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Inequities in arts education permeate the educational landscape. Some schools provide programs for a few students; others provide for all students, but only sporadically (Burton, Horowitz, & Abeles, 1999; Fowler, 1996). According to a Los Angeles County Art Commission (2001) study, wealthy and high-achieving students are more likely to receive arts education than low-performing and economically-disadvantaged students. Sadly, arts education is virtually non-existent for marginalized youth. “Disadvantaged and at-risk youth are often barred from school arts programs in favor of remedial instruction in reading and math” (California Alliance for Arts Education, n.d., Quality, Equity, and Access to Arts Education Section, Bullet 3). This imbalance is clearly evident in middle level schools where substantive arts learning, contingent upon the availability of funding and experienced personnel, occurs most often in specialized electives such as music (i.e. band or choir) or visual arts (Fowler, 1996; Woodworth et al., 2007). While these courses may offer a more in-depth arts experience, compared to a short-term rotation elective, participation is limited to students who are talented and who have successfully passed state exams (California Alliance for Arts Education, n.d.). As a result, only a small percentage of middle level youth receive quality arts education experiences.

To address arts education disparities in middle level schools, this article explores evidence that infusing the visual and performing arts into language arts, math, science, and history/social studies courses is a pedagogical approach that meets the developmental needs of early adolescents and fosters a relevant, challenging, integrative, and exploratory curriculum to all learners. The strategy is often identified as integrated or interdisciplinary arts education (Arts Education Partnership National Forum, 2002). To organize an investigation of interdisciplinary arts education, an examination of the literature and a valuable case study of five middle level classrooms provide the compelling argument to support implementation in middle level schools serving diverse learners.

Making a Difference with Arts-Infused Learning

The focus group for this study includes English learners, students from economically disadvantaged families, and students from varied racial/ethnic backgrounds. The curricular emphasis is arts-infused learning in language arts, math, science, and history/social studies middle level classrooms. As such, literature from several perspectives was reviewed to establish a theoretical framework. Middle level theory and practice, arts education policy and practice, and critical theory are intertwined to generate new thinking about developmentally and culturally responsive pedagogy.

Developmentally Responsive Pedagogy

To effectively explore arts-infused middle level learning, addressing the connection between arts-infused learning and developmentally responsive pedagogy is essential. According to the National Middle School Association, a curriculum that is relevant, challenging, integrative, and exploratory, combined with varied instructional methodologies, is most conducive to meeting the developmental needs of young adolescents (NMSA, 2003). Arts-infused learning effectively merges with these criteria to foster positive outcomes for middle level youth.

Moreover, successful schools thoughtfully consider and respond to the varying physical, psychosocial, and cognitive needs of young adolescents (NMSA, 2003). According to noted educators and researchers Benard (2004), Diket (2003), and Gay (2000), experiential learning opportunities are successful approaches to schooling, and, when implemented effectively,
contribute to a strengths-based approach that fosters positive affective and cognitive outcomes. Each expert has specifically addressed the positive benefits of arts learning. Building and fostering resiliency (Benard, 2004), engagement, meaning-making, and enhanced reasoning (Diket, 2003), and culturally relevant connections through arts-infused learning (Gay, 2000) are a sampling of the rich and valuable assets derived from experiential learning involving the visual and performing arts.

Likewise, Jackson & Davis (2000) and Gay (2000) offer a connection between arts learning and the development of abstract thinking. Because of the varied rates of development, most youth of middle school age vacillate between concrete and abstract thinking (Jackson & Davis, 2000). For example, role-playing, simulation, and movement can enhance and reinforce comprehension of abstract concepts (Gay, 2000). In one eighth-grade math classroom, students were involved in “acting out” fractions. One student in particular “mastered the concept that had totally baffled her only a short time earlier” (p. 172). Thinking skills were also uncovered in a study (Albert, 1995) designed to uncover the impact of an integrated arts/social studies unit on eighth-graders’ thinking capacities. Through observations, interviews, and document analyses gathered from one class in an inner-city arts magnet school, Albert reported that the use of varied forms of representation cultivated the practice of visual, narrative, metaphorical, reflective, and multisensory thinking, along with knowledge integration. By providing early adolescents with an opportunity to understand challenging concepts through methods that mesh with their varying levels of physical, psychosocial, and cognitive development, middle school teachers can advance student achievement and self-efficacy.

Culturally Responsive Pedagogy

As critical theorists assert, empowerment is nurtured in learning environments and through pedagogical structures that offer meaningful and engaging experiences (Haberman, 1995; Nieto, 1999). Infusing the arts on a regular basis in all curricular areas provides not only rich, relevant, and engaging learning experiences, but also empowers and transforms disenfranchised youth (Stevenson & Deasy, 2005). Researchers Stevenson and Deasy (2005) provide an illustration. In a multi-year study, they examined the impact of school-wide arts programs in schools that serve economically disadvantaged communities. Through in-depth interviews and school observations, findings from their longitudinal study indicate that arts involvement enhances risk taking and self-efficacy. According to Stevenson and Deasy,

> As students grow in competence and assurance in expressing themselves in an art form – a painting, a poem, a dance, they not only grow more assured and confident but also have a sense of accomplishment and a growing understanding that they can make an even greater impact as their work becomes more skillful. pp. 32-33

In each of the ten schools within this study, students had multiple opportunities to contribute to a culminating project showcasing their individual and collective efforts. These experiences powerfully demonstrate that the visual and performing arts, as a method to actively construct personal meaning, can promote empowerment particularly for learners living below the poverty line.
Moreover, culturally responsive pedagogy is fostered in learning environments that embrace individual expression and an appreciation for differences (Gay, 2000; Nieto, 1999). Burnaford, Aprill, and Weiss (2000) offer a concrete example that involved seventh and eighth-grade students. Through the study of “Retablos” (a Mexican art form using painted tin or wood), Orozco School students created personal retablos. This experience enhanced their understanding of the past and enabled them to articulate “transformative moments in their own lives” (p. 13). As the retablos example suggests, individual expression combined with cultural experience evokes powerful learning. Fowler (1994) synthesizes the relationship between creative expression and culturally responsive pedagogy another way, “Because the arts convey the spirit of the people who created them, they can help young people to acquire inter- and intra-cultural understanding” (p. 5). Through viewing, thinking, responding, and creating via the visual and performing arts, learners are able to communicate their understanding of their world.

When discussing the benefits of arts integration, researchers and arts advocates alike present similar findings (Fiske, 1999; Ingram & Seashore, 2003; Rabkin & Redmond, 2005). Through longitudinal studies and research reviews related to arts education and poverty, multiple studies have indicated a close association between arts involvement and learning. Rabkin and Redmond (2005) summarize their findings succinctly: “We found the most powerful effects consistently associated with programs that integrate the arts with subjects in the core curriculum” (p. 46). Likewise, findings from a review of the Arts for Academic Achievement program (Ingram & Seashore, 2003) also point to the benefits for all types of students. Ingram and Seashore state, “In some cases, the relationship between arts integration and student achievement was more powerful for disadvantaged learners” (pp. 3-4). Furthermore, within the landmark publication, Champions of Change: The Impact of the Arts on Learning, Fiske (1999) suggests that the results emerging from this compilation of research indicate a need for “seeking systematic ways to make the arts a meaningful part of every American child’s life” (p. xii). As a vehicle for fostering academic success among diverse learners, arts-infused learning holds tremendous promise.

Advocates of culturally responsive teaching campaign for a different pedagogical paradigm, “one that teaches to and through [students’] personal and cultural strengths, their intellectual capabilities, and their prior accomplishments” (Gay, 2000, p. 24). With increasing globalization, diversity, and poverty impacting all aspects of life, providing a relevant curriculum, equitable access, and effective pedagogy are critical elements to supporting optimal learning experiences for all (Burnaford, Aprill, & Weiss, 2000; Nieto, 1999).

However, the intersection of meeting the demands established by the No Child Left Behind Act and teaching through personal and cultural connections can be problematic (Gay, 2000). Limited ethnic diversity and bias permeating most curriculum and textbooks requires a conscientious effort for educators committed to equitable educational experiences for every student. Addressing national and state mandated standards through varied cultural perspectives (e.g. Native American, African American, Asian, and Latino) offers all learners opportunities to delve deeply into a particular concept or topic. For example, students learning about ancient civilizations may draw upon multiple sources of literature, research, and primary source information to pose critical questions that evolve into the creation of a play or illustration of a poem reflecting the perspective of a particular culture. In this way, students do more than regurgitate facts. They demonstrate their understanding of the relationship between past civilizations and current society through arts-infused culturally relevant pedagogy. Critical theorists and arts activists agree, pedagogical approaches through which students can express
their understanding, ideas, and feelings about the world in which they live brings about positive results (Gay, 2000; Rabkin, 2004).

**A Case Study of Arts-Infused Learning**

Although current educational policies and practices prevent equitable arts education for middle level learners, promising outcomes were discovered in schools that implement an arts-infused approach to learning. As such, a case study of five middle level classrooms demonstrates the benefits of arts-based pedagogy.

**Data sources.** Interview and observation data, originally collected from a larger study (conducted over the course of a four-month time span), included eight schools located in two counties in southern California (Lorimer, 2007). However, this study highlights findings from five classrooms in two schools, Urban Middle School and City School. The boundaries for this case were selected, because both schools emphasize the visual and performing arts and serve a high population of English learners, students from economically disadvantaged families, and students from varied racial/ethnic backgrounds. All students attending these schools receive Title I services for Reading and Math. To expand upon this information, additional demographic data presents the individual features of each school. (Table 1.1. and Table 1.2)

By selecting schools with a high population of diversity, study findings reflect explicit connections between arts-infused learning and culturally responsive pedagogy, while simultaneously offering valuable insights for middle level educators, administrators, and policy makers.

**Urban Middle School.** Urban Middle School is located in a large city. The school is subdivided into three special focus schools (i.e. school within a school). With a focus on the arts, Urban Middle School services approximately 371 students from varied ethnic and racial backgrounds. Data collected from the California Department of Education (CDE)/Ed-Data indicate 57.8% are Hispanic or Latino, 19.2% are African American, 18.1% are Asian, 3.2% are White, 1.1% are Filipino, and less than one percent are American Indian or Alaska Eskimo or Pacific Islander. Additionally, 91.4% of the student population at School I are eligible for free and reduced meals and 38.9% are identified as English Learners. Among the population of English Learners, 75.7% speak Spanish, 9.7% speak Khmer (Cambodian), 5.6 speak Somali, 4.9% speak Vietnamese, 2.1% speak a language other than English, and less than one percent speak Cantonese, French, or Lao.

One seventh-grade history teacher, three sixth-grade core (language arts, social studies, science, and life skills) teachers, and the principal participated in this study. In total, four classrooms at this school were included in the case study.

**City School.** City School, an arts-based magnet, is located in a largely Hispanic, urban fringe community. Although this school is designated as a K – 8 school, with approximately 1,128 students, one sixth-grade math/science teacher and the assistant principal participated in this study. In total, one classroom from this school was included in this case study.

Demographically, 64.6% of the student population are Hispanic or Latino, 28.1% are White, and less than one percent are Asian, African American, Filipino, Pacific Islander, and American Indian or Alaskan Eskimo. At School II, 50.6% of the student population are eligible
for free and reduced meals. Additionally, 42.6% are identified as English Learners. All of the English Learners speak Spanish.

Compelling Evidence for Arts-Infused Education

Following the transcription of the audio-recorded interviews, the collected data were synthesized and related to key questions (e.g. what does arts-infused learning look like? what are the outcomes?) to uncover emerging themes, patterns, and relationships. Comparisons between the two schools uncovered the types of arts-infused learning, along with the quantity (how often and how much time was dedicated to these types of activities) and quality of arts-infused learning (relationship to visual and performing arts state standards) taking place. Simultaneously, comparative analyses between the schools and the literature provided another layer of information to examine. Collectively, the connections between the data and emerging themes, along with specific quotes and descriptive details embedded within the analysis, offer a rich portrait of the types of learning and learning outcomes that took place in five middle level classrooms that use arts-infused learning as a pedagogical tool.

Based upon the analysis of the collected observation and interview data, the impact of arts on middle level learning became evident.

Observation and interview findings.

Observations. Observations occurred three times at each site and focused on the learning environment, student-student and student-teacher interactions, types of activities, levels of engagement, types of arts integration, and classroom discourse. Data from the observation protocol was examined for evidence of arts-infused learning. Lesson objective/s, type of art (e.g. visual art, music, dance, or drama/theater) integrated into non-art curriculum, and room environment were used to determine quantity and quality of arts-infused learning. Additionally, student-student and teacher-student interaction were considered influential factors contributing to arts-infused learning. Evidence of engagement, meaning-making and critical thinking were tantamount to supporting evidence of a relevant, challenging, integrative, and exploratory curriculum. Likewise, observation data was reviewed to determine the ways in which lessons considered the varying physical, psychosocial, and cognitive needs of young adolescents.

Activities. A variety of arts-infused learning was observed in the four classrooms at Urban Middle School and one classroom at City School (Table 2). Moreover, it became evident that curriculum integration occurs in several ways. The teachers at both schools integrate language arts learning experiences into history/social science, math, and science. For example, when students are learning about other cultures, scientific principles, and math formulas, it follows that reading, writing, listening, and speaking are directly involved. This is one level of interdisciplinary teaching and learning. On another level, observations revealed that arts-infused learning experiences that used the visual arts occurred within language arts, math, science, and social studies instruction. The visual arts were observed most often, and dance and drama much less so. However during one observation at City School, the teacher implemented a fraction rap activity (with music and movement) to reinforce the steps to reducing fractions. Students enjoyed this activity (e.g. by exhibiting smiles on their faces) and appreciated the connection to a contemporary form of music while learning about fractions. Other observations uncovered activities such as making Egyptian sarcophagi, drawing science lab experiments, and recording perceptions, inferences, and responses to written questions following the careful examination of
a Chinese art print. In these examples, the visual arts were used to enhance learning in another subject.

*Culturally responsive pedagogy connections.* Culturally responsive pedagogy, active engagement, and personal connections were evident during observations at both schools. One example illustrates this point. While analyzing art from the Tang Dynasty, seventh graders at Urban Middle School interacted closely with each other and the task. Students were required to look closely and intently at the projected image (a country scene from Ancient China). The teacher encouraged students to describe what they noticed and share questions they had about the artwork. Researcher observations notes indicate:

When one student shares a thought/idea, several others chime in with connecting thoughts. Students are focused – writing, looking at artwork, attentive to the task. Students participated actively – e.g. hands up, offering to share ideas/thoughts/comments” (11/27/06).

During this lesson, art served as an entry point to draw upon prior knowledge and experience and encourage analytical thinking about culture and promote inquiry. One female student noticed, “The make-up they wear is a different design from the way we do our make-up . . . and their hairstyle is different” (11/27/06). Following several more student responses, the teacher then prompted them by asking, “What does this tell you about their culture?” One student suggested, “They may have some connection to religion (based upon the long robes worn by the figures in the artwork)” (11/27/06). Through arts-based culturally responsive pedagogy, students expanded their understanding of culture while simultaneously connecting their learning to daily life.

Additionally, the arts were used as a vehicle to study complex phenomena. During science labs, students worked meticulously as they developed illustrations to support their understanding of key concepts. At Urban Middle School, sixth graders used symbolic representation to develop their understanding of the earth’s layers and causes of earth movement. By drawing their hypothesis (predicting what they thought would happen) and findings (observations of experiment outcomes), they were able to effectively respond to verbal and written science lab questions while deepening their understanding of geological principles. Similarly at City School, sixth-grade students examined three types of rocks and then selected one type to illustrate using blind contour drawing (a strategy that requires intense focus on the object rather than on the pencil or paper). Students in this class spoke very little during the activity. Instead, their attention was directed at the details of the rock. This visual scanning and drawing experience was designed to reinforce their understanding of a science concept: exploring the differences among sedimentary, igneous, and metamorphic rock formations.

These examples of art-infused learning demonstrate that challenging science lessons with complex academic vocabulary can be undertaken with focused effort and interest, while simultaneously supporting positive academic outcomes. Likewise, the arts allow learners to critically explore and understand content in deep and meaningful ways.

The demographic composition of all observed classes included students from diverse cultural backgrounds, ability levels, and language experiences. Observations revealed evidence of a collaborative work environment in every case. Regardless of whether the final assignment was submitted individually or collectively, students supported their classmates throughout these activities. For example while working on a China Book Project, students collaborated on design
ideas and illustrations. Likewise, during the Nile River Maps project, students negotiated placement of color, information, and map details. Regardless of their background or ability level, the arts-infused activities facilitated an energetic and cohesive learning environment. Clearly, this authentically inclusive learning experience exemplifies the power of the arts to promote intercultural collaboration and educational benefits for all learners.

**Interviews.** Teacher interviews elicited detailed data about the type of arts-infused instruction being implemented, the method/s used to design the curriculum, and teacher perception regarding learning outcomes. Interviews with administrators were designed to ascertain their involvement related to arts-infused learning (including curricular and fiscal decisions, overall support, and any other type of involvement). These interviews revealed perceptions about learning outcomes stemming from arts-infused learning.

**The impact of arts on schools.** Every participating teacher and administrator indicated his or her concern about high-stakes assessment and its influence on arts-infused learning. The assistant principal at City School offered these comments,

> The emphasis on language arts and math scores have prompted a discussion from the district office about gutting the arts. We are a program improvement school. Our teachers are passionate about the fact that experiences with the arts will build confidence [and] connections with school. This will elevate students in other [non art] classes. At this school we prioritize the arts (1/11/07).

Despite these types of challenges, all participants stated that they perceived arts-related learning to be a positive catalyst leading to more engagement, which also improves attendance, behavior, and attitudes for young adolescents from diverse backgrounds. To reiterate this, the principal at Urban Middle School stated that he has noticed “fewer tardies, suspensions, and referrals since the implementation of a school-wide arts focus” (12/11/06). Adding to this, a sixth-grade teacher at Urban Middle School shared her perspective: “Half the reason some of the kids come to school is for the art” (2/1/07).

When the participating teachers were asked about the benefits they perceived as outcomes from arts-infused learning, many identified persistence, attention to detail, increased confidence and motivation. As one seventh-grade teacher stated, “They have more courage or are more willing to take a risk about how they interpret a piece of art rather than a piece of text” (2/1/07). Another responded in this way,

> When they are able to express themselves through drawing, painting creating scripts, acting something out . . . it gives students that are scared to be wrong a way to do it. Because they are part of the thing and they are actually learning about it. They can say what they think and it’s not wrong (2/1/07).

Considering the diverse needs of her student population, motivation was described by a sixth-grade teacher at Urban Middle School in the following manner.

> Kids that are not usually motivated when we’re doing more of notetaking or lecture thing are definitely more motivated and not off task [when involved
in art]. The kids who are usually off task can be focused a lot more. In particular, there was a one special ed kid. I’ve never seen [him] produce anything, ever. As soon as I announced the project . . . he was days ahead of everybody. (12/2/06)

This same teacher also stated, “I was surprised with the quality and results from this project, because in previous projects it was mishmash. . . They went back and revised after some suggestions” (12/2/06).

Similar to the findings reported by Stevenson and Deasy (2005), arts-infused learning experiences at Urban Middle School foster empowerment and self-efficacy. The middle level educators in this case study articulate with passion the benefits of an arts-infused approach to learning in middle level schools. Moreover, their dedication to the implementation of a developmentally responsive arts-based pedagogical approach amid challenging education policies suggests that the arts are vital and valuable to academically, economically, and culturally diverse learners.

Forging a Path for Arts-Infused Learning

Although derived from a small sample, this case study presents new insights into a pedagogical approach that enhances middle level curriculum, pedagogy, professional development, and policy. Findings from this research suggest that arts-infused learning offers “a different vehicle for more students to achieve success and life satisfaction by using ways of knowing available only through the arts” (Cornett, 1999, p. 40). Similarly, the characteristics of developmentally responsive middle level learning are exemplified through a positive classroom climate that occurs when students are involved in arts-infused lessons. Curriculum and instruction in the five participating classrooms was designed to challenge and engage early adolescents by “marshalling their sustained interest and effort” (NMSA, 1995, p. 20). By nature, arts-infused learning is integrative and exploratory. This enables middle level students to connect the curriculum to their own life experience (i.e. relevancy) while supporting creativity, problem-solving, communication, collaboration, and construction of knowledge. Each of these constructs is identified as essential to middle level learning (NMSA, 2003).

Students at the participating schools exemplify a complex array of backgrounds, abilities, and learning styles. Through observation and interview data, a snapshot of the positive outcomes derived from arts-infused learning is captured. Engagement, motivation, persistence, and attention to detail are qualities that educators encourage students to develop in all middle level classrooms. Moreover, critical thinking and meaningful learning is demonstrated as students express their opinions and understanding of world cultures and scientific theories. By retooling middle level curriculum and pedagogy to include specific arts-infused experiences within language arts, history/social science, math, and science courses, young adolescents become more engaged in multimodal learning that is relevant, challenging, integrative, and exploratory.

The participants in this study illustrate a larger dilemma. Middle level teachers, administrators, and policymakers must address the challenge of delivering an effective and engaging curriculum designed to meet NCLB mandates, while simultaneously exploring new ways of supporting professional development and curricular innovation. Although many schools place students identified as underachieving (by test score measurements) into remedial courses in lieu of arts electives, learners in the case study schools have access to arts-infused learning within language arts, math, science, and history/social studies at least once a month. Despite the fact that no single solution can solve the challenges associated with inequitable educational
policies, findings from this case study indicate that arts-infused learning contributes to effective and engaging learning for diverse student populations.

If a key goal in education is to de-emphasize the focus on multiple-choice tasks, and, instead enrich students' construction and organization of knowledge, arts-infused learning may be a critical link to this endeavor. To actualize this vision, a plan of action, along with the allocation of resources (including funding for training and materials, professional development for classroom teachers and arts specialists, and time for planning, collaboration and lesson implementation), must be established. By doing so, educators and policymakers can shift the current paradigm with a renewed emphasis on middle level education that includes arts-infused learning. In the best middle level classrooms, students think about what they are learning, express and defend their ideas, and present their understanding through visual and performance outlets.
Table 1.1

*School Demographics*¹

<table>
<thead>
<tr>
<th>School</th>
<th>Grades</th>
<th>Total Enrollment</th>
<th>% Free and Reduced Priced Meals</th>
<th>% English Learners</th>
<th>% Compensatory Education</th>
<th>Title I</th>
<th>Location³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Middle School</td>
<td>6–8</td>
<td>371</td>
<td>91.4%</td>
<td>38.9%</td>
<td>100%</td>
<td>Yes</td>
<td>Large City</td>
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<tr>
<td>City School</td>
<td>K–8</td>
<td>1,128/366²</td>
<td>50.6%</td>
<td>42.6%</td>
<td>98.4%</td>
<td>Yes</td>
<td>Urban Fringe</td>
</tr>
</tbody>
</table>

¹ All data were collected from the California Department of Education (CDE)/Ed-Data Partnership Reports (http://www.ed-data.k12.ca.us).
² Total population (K – 8th)/ middle level grades population (6th–8th)

Table 1.2

*School Ethnicity Data*

<table>
<thead>
<tr>
<th>School</th>
<th>American Indian or Alaska Native</th>
<th>Asian</th>
<th>Pacific Islander</th>
<th>Filipino</th>
<th>Hispanic or Latino</th>
<th>African American</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Middle School</td>
<td>0.3%</td>
<td>18.1%</td>
<td>0.3%</td>
<td>1.1%</td>
<td>57.8%</td>
<td>19.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>City School</td>
<td>0.2%</td>
<td>0.9%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>64.6%</td>
<td>0.9%</td>
<td>28.1%</td>
</tr>
</tbody>
</table>
Table 2

*Observed Lessons*

**Urban Middle School**

<table>
<thead>
<tr>
<th></th>
<th>Visual Arts</th>
<th>Music</th>
<th>Dance/Movement</th>
<th>Theater/Drama</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language Arts</strong></td>
<td>Sarcophagus Books (6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>Lab Illustrations (6)</td>
<td>Comparing Maps (6)</td>
<td>Layers of the Earth (6)</td>
<td></td>
</tr>
</tbody>
</table>

**City School**

<table>
<thead>
<tr>
<th></th>
<th>Visual Arts</th>
<th>Music</th>
<th>Dance/Movement</th>
<th>Theater/Drama</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language Arts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>Fraction Art Designs (6)</td>
<td>Fraction Rap (6)</td>
<td>Fraction Rap (6)</td>
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<tr>
<td><strong>History/Social Studies</strong></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Science</strong></td>
<td>Maidu Circles (6)</td>
<td>Rock Drawing (6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
References


National Middle School Association (1995 and 2003). *This we believe: Developmentally responsive middle level schools*. Columbus, OH: Author.


