinking must occur in order for students to apply knowledge when learning the arts and to solidify the connections they make to other subjects. Curriculum mapping, common goals, and informal collaboration among special subject teachers lead to mutual reinforcement of concepts and themes. Allen (2004, p. 6-8) stated that when teachers maximize the strength of the arts and explore connections to the other disciplines they get the students hooked on learning. Different disciplines maintain their integrity when legitimate connections are found and common learning becomes a focus (Burrack, McKenzie, 2005, p. 46). Once central themes, problems and issues, or common topics and experiences are located, curriculum weaving becomes a natural progression. Cross-discipline assignments promote deeper understanding and inquiry while providing “the red thread” to stitch many relevant facts together across disciplines.

These approaches may also allow for certain concepts and elements to be taught more effectively. Students understand the connections, while the interactions and intersections of subject matter encourage them to want to know more. As the students’ impetus for further exploration grows, the teachers’ ability to strengthen collaborative efforts rises. Burrack and McKenzie (2005, p.50) agreed that “this instructional approach encourages intellectual curiosity regarding the structural, contextual, and expressive dimen-

sions of the musical work, and it can also strengthen professional bonds between music educators and teachers of other disciplines.” When administrators see an improvement in student motivation and teacher morale, they start reevaluating what the arts are about and may be willing to give them greater support.

Higher-order thinking skills are important factors in training music, art, and physical education educators. Physical education and art teachers use higher-order thinking skills to interpret distinct information necessary to predict space and movement. Special subject teachers must go beyond cognitive understanding of available information to discovery, organizing, augmenting, and assigning meaning to ambiguity while training to teach in their specific fields. Sheldon and DeNardo (2005, p. 41) found that music majors entering the field of education “find it easier to derive meaning from given information, although less direct. [This ability] may equip music learners for independent life-long learning well past their time with a teacher.” The two professors of music conducted a research study on a group of 246 university music majors, following the individuals’ progress from audition through senior year in college.

This study found that because of the pre-service music teacher’s concentration in listening skills and composition analysis, the participant’s higher-order thinking skills greatly improved over the five years of data collection. The researchers suggested that by honing higher-order thinking skills at the pre-service level, teachers in other subject areas as well as the special subjects would be better prepared to integrate critical thinking skills in their students throughout their educational experience. “It would follow that teachers who have developed such skills might be more likely to teach using methods that would help to hone these skills in children” (Sheldon, DeNardo, 2005, p. 47).

Barrett (1997, p. 30) stated that “teachers who look for, listen, and think about relationships, patterns, influences, and meaning serve as role models for intellectual curiosity.” This type of connection dissolves borders between subject areas and lends credence to the statement that knowing in more than one way deepens the educational experience for the student. Achieving broader goals and the very purpose of education and schooling occurs when learning with integrity between and among disciplines shapes school life. This directly influences and contributes to the student’s general development and quality of life.

Art, music, theater, physical education, and literature are connected with common language. Once again, a “red thread” is shown to exist. Connections between math, social studies, science, and writing are evident in music and art. Physical education has a connection to core curriculum content as well as to personal well-being (Carroll, 2004; Jensen, 1998, p. 85). Barrett (1997, p. 316) explained how art, music, and physical education teachers exist in fields where passion is at the heart of their teaching. These teachers have experienced intense preparation, continually practice what they teach, have committed years of study to their disciplines, model strong convictions and high motivation, and have highly developed practice skills to earn their credentials.

Yet, too often in schools, these passionate instructors are left out of key professional experiences. Art, music, and physical education teachers have long been denied the types of professional development offered to core curriculum subject teachers. Carroll (2004) and Loschert (2004) cited little or reduced professional development within the field of physical education and other subject areas that are now considered marginal. Foreign languages, social studies, and life skills, as well as art and music, fall into the category of marginal subjects that are left out of professional development in many districts because they do not directly relate to standardized test scores.

To combat these disenfranchising trends, Ritchhart (2000, p. 235) advised starting informal study groups or profession discussion groups to address collaboration. Barnes (2000, p. 38, 42) stated that school-based professional development is one of the most important endeavors that creates an established climate of collaboration in a school’s culture. Barnes discusses four benefits of school-based collaboration:

- Participatory research that fosters authentic teacher collaboration
- Group inquiry encourages professional development
- School-based collaboration improves the school climate/school culture
- Intellectual exchange renews energy and talent among staff/subject areas

Manzo (2002) confirmed that art and music specialists need to become part of the larger educational team so that they are no longer considered outsiders or prep givers. They must experience validity as important members of a school where the special subject area

teachers can assist student achievement in the core curriculum content areas while not losing sight of their own curriculum content.

Manzo (2002, p.54) also supported Barnes' statement about school-based professional development by suggesting that when special subject content supports core curriculum content it "improves school culture through greater collaboration and helps teachers incorporate more critical thinking skills into lessons." Raffone (2002) crafted writing into a physical education curriculum in a New Haven, Connecticut minority school, citing how thematic units infused with writing and journaling supported classroom learning, fostered deeper thinking, and strengthened interpersonal skills. Dr. Susan Snyder created ART SMART (1997) to integrate music, art, and movement into classroom subjects to foster deeper learning. After a two year study in Jacksonville, Florida, Dr. Snyder reported better student attendance, higher academic performance, improved behavior, and a deeper understanding of the relationship of self to others.

A second point of view argues against arts integration, which does not take into account the 'spillover effect'. Debra Viadero explained how "some critics contend that the arts are important for their own sake, and they take offense at research casting such learning as a "handmaiden" to academic subjects" (Viadero, p. 8). This suggests a pedagogical approach that is purist in nature, forging the concept of arts integration and focusing on learning art for art's sake. However, the author interestingly enough cites various studies which show that there is a *secondary effect* on students who participate in the arts, but these results are often difficult to verify. "The trick now is to figure out how best to measure subtler benefits of the arts, such as persistence or the ability to conjure up mental images" (Viadero, p. 8). Collecting this data is often difficult and subjective.

Other researchers have also indicated that teaching the arts to support classroom learning will compromise the subjects enough to "write themselves out of the curriculum" (Hetland and Winner, 2000, p. 4). They disagreed with incorporating arts education with core content subject learning because there is no measurable performance difference between students who do or do not participate in the arts. Hetland and Winner stated that a direct correlation between test scores and arts integration has never been firmly established through serious quantitative studies. They did prove, however, that when students acted out literature through drama and role play improvisation, their verbal skills and

comprehension increased. In addition, the students were forced to grapple with open-ended, messy problems.

Hetland and Winner (2000, p. 2) indicated that students who were active in the arts also developed the habits of close observation, revision, and perseverance. If the purpose of education is to support student learning and prepare them for real world experiences, do Hetland and Winner's findings contradict their statement that arts integration does not improve student performance? Can researchers find a verifiable way to gauge 'the spillover effect' discussed by Viadero that can substantiate arts education as intrinsic to deeper student learning?

Art, music, and physical education classes are ideal places for weaving core curriculum content. Jensen (1998, p. 15) stated that "the end result of learning anything is intelligence". Learning is what the brain does best as it continues to rewire itself with each new stimulation, experience, and behavior. Since humanity has survived for thousands of years by 'not getting it right' the first time "the notion of narrowed standardized tests to get the right answers violates the law of adaptiveness in a developing brain" (Jensen, 1998, p. 16). A strong foundation in art, music, and physical education builds creativity, concentration, problem solving, coordination, and values attention. It also encourages self-discipline (Jensen, 1998, p. 36). "In the same way that exercise shapes up the muscles, heart, lungs, and bone, it also strengthens the basal ganglia, cerebellum, and corpus callosum, all key areas of the brain" (Jensen, 1998, p. 85). Jensen stated that art, music, and physical education activities demand the use of both hemispheres of the brain simultaneously thereby creating connections to other learning (Jensen, 1998, p. 37-38).

When students are engaged in special subject activities, they are exposed to and receptive of core curricular content learning in a new, refreshing way. Arts education promotes cognitive flexibility which is needed in real world situations and workplace readiness (Jensen, 2001, p. 9). Jensen stated that, in countries with the highest math scores on standardized tests, including Japan, Hungary, and the Netherlands, music instruction is not only required but expected. It is an integral part of the student's daily exercises and holds as much weight as other core-content subjects. In addition to higher test scores, the arts help to define the society in which we live. Participation in music instruction and performance "helps construct our meaning and represents our world in

ways that can't be done with linear teaching" (Jensen, 2001, p. 49). In *Creating a Timely Curriculum: A Conversation with Heidi Hayes Jacob*, Deborah Perkins-Gough poses the question: "How do you see the arts fitting into the curriculum for the future?"

The focus on the arts is central to what it means to be human. Curriculum discussions in the United States often marginalize the arts. The education systems in most other countries – especially industrialized countries, but even developing ones – reflect how important it is to be culturally literate. Heidi Hayes Jacob (2003, p. 20)

Barrett (1997, p. 321) suggested that the way we explore a subject is just as important as the subject itself. Ritchhart (2002, p. xvii) asked the question "what if education was less about acquiring knowledge...and more about cultivating the dispositions and habits of mind that students will need for a lifetime of learning, problem solving, and decision making?" Developing sound learning habits to encourage life long learning is a lengthy process. It can be compared with learning to play an instrument, drawing a self portrait, or keeping oneself physically fit. Many core curriculum concepts are present in the special subjects of art, music, and physical education, but they are not clearly specified and categorized as cross-content material. In order to support and attach focus on classroom learning, art, music, and physical education teachers must target specific core curriculum content to incorporate into their weekly lessons. Students must feel prepared to face standardized testing by being encouraged to think deeply throughout all the subjects taught in school.

Jensen (2001) suggested that slower, more interactive discovery learning takes longer but builds more intelligent neural networks while only teaching for the test bypasses the process of developing smart learners. Gardner (2000, p. 80) agreed that "perhaps the musical experience turns out to be a general motivator, and ultimately produces superior performance on a gaggle of nonmusical tasks." Ritchhart (2002, p. 3) embellished Jensen's concern by asking "is teaching for intelligence, that is, teaching with the goal of making students smarter, such a cornerstone of our educational system that we can take it for granted?" In order for meaningful learning to occur shouldn't there be connections that imbed intellectual rigor in all subjects? The special subjects of art, mu-

sic, and physical education provide pathways to learning that allow students to become emotionally invested in learning.

Rabkin and Redmond (2005) confirmed that test scores in twenty-three arts-integrated schools in Chicago rose twice as fast as comparable schools. In Minneapolis, the various core-content teachers found that professional development linked to arts-integration was a very powerful experience. Student success is directly affected by weaving subject matter together:

Their thinking capacities grow; they work more diligently, and learn from each other. In arts-integrated rooms, students often work in groups and turn classrooms into learning communities... Art and music teachers often become the fulcrum of multi-class projects. (p. 46)

The special subjects of art, music, and physical education are not only important for their specific content matter, they are also priceless links to deeper learning, teaching for understanding, student emotional and moral growth, and meaningful teacher collaboration. It is impossible to separate the arts from what it means to be a contributing member of society.

If *arts-integrated curriculum* improves student learning, then can *core-content curriculum* threaded through special subjects do this as well? By weaving core-content material into the subjects of art, music, and physical education, more meaningful connections are made to general education classroom learning. Students learn many important life-lessons from studying the arts. Physical Education activities promote health and mental fitness as well. Special subject teachers are an integral part of school culture and student learning. This researcher believes that teacher collaboration, common purpose, and developing intellectual character in our student population will be “the red thread” that weaves core curriculum content through the special area subjects.

Focus Statement and Action Research Questions – Chapter III

This study involved students in three state tested grade levels and incorporated the talents of the special subject teachers. The special subject teachers were identified as two

physical education teachers, two art teachers, one part-time instrumental teacher, and one full time general/vocal music teacher. The part-time instrumental teacher was included because most of his students were also involved in chorus as well as general music class, which showed these students to be more immersed in arts education than the others. In addition, the novice teacher was eager to participate in the project and often brought a different perspective to the veteran special subject staff. Also, in order to avoid marginalizing his contribution to the continuing musical education of the student population, it was important for this researcher to include him. The grade levels that participated in state testing were grades three (74 students), grade four (80 students) and eight (90 students).

Fourteen general education classroom teachers and the school's Instructional Coach participated through surveys and professional discussions. The Instructional Coach (IC) was a newly created, non-classroom administrative position created throughout the urban district schools during the 2004-2005 school year. The individual that was appointed in our school was a veteran classroom teacher who was given authority by our principal to assist and guide teachers with curriculum issues. In addition, the IC presided over Instructional Council meetings on a monthly basis. This researcher represented the special subject teachers at these meetings and worked cooperatively with the IC to ensure that core curriculum content would be addressed in the art, music, and physical education classes.

Although the scope of the study appeared to be large, it was important for this researcher to include all the special subject teachers in the research and therefore needed to include grades three and four as well. Student contact for the physical education and art teachers was twice weekly. Approximately 15 students in grades seven and eight took instrumental lessons on a weekly basis, and all students in the study attended general music class once a week for forty minutes. Sixty upper grade students participated in chorus class in addition to the general music instruction.

The educational environment that had persisted for the special subject teachers was one of isolation and disconnectedness. Appointed as their liaison to the Instruction Council, this researcher met with each special teacher individually or in couplets throughout the school year to foster core content weaving. It was the intent to develop a plan so

that these six teachers could better support classroom learning when integrating general classroom subject matter. They were to weave core content into their lessons if they had knowledge of specific learning concepts that needed attention. Prior to this project they had not been included in teaching strategy workshops and professional discussion groups.

The special subject teachers met as a whole at the October In-Service to discuss methods of integrating core curriculum content. The special subject teachers were willing to bring their focus into alignment with classroom teaching by using common language, building intellectual character in their students, and weaving core concepts taught in the classroom into their lessons to foster a cohesive climate. It was anticipated that student achievement would rise when connections were made across disciplines. The students were made aware of the importance of practicing time management. As a consequence, deeper learning strategies would become routine for them. They would feel better prepared for testing if they were made more familiar with common tasks and focused goals.

The major challenge of this study was common meeting time for the specials to network and work as a cohesive unit. Since changes to our schedules were not feasible, individual monthly professional discussions were instituted. This research project did not require funding as no time was made available as requested. The researcher had the support of the administration, the special subject teachers, and the classroom teachers. Parental involvement was minimal since homework assignments were not required in art, music, or physical education. Contact with parents included concert attendance and report card nights. Informal discussion with the parents served as a method of explaining what weaving core curriculum through a special subject means.

The action research project centered around two goals for improvement. The first goal was to validate and include the special subject teachers as integral members in the learning community of the school. Professional discussion and dialogue with the special subject teachers focused on teaching strategies, character development, and common teaching language to create a collaborative climate, and support classroom core content learning for the students who would be tested.

The second goal, and more critical purpose, was to raise student achievement on state tests by 10% and encouraged deeper learning of core content curriculum by weaving class material through the special subjects.

The purpose of this action research project was to determine if weaving core curriculum content through the special subjects of art, music, and physical education would indeed increase student success on standardized tests. By creating a sense of collaboration and developing common teaching practices among the special subject teachers, the students were better prepared for the GEPA and NJASK. Essential learning was supported in the special subject classes of art, music, and physical education. Character building had a positive influence on the students' test taking abilities. This researcher wanted to know if, by establishing common practices, the special subject teachers would play a significant role in improving test scores through authentic teacher collaboration and weaving the core curriculum through art, music, and physical education.

Factors Involved in the Action Research Project

The pie chart on the next page shows what significance the six areas of concern played in this research. The most important factor (25%) was to focus on assisting the special subject teachers with teaching strategies. Targeting classroom teacher's needs, researching teaching strategies, and the implementation of core content related lessons each holds equal value (20%). Understanding our connection to NCLB as a Category I school (10%) was explored during our discussion groups. Administrative input (5%) was minimal because this researcher followed established administrative guidelines to implement this action research project. The absence of a budget was acceptable to this researcher because the implementation of professional discussion groups, and common meeting times did not play a significant factor in the school day.

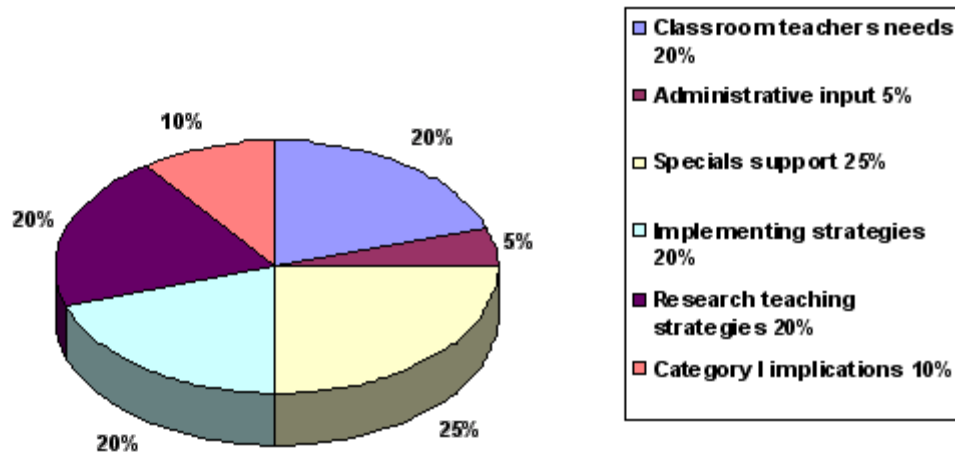


Figure One: Factors chart for Weaving the Core Curriculum through Special Subjects

Essential Questions

The graphic organizer that follows contains the variables surrounding this action research project. Each question was perceived by this researcher as a critical point to investigate in order to institute change for a successful completion of this researcher's area of study. All questions stemmed from the implementation of weaving the core curriculum content through the special subjects of art, music, and physical education. Each frame contained a major question followed by methods of obtaining the specific answers in **bold print**.

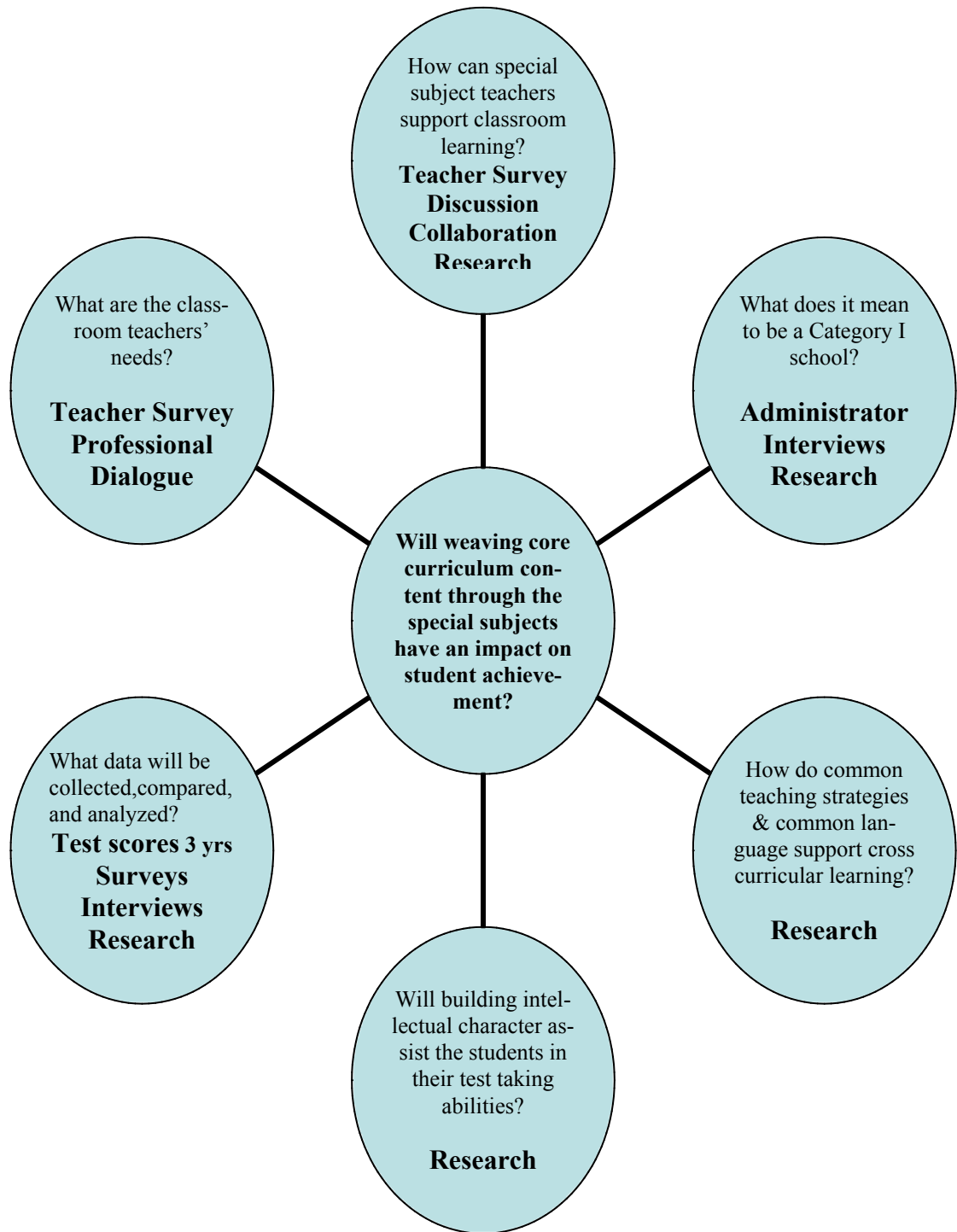


Figure Two: Essential Questions for Weaving the Core Curriculum through Special Subjects

Design and Methods – Chapter IV

In order to investigate the action research focus questions, this researcher employed qualitative as well as quantitative data methods. Qualitative data included pre-survey and post-survey of classroom and special subject teachers. The pre-survey assisted the researcher in gathering data as to the general disposition towards curriculum weaving and its effect on the general student population to support student learning (Appendix A). How to better prepare students for standardized tests through the special subjects was discussed by the researcher with the other special subject teachers.

The post-survey for classroom teachers was administered in June 2005 after all testing had been completed (Appendix B). These data determined if the researcher's action research project significantly supported student learning and student preparation. **Supporting Core Curriculum Artistically, Musically, and Physically Ensuring Real Success**, known as the **SCAMPERS** Project, was designed by this researcher in October, 2004. Discrete **SCAMPERS** posters were visible in the art and music room during the year (Appendix C). When connections across the curriculum were made, the middle-school art and music teachers briefly discussed with the class the meaning of weaving the core curriculum through our subjects to help focus student understanding of deeper learning. In addition, a periodic **SCAMPERS** Project request letter was made available to participating classroom teachers every month (Appendix D). This data was collated and distributed to the special subject teachers for lesson planning and became the topical point of professional discussions throughout the year. Copies of the request letter were distributed to update the special subject teachers on classroom core curriculum concepts being studied. Two Professional Discussion Group (PDG) meetings occurred, during which most of the special subject teachers were able to create a list of terminology to aid us in weaving basic concepts through the art, music, and physical education curriculum (Appendix E).

Special subject area teachers discussed the types of instructional strategies they were familiar with. Additional information on brain-based learning and backwards design curriculum was made available to them for future reference. The researcher analyzed the surveys and addressed common language, teaching strategies, and student character building during the second PDG. The PDG served as a mini-workshop to assist the

special subject teachers in the implementation of brain-based learning techniques, character building, and coordinated lesson planning to underscore the classroom teachers' suggested areas of focus. In addition, a common list of terms was adopted for future use.

The principal and the business administrator of the school were interviewed to clarify Category I status and to identify the important areas the special subject teachers needed to concentrate on to support classroom learning and to achieve successful test taking skills. ILC meeting notes were collaborated upon by the researcher and the special subject area teachers to insure cohesiveness of purpose and alignment of educational goals.

Quantitative methods included analyzing GEPA and NJASK test scores for the three years (2003, 2004, and 2005) and comparing advanced art, chorus and instrumental students' scores with the general education population. The physical education teachers did not wish to participate in this portion of the action research, citing various reasons this researcher understood to be valid.

The triangulation chart on the following page contained key questions that this researcher explored during this action research project. Triangulation was defined as using multiple sources of data to research a particular aspect of the study. This researcher's matrix used examination, "enquiry", and experiencing (Mills, 2003, p.52). In an effort to give the action research project spirit, the concept of weaving the core curriculum through the special subjects was named **SCAMPERS** (Supporting Core curriculum Artistically, Musically, and Physically Ensuring Real Success). The researcher reviewed student test scores and other pertinent data available in the school in addition to field notes (examining). Interviews and surveys were used to determine the needs of the classroom teachers, the students needs (curricular, intellectual and character building), and areas to concentrate on (enquiring). A professional discussion group was formed to collaborate with the special subject teachers to keep them apprised of the project and aligned with the ILC's goals. The researcher was an active participant in the **SCAMPERS** Project (experiencing).

ACTION RESEARCH TRIANGULATION CHART

Research Questions	Data Source ONE	Data Source TWO	Data Source THREE
<i>What are the classroom teacher's needs?</i>	Pre Survey SCAMPERS	Professional Discussion & Dialogue	Periodic SCAMPERS request letters indicating core content concept
<i>How will the special subject teachers know what areas need to be addressed?</i>	Pre Survey SCAMPERS	Professional Discussion & Dialogue	Monthly SCAMPERS Request letters
<i>What resources will be used to compare student test scores and identify the changes?</i>	Post Survey SCAMPERS	Administrative records for NJASK 03-05 & GEPA 03-05	Student end of the year letters & classroom discussion
<i>What will indicators be for better student preparation and positive attitude towards test taking?</i>	Classroom teacher visual observations	Students' higher achievement on assessments	Special Subject teachers' visual observations
<i>How will weaving core curriculum be accomplished though special subjects?</i>	Special subject teacher lesson plans	Discussion Groups with Special subject Teachers	ILC field notes indicating needs for assistance from the special subject teachers

Figure Three: Triangulation Chart for Weaving the Core Curriculum through Special Subjects

ACTION RESEARCH TIMELINE

DATE	ACTIVITIES	DAYS	DONE	
December 2004	Hand in initial paper	0	X	
	Compose SCAMPERS	2	X	
	Project Teacher Letter	5	X	
	Write and refine classroom teacher survey	5	X	
	Write and refine special subject teacher survey			
January 2005	Hand out & collect classroom teachers survey	5 5 1	X X X	
	Hand out & collect specials survey	5	X	
	Circulate SCAMPERS	N/A	X	
	Project letters	5	X	
	Review surveys	N/A	X	
	Initiate SCAMPERS ACTION RESEARCH			
	Compile data from surveys			
	Professional Discussion Group Activity			
	February 2005	Interview Principal	1	X
		Profession Discussion Activity	N/A	X
Review notes from ILC & PDG		2	X	
1st MP review of SCAMPERS Project		2	X	
March 2005	Interview business administrator	1 N/A	X X	
	Professional Discussion Group Activity	2	X	
	Review notes from ILC & PDG	2	X	
	Mid-research review of SCAMPERS			
April 2005	Literature review – update	14	X	
	Professional Discussion Group Activity	N/A	X	
May 2005	Review notes from ILC & PDG group 2 mos.	2	X	
	Professional Discussion Group Activity	N/A	X	
June 2005	Compile 2005 GEPA, NJASK data	7	X	
		5	X	
		5	X	

	Administer post survey to classroom teachers Administer post survey to specials		
July 2005	Compare 2003, 2004, 2005 test score data Compile surveys pre & post data Revise & rewrite action research project	14 7 30	X X X
August 2005	Continue to revise & edit ARP Complete reference and appendices	30 30	X X
September 2005	Final paper revisions Have paper edited Complete Chapter V	5 10 14	X X X
October 2005 November 2005 December 2005	Revise & edit chapter 5 Final edit Have project finished by 12/1/05	15 10 5	X X X

Figure four: Action Research Timeline for Weaving the Core Curriculum through Special Subjects

Data Analysis and Reporting of Results – Chapter V

The **SCAMPERS** Project was approved by the administration in early October 2004 and a brief presentation was made to the faculty at the October in-service. The idea of weaving core curriculum through the special subject areas was favorably received by a majority of the staff. The special subject teachers met to discuss the different ways to support classroom learning and many creative ideas were shared. It was agreed upon by all that common terms and common language would be used in our classes.

The physical education teacher, who is a veteran staff member, suggested that focus be placed on specific concepts such as time, measurement, geometrical shapes, repetition, and self-esteem each month. Survey information supported many of the same con-

cepts. To organize the collaboration, schedules were discussed to compensate for no common prep times. To remedy this, brief individual professional discussions served as the information gathering medium. In addition, special subject teachers agreed to sit together at all future in-services to facilitate discussion and support. A sense of meaningful collaboration was immediately established. Over the course of the following two weeks the special subject teachers individually approached the researcher to say “how good it felt to be a significant part of an educational project”. Many Instructional Leadership Council members were enthusiastic about **SCAMPERS** at the November meeting, eagerly informing this researcher of subject matter they could use support in and commenting positively on **SCAMPERS**.

Twenty-two percent of the faculty participated in the pre-survey with 80% stating that they had never participated in action research before. Written comments included statements such as: “Special subject teachers must commit to integrating subject matter!” and “**SCAMPERS** can only help! Thanks for taking the initiative!” This tone was typical among teacher comments. Other information supported this researcher’s original belief that weaving core curriculum through special subjects was a worthwhile project. The pre-survey results showed

- Overwhelming agreement that special subjects could and should support classroom learning.
- Agreement that using common language and common teaching strategies in special subject areas would benefit the students.
- Belief that student self-image and perception of their ability level directly affected student performance.
- Consensus that most students did not finish tests in a timely manner.
- Lack of student discussion of what they learn in special subjects, not often making connections to classroom learning.
- Higher levels of performance by students who participate in gifted and talented art, chorus, or take instrumental lessons.
- Conviction that test scores will rise if students make core-curriculum connections in the special subject areas.

The principal and business administrator of the school communicated to this researcher that the focus on higher test scores was of primary importance. In an effort to support the **SCAMPERS** project, the business administrator ordered “Math Jingles” (Grades 1 – 6) from Harcourt, Inc. to be used in the music classes as supplemental learning material. The principal indicated that the **SCAMPERS** project was in line with efforts of school improvement. Although the necessary common meeting time was requested, it was not possible to work this into the school day. In response to this, the researcher established short 15-minute individual meetings with special subject teachers twice a month during her prep periods.

It was reported to this researcher that patterns and themes began to emerge within the first month of participation in the **SCAMPERS** project. Special subject teachers stated that students commented on and recognized that common terms were being used in art and music classes. Common terminology recognition was slower to become apparent to the students in the physical education classes. This researcher redoubled her efforts to assist these teachers with making curriculum connections as well as reassuring them of their importance in this project. The physical education teachers incorporated writing assignments in the form of journal entries into their lessons, paying particular attention to physical education’s connection to personal health and wellness.

The art teachers had more success with weaving core curriculum through their projects. Both art teachers commented on the need to focus students on measuring, repetition and contrast. This researcher included the three concepts in her general music lesson plans for grades three and four. Within two weeks classroom teachers, as well as the art teachers, commented to the researcher directly that students were more aware of measurement accuracy, repetition in design, word patterns, and contrasting themes, both written and visual.

“Math Jingles” were incorporated in music lesson plans for grades three, four, and eight after meeting with math teachers to identify which concepts needed the most support. They helped this researcher develop simple math quizzes to be used in music class. The students were perplexed at first, singing about math functions in music class. Once the songs were identified as AB or ABA form, the students discussed the lyrics and enjoyed taking math quizzes. Many students indicated in writing how much they enjoyed

making connections between math and music. This involvement was especially evident in the eighth grade. Students shared their love for math or their fear of it. Many stated that singing about the mean, median, and mode made these items more understandable. In addition, stronger math students enjoyed assisting classmates who had trouble with this researcher's mini-math quiz. The math jingles were used each week during the two month period prior to the GEPA. There was a sense of energetic and meaningful collaboration between math and music teachers. Both teachers heard from students that reinforcing core content subject matter was thoroughly enjoyable using the math jingles. It supported student learning and intellectual character as well.

Perhaps the most dramatic effect of using the math jingles occurred in the fourth grade population. The teachers indicated which math concepts needed the most attention. A mini-math quiz was then devised for these students and administered in music class after the students sang the math jingles. This researcher agreed to devote ten minutes at the end of each class to math-music connections for the two months prior to the NJASK. Students were immediately hooked on triangles, time, measurement, and finding averages. Class discussions centered on the connections and patterns found within subject matter in different disciplines. Two weeks before testing, a fourth grade teacher approached this researcher in the faculty room with a broad smile on his face: "I started to review triangles with my math class and the kids got very excited. They started telling me about acute and obtuse triangles! I was amazed! You make my job easier! That was fantastic!"

Third graders learned to clap, snap, and patch their times-tables to rhythms. This researcher devised a method of teaching the multiplication tables with kinesthetic rhythmic exercises. Third grade teachers indicated that students brought the activity into their math class and could be seen playing this multiplication rhythm game during recess. It became evident that many students were more secure in their multiplication tables because of this activity coupled with the math jingles. In addition to supporting core curriculum content, many students' self-confidence and self-esteem reached new heights.

The music teacher noted from student in-class participation and informal teacher interviews that other developments materialized through **SCAMPERS**, and because of it:

- Professional dialogue and discussion about the research project solidified teacher collaboration with special subject teachers as well as classroom teachers.
- The middle school art teacher was so impressed with core-content weaving that she attended a seminar on curriculum integration. She explained **SCAMPERS** to the presenter, who automatically asked her describe it to the class - indicating that this type of project improves student learning and initiates changes in school climate where special subjects are no longer considered marginal subjects.
- Special subject teachers worked together collaboratively. Their creative abilities, contributions to school culture, and focus on student learning received validation as classroom teachers commented on specialists' core content support.
- Special subject teachers encouraged deeper learning and intellectual character in their classes. Journal writing activities were instituted in physical education classes and student process-folios were expanded in music class. Writing activities in art and music class included newly-learned tools such as metaphors, similes, and oxymorons in the upper grades.
- As a result of the **SCAMPERS** project, special subject teachers had a better understanding of deeper thinking, higher-order thinking skills, backwards designed lesson plans, and meaningful teacher collaboration.
- Beginning with the 2005 – 2006 school year, special subject teachers have 2 scheduled team meetings per month during school time and will include the World Language teachers as well. This researcher serves as the grade level facilitator.

Twenty-five percent of the faculty participated in the **SCAMPERS** post-survey activity. The findings were favorable and better than expected:

- 75% of the responders have become active participants in action research.
- 100% of the responders agreed that **SCAMPERS** should continue and that it had a positive effect on student achievement.
- Classroom and special subject teachers reported regularly that students were making connections between special subject content and core-curriculum concepts.

- 70% of the responders indicated that student self-confidence and time management on assessments improved since the initiation of **SCAMPERS**.

Written comments were favorable and encouraging. “Special subject teachers should definitely continue to network with each other the way classroom teachers do.” One responder was highly complimentary to **SCAMPERS**: “I love the idea of the **SCAMPERS** Project! Unfortunately there is not always time for the classroom and special subject teachers to talk with each other about what is going on in their classrooms. This enabled feedback from all areas of study. I hope utilization of **SCAMPERS** continues. I feel that more teachers should participate in using this as it makes connections between all subjects; showing the importance of all subjects (art, music, PE). It also shows that these special subjects and practices do help students in tests and in the classroom.” In addition, some of the eighth graders alluded to the math jingles assisting them while taking the GEPA: “I started singing the song in my mind about the mean, median and mode. It helped!” “As I worked the angles, I remembered “All about Triangles” and I think I got the right answers.” “I really enjoyed your math jingles this year. I am really good in math and they were fun.”

The qualitative and quantitative data that were collected clearly showed that weaving core curriculum through the special subjects of art, music, and physical education contributed to student success. Test takers were better prepared for standardized tests and consequently, GEPA scores rose dramatically in the 2004-2005 school year which is documented in the following table:

**School No. 25 GEPA Results – General Education Student Population
2003-2004 compared to 2004-2004**

Subject Tested	2003-2004 Students Passing	2004-2005 Students Passing	2005 GAIN School 25	2005 District Scores	School 25 Compared to District Average
Lang. Arts	60.3%	78.3%	+ 18.0%	61.1%	+ 17.2%
Math	50.0%	61.0%	+ 11.0%	47.5%	+ 13.5%
Science	62.0%	80.0%	+ 18.0%	60.0%	+ 19.4%

- The only 2 students who achieved *advanced proficient* in all tested areas were four-year chorus members and studied musical instruments at the school.
- 25 out of 27 students who participated in gifted and talented art and music classes tested proficient or advanced proficient in all three tested categories.
- Students expressed in writing and conversation that although they were nervous about the GEPA, many of them felt better prepared to face the rigors of state testing, thus minimizing their fear and anxiety which often defeated their performance.

Two areas of data suggested little or no change. NJASK4 results showed no significant improvement for 2005 over 2004 with test scores differing by a mere percentage of a point. This information is, however, significant because the tested population had more low-achievers than this group had in 2004. There was evidence that these students worked very hard learning and digesting tested information. The second area of data that proved important was that although there were *significant* gains well above the district average, the school did not place out of Category I status (Year 3), thus requiring continued supplemental services (The Record, August 11, 2005), and did not make Safe Harbor Status. The state has mandated that 90-minute block scheduling be implemented for Language Arts/Literacy and Math. In addition, a district wide curriculum time-line has been implemented leaving a five day movement open because of the large number of student transfers during the school year.

All research questions were asked and answered. The **SCAMPERS** project had three main areas of strength. First, special subject teachers experienced a sense of authentic collaboration and legitimacy that was not perceived before this action research project. They remained engaged and interested throughout the year, often approaching the researcher with additional ways to connect to core content learning. The six teachers became more aware of teaching for deeper understanding, and tried different teaching strategies that would further benefit the student population. Their attitudes reflected common goal and purpose across disciplines, working as a dedicated team.

Second, the level of student achievement did rise. Although weaving core content through special subjects was one small component that added to student success, it never-

theless was an important one. **SCAMPERS** modeled a collaborative effort which made student learning its focal point. The special subject teachers' efforts did not go unnoticed by classroom teachers, students or administrators.

Third, **SCAMPERS** created instructional change for the special subject teachers. More attention was placed on teaching strategies, methods of delivery, common learning strategies, and interdisciplinary collaboration. Classroom teachers found that they had a new avenue of support. The sense of working together with the art, music, and physical education teachers for the common goal of deeper student learning was indeed a success.

The major area of concern with **SCAMPERS** was that no common prep time or release time was given for the teachers to meet. The special subject teachers felt marginalized by this lack of consideration. It also gave them the impression that collaboration between art, music, and physical education teachers was neither necessary nor considered important. This researcher had to devise a tight schedule during preps to provide for individual meetings and dispensing information, often repeating five times what could have been stated in one brief group conference. Small pockets of release time during the school day would have been appreciated to validate the importance of special subject teacher participation in this action research project.

Action Plan – Chapter VI

The overwhelming support of the **SCAMPERS** project will have had a sustaining effect on student learning as it continues to address student learning in the 2005-2006 school year. It has become “the red thread” that was needed to bind art, music, and physical education to classroom learning. The results have positively impacted the art and music programs. Additional materials have been purchased that focus on cross-curricular activities for the 2005-2006 school year for art, music, and physical education. As a re-

sult of this action research project World Language teachers have been added to our Special Subject Team.

This researcher feels strongly that weaving core content through special subject areas has also provided “the red thread” that helped to knit a talented faculty together, whether they were special subject teachers or classroom teachers. In effect, this action research project has put theory into practice as well as having imbedded itself into our school’s culture. It will continue to foster teacher collaboration, meaningful data collection, and focus on increasing student achievement. Avenues for professional discussion and dialogue will remain open as **SCAMPERS** continues and becomes an integral part of special subject core-content integration.

The recommendation for common prep time for special subject teachers was addressed by the administration of the school. The special subject teachers now meet twice monthly with this researcher as the team facilitator to assist art, music, physical education, and world language in weaving core-content through our curriculums and connecting it between our subjects and classroom learning. A **SCAMPERS** project presentation was given at the October 2005 in-service to inaugurate a new year of meaningful collaboration to focus on deeper student learning.

Data from the fields of art, music, and physical education continues to be very difficult to collect and analyze because of the individual nature of these subjects. They are truly interdependent on core-content learning as they should be. However, students do not learn material in strict isolation. It is through the interdependence of information that connections from arts learning fuses with classroom learning. Test scores and student achievement have risen since art and music were reinstated in 1998. Is there a connection? Does an action research project like **SCAMPERS** help to prove the significance of art, music, and physical education supporting core-content learning? Further research on a much larger scale is needed.

The result of this project was shared with the administration of the school, the Fine Arts Director, the principal of the Academy of the Performing Arts, and the special subject teachers who participated. The administrator of the school has been more than supportive and welcomes this type of collective leadership to bring validation to special subject teachers on her staff. The Director of Fine and Performing Arts encouraged this

researcher to share her work with the entire Fine Arts staff in the district, and sees this action research project as a viable way for all district schools to interconnect special subjects with core content curricular learning. A copy of the research project will be made available to the staff and administration of the school as documentation of a collaborative effort to model curriculum integration for other schools in this urban district.

A **SCAMPERS** project workshop on core-content weaving was presented to the district music teachers in early October and to the art teachers in November 2005 by this researcher. The feedback from both groups has been positive and encouraging. Other district special subject teachers in the area of Fine and Performing Arts have requested **SCAMPERS** request forms to modify for their home schools. In addition, the concept of creating a Best Practice Art Collection of Lessons across the district has been discussed because of this project.

An abridged version of the **SCAMPERS** project may be submitted to the New Jersey Music Educator's Association for publication in *Tempo Magazine*. Other avenues for publication will also be investigated. It has been suggested to this researcher at the presentations that the simplistic format of the project makes it a sensible and very doable collaborative venture that can easily fit into special subject teachers' complex schedules. With the addition of World Language teachers and the possibility of school librarians, this form of curriculum weaving has the opportunity to grow into a substantial model for a variety of school districts, whether large or small, suburban, rural, or urban.

Thirty **SCAMPERS** request forms were made available to the faculty members in early September. This researcher received overwhelming support from the classroom teachers as ten request forms were returned before the end of the first week of school. The two new staff members (World Language - Arabic and Spanish) have been appreciative of belonging to our team upon their arrival at our school, finding support and collaboration which they have not had in other urban district schools.

The limitations to this study were common meeting time, minimal participation by the faculty in the survey process, and no availability of pre-standardized tests to identify which students benefited most from weaving core curriculum content through special subjects. Furthermore, it would have been interesting if more teachers participated in the pre and post survey activities in the initial study. This researcher would have liked to

have had at least 80% participation in the survey process to guarantee a clearer image of the faculty's thoughts about core-content integration in the special subject areas, student self-image, and timed-testing abilities. In the future, pre-survey and post-survey questionnaires should be distributed at in-service workshops to spark further participation and allow for clarification.

This researcher is proud of having created **SCAMPERS**, and her pride was validated by the special subject teachers' input, discussion, and active participation. The authentic collaboration that occurred while focusing on student achievement and character building was a very deep learning experience. The fact that **SCAMPERS** will continue in the urban school creates a sense of pride and accomplishment the researcher did not expect to experience.

Appendix A

TEACHER SURVEY SCAMPERS PROJECT 2005

Please circle one: 4 = Strongly Agree 3 = Agree 2 = Disagree 1 = Strongly Disagree

I have participated in an action research project before.				
	yes	no		
I believe that supporting core curriculum content in the special subject areas will have a positive affect on student learning.	4	3	2	1
There is a need for subject integration across disciplines which include the special subject areas of art, music, and P.E.	4	3	2	1

Special subject area teachers should network with each other as classroom teachers do with a common prep time.	4	3	2	1
There are many commonalities across special subject areas.	4	3	2	1
The use of common terms by the special subject teachers will help the students make connections to other subjects and concepts taught.	4	3	2	1
Common teaching strategies among the special subject areas will make a difference in my students' learning.	4	3	2	1
Common terminology among the special subject areas will make a difference in my students' learning.	4	3	2	1
Students' perception of self is important to their success on standardized tests.	4	3	2	1
Most of my students do not finish tests in a timely manner.	4	3	2	1
Self esteem and motivation are often issues in my classroom.	4	3	2	1
The students in my class who take instrumental lessons or participate in chorus are usually students that do better on standardized testing or classroom assessments.	4	3	2	1
My students often share with me what they have learned in music class.	yes	no		
My students often share with me what they have learned in art class.	yes	no		
My students often share with me what they have learned in P.E.	yes	no		
I believe that my students will do better on standardized testing if the special subject area teachers make cross-curricular connections.	yes	no		
The way a student feels about him/her self directly affects their performance on any kind of testing.	4	3	2	1
THANK YOU FOR YOUR PARTICIPATION!				

Additional Comments: _____

Appendix B

TEACHER POST SURVEY SCAMPERS PROJECT 2005

Please circle one: 4 = Strongly Agree 3 = Agree 2 = Disagree 1 = Strongly Disagree

I participated in the SCAMPERS Action Research Survey Pre-Survey.	yes	no		
I believe that supporting core curriculum content in the special subject areas has had a positive affect on student learning.	4	3	2	1
There is a continuing need for subject integration across disciplines which include the special subject areas of art, music, and P.E.	4	3	2	1

Special subject area teachers should continue to network with each other as classroom teachers next year.	4	3	2	1
There are many commonalities across special subject areas.	4	3	2	1
The use of common terms by the special subject teachers has helped the students make connections to other subjects and concepts taught.	4	3	2	1
Common teaching strategies among the special subject areas made a difference in my students' learning.	4	3	2	1
Common terminology among the special subject areas made a difference in my students' learning.	4	3	2	1
Students' perception of self is important to their success on standardized tests.	4	3	2	1
More of my students finished tests in a timely manner since the SCAMPERS Project has been instituted.	4	3	2	1
Self esteem and motivation are more evident in my classroom.	4	3	2	1
The students in my class who took instrumental lessons or participated in chorus performed better on standardized testing or classroom assessments.	4	3	2	1
My students often shared with me what they have learned in music class.	yes	no		
My students often shared with me what they have learned in art class.	yes	no		
My students often shared with me what they have learned in P.E.	yes	no		
I believe that my students performed better on standardized testing partially because the special subject area teachers made cross-curricular connections.	yes	no		
Student perception of self directly affected their performance on tests.	4	3	2	1
THANK YOU FOR YOUR PARTICIPATION!				

Additional Comments: _____

CIRCLE ONE: K-4 TEACHER

5-8 TEACHER

NON-CLASSROOM

Appendix C



SCAMPERS PROJECT

WEAVING CORE CURRICULUM THROUGH SPECIAL SUBJECTS

By MICHELE A. FLAGG

**SUPPORTING
CORE CURRICULUM
ARTISTICALLY
MUSICALLY
PHYSICALLY
ENSURING
REAL
SUCCESS**



Appendix D



SCAMPERS PROJECT

Supporting Core Curriculum Artistically, Musically, and Physically Ensuring Real Success

Dear Teachers,

In an effort to keep us all “on the same page” and to assist with student learning, the attached SCAMPERS Project request letter will be offered to you each marking period. The goal of this project is to interface special subject lessons with your classroom learning needs. The art, physical education, and music department teachers are working in collaboration with each other to support core curriculum learning in our classes. SCAMPERS has been initiated to assist our student population as they reach higher to attain success through an integrated, creative, and meaningful educational experience. Your participation is *voluntary* and your feedback will, as always, be welcome.

There are many ways that the arts and physical education can support classroom learning and still continue to teach the curricular concepts of our special subject area. Deeper learning of a concept such as multiplication, patterning, timed tasks, and language arts literacy promotes real success for our students. In addition, self motivation and intellectual character can be addressed in our subject areas in a very unique way. When our students feel confident about themselves and their ability to complete tasks in a timely manner their self esteem soars!

Deeper knowledge is acquired through sustained and thoughtful teaching methods used across all subject areas in order for a child to achieve maximum learning. I welcome your participation in SCAMPERS and will forward a copy of your attached request letter to the other special subject teachers. If further explanation is needed, please feel free to contact me at ex. 22556. Thank you in advance for your anticipated participation in the SCAMPERS project.

Sincerely yours,

Mickey Flagg

Appendix E

SCAMPERS COMMON TERMS for use in Special Subjects of Art, Music, Physical Education, and World Language Classes

SHAPE

FORM

TEXTURE

CONTRAST

UNITY	MEASURE	REPETITION	LINE
MOVEMENT	HORIZONTAL	VERTICAL	PATTERNS
MOTIVE	ABSTRACT	VISUAL	SYMBOL
SCALE	INTERVAL	CREATE	RHYTHM
PHRASE	TIME	TIMING	METER
WHOLE	HALF	QUARTER	EIGHTH
TRIANGLE	ANGLE	SQUARE	QUADRANGLE
OCTAGON	PENTAGON	ROOT	STEM
HEAD	MOTION	SHAPE	AUGMENT
DIMINISH	HARMONY	SEGMENT	SUBTRACT
ADD	MULTIPLY	DIVIDE	OBJECT
CIRCULAR	ELEMENT	TEAM	CONNECT
COOPERATION	FEELINGS	EMOTIONS	EXPRESSION

SCAMPERS COMMON LANGUAGE for use in Special Subjects of Art, Music, Physical Education, and World Languages:

TIME ON TASK	ASSESSMENT RUBRIC	FOCUS
JOURNAL	COMPARE & CONTRAST	LISTEN
WHERE'S THE CONNECTION?	WHAT DO YOU SEE/HEAR/FEEL?	
EXPLAIN TO ME WHY?	ARE YOU PREPARED TO LEARN?	
WHAT DID YOU LEARN TODAY?	HOW DOES ____ RELATE TO ____?	

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