ACTION RESEARCH TOOLKIT

ARTS EDUCATION

Dr. Richard A. Disharoon
Board of Trustees
Arts Education in Maryland Schools Alliance
WHY AN ACTION RESEARCH TOOL KIT?

The Arts Education In Maryland Schools Alliance:

- recognizes the critical role of teachers in advocating for their school programs.
- wishes to support their efforts to establish and maintain the crucial role of the arts in the education of every child.

The purpose of the Action Research Tool Kit, published in print and electronically, is to encourage arts educators to become researchers who are “...committed to taking action and effecting positive educational change based on their findings...” as opposed to the goal of traditional researchers to just report their conclusions to others. (Mills, p. 3)

The AEMS Alliance will establish a repository of action research projects. These projects will serve as reference points for teachers new to action research and will provide ideas for teachers to adaptation or replication tailored for teachers’ individual situations.

WHY SHOULD I ENGAGE IN ACTION RESEARCH?

Teachers engage in action research to
- Improve instruction.
  “Action research provides teachers with a philosophy and practice that allows them to systematically study the effects of their teaching on student learning.” (Mills, p.4)

- Advocate for their program.
  The AEMS Alliance strongly believes that research carried out in local schools provides a powerful argument for the importance of arts education as a central component of the education of every child in those schools.
ACTION RESEARCH IS DIFFERENT FROM QUANTITATIVE RESEARCH

Action research does NOT:

- Require formal research design.
- Require random assignment of students to a control group and an experimental group.
- Disrupt normal classroom routine.

WHAT IS ACTION RESEARCH?

- Action research involves posing a problem, devising a strategy, and sharing results with parents and professionals.
- “Action research is any systematic inquiry conducted by teacher researchers...to gather information about...how they teach and how well their students learn.” (Mills, p. 5)
- Action research is “done by teachers for themselves; it is not imposed on them by someone else.” (Mills, p.5)
- Action research is:
  Situational
  Involves planned action and intervention through a spiral of deliberate steps
  Collaborative
  Integrated easily into daily lesson planning.

Evaluation of the lesson includes recording teacher observation and interpretation of the selected aspect of improving instruction. The teacher uses this information as formative and summative assessment of the results of the investigation.
There are two categories of research: quantitative and qualitative. Quantitative, or formal, research requires administering a “treatment” under control of a small number of variables and using numbers to report cause and effect relationships. Qualitative, or action research, uses descriptive techniques such as observation and interviews to report results and develop an action plan. The action plan may become part of the instructional program or lead to additional research involving a modification of the original area of focus.

In some cases it is appropriate to combine quantitative and qualitative research or traditional and educational research techniques. An example of combining quantitative and qualitative techniques example is using standardized test scores (quantitative) and observation techniques (qualitative). Results would be reported in a combination of numbers and interpretation of observations.

Combining traditional and educational research techniques occurs when using two “intact” groups. For example, a teacher/researcher might decide to compare the achievement of two third grade classes. One class receives the “treatment”; the other class receives “regular” instruction. This eliminates the control/experimental group technique without random assignment to groups as defined by certain variables.

DO I WORK ALONE OR WITH OTHERS?

Action research projects can be carried out alone or in collaboration with colleagues.

The steps involved in organizing an action research are outlined in Appendix A. Simply put, Action Research involves posing a problem, devising a strategy to solve the problem, using results to improve instruction, and reporting results for the benefit of others. (Examples of individual action research projects will be found in Appendix B.)
Although the steps in Appendix A are appropriate for collaborative action research, creating a learning community to identify and attain common goals requires additional considerations:

- Learning to know each other (building community)
- Sufficient dialogue to clarify and identify a common area of focus (for example, a multi arts focus identified by arts educators or a general instructional focus determined by classroom teachers and arts educators)
- Reaching agreement of a “treatment”
- Sharing observations and interpretations as the process unfolds (formative assessment)

A thorough description of the group process developed by the Minnesota Arts Best Practice Network (sponsored by the Perpich Center for Arts Education), Critical Links: A Professional Inquiry Process, is available on line at www.criticalinks.org. The process is indexed to Critical Links: Learning in the Arts and Student Academic and Social Development published by the Arts Education Partnership. This publication is an excellent source for areas of focus for individual or group research.

SOURCE CITED:

APPENDIX A

STEPS INVOLVED IN ORGANIZING AN ACTION RESEARCH PROJECT

AREA OF FOCUS STATEMENT

The purpose of this study is to describe…the effects/the impact of

DEFINE VARIABLES

A variable is something in your project that is subject to change. For example, it could be teaching style or curriculum changes. Represent clearly what the variables mean to you.

DEVELOP RESEARCH QUESTIONS

Questions should help to define the area of focus statement. See examples in appendix.

DESCRIBE THE INTERACTION OR INNOVATION

Describe what you are going to do to improve the situation.

DESCRIBE MEMBERSHIP OF THE GROUP

Why are these members important? Any discipline problems? What is the age/grade level?

DESCRIBE ANY NEGOTIATIONS TO BE UNDERTAKEN

Do you need permission from administrators? Parents? Central office?

DEVELOP A TIMELINE

Who will be doing what and when?
DEVELOP A STATEMENT OF RESOURCES

Identify materials needed. If you need money, what is your source? What will be the source of curriculum materials?

DEVELOP DATA COLLECTION IDEAS

Test scores, attendance, records, portfolios

DATA ANALYSIS AND INTERPRETATION

Identify appropriate data analysis techniques for your project
Identify appropriate data interpretation techniques
Review what you have learned and draw conclusions

REPORTING RESULTS

With whom will you share results? How and in what setting? Will you prepare a written report and/or a PowerPoint presentation?
APPENDIX B
SAMPLE ACTION RESEARCH PROJECTS

These Action Research projects have been adapted to the steps described in Table 1. The AEMS Alliance is grateful to the teachers who shared their research.

DRAMA

A YEAR IN THE BEEHIVE: FROM BUZZING TO MAKING HONEY.
CANDACE ELLEN MARSHALL, KENSINGTON-PARKWOOD ELEMENTARY SCHOOL, OCTOBER 2006-MARCH 2007

AREA OF FOCUS STATEMENT

The purpose of this study was to evaluate the effect of drama on developing social skills in first grade children. The research cited in this project states: “Accomplishment of the schools has been impeded by social, emotional, and behavioral problems of children.” (Borman and Schneider, 1998).

Reading, writing, math are at the core of primary curriculum, but just as important, if not more critical, to students’ eventual success in the world beyond the classroom, is the teaching of social skills. Social skills include, but are not limited to, taking turns, praising, sharing materials, resolving conflicts, and celebrating successes.

Beyond the development of aesthetic skills, integrating development of social skills with drama is worthwhile because “it deepens their sensory awareness and helps them learn to visualize more effectively through experience…and transfer these learned behaviors to uncontrolled settings.” (Cornett, Morris, Fulton)

Realizing that “cooperating…requires many other social skills to thrive,” the author narrowed the focus to improving class cooperation.
DRAMA/SOCIAL SKILLS-2

DEFINE VARIABLES

Student ability to take turns, share materials, resolve conflicts, solve problems creatively and make decisions. Verbal and non-verbal communication, increased concentration and comprehension.

DEVELOP RESEARCH QUESTIONS

1. How will using drama, especially the Toolbox and On-Minute Challenges, impact the cooperation skills of my first graders?
2. How will the use of drama impact student selection of groups (inclusion of all students)?
3. How will the use of drama impact our whole class goal of controlling our voices?

DESCRIBE THE INTERACTION OR INNOVATION

1. Use photos to analyze student cooperation through body language and other visual evidence.
2. Use Sean Layne’s Actors Toolbox to familiarize students with tools and skills such as body, voice, imagination, concentration, and cooperation.
3. Teacher use of Toolbox language throughout the day.
4. Use of Concentration Circle, ten minutes at a time, to strengthen concentration and to refocus attention.
5. Use spirit bracelets to help students remember to keep their concentration.
6. Keep anecdotal records focused on cooperation and student awareness.
7. Students complete the survey tool entitled “Using the Student Toolbox and Music” to determine if they thought enacting the ritual and using the music was helpful.
8. Student writing assignment: What Does It Mean to Control Your Voice?
9. With their families, students complete a Plus/Delta chart with the following headings: What was helping them learn (pluses)? What was getting in the way of their learning (Deltas—things to change)?
10. Administer a sociogram asking students to identify three people they would most like to work with in a group and three people they would least like to work with in a group.
11. Focus student energy and accountability for cooperating on a smaller group level through a system of rewards for accomplishing routine daily tasks.
12. One-Minute Challenges: Students have one minute, using every person in their small group, to show a specific idea, service, etc.
13. Freeze-Tag Tableau. Students visualize a body position and expression that demonstrate the content.

**DESCRIBE MEMBERSHIP OF THE GROUP TO BE STUDIED**

First grade class comprised of 23 students (12 boys, 11 girls). Many races are represented, but primarily Caucasian. Two students were retained in first grade but are new to this teacher. Five of the students are either a twin or a triplet.

**DESCRIBE ANY NEGOTIATIONS TO BE UNDERTAKEN**

Permission of administrators.

**DEVELOP A TIMELINE**

October-December: Exploratory months. Collect data—-anecdotal records and photographs.
January: Focus the study; develop research questions.
February/March: Continue to accrue anecdotal records and photographs.
April/May: Begin to analyze and interpret data.
DEVELOP A STATEMENT OF RESOURCE
1. Dance Education literature.
2. Teaching Artist Program, John F. Kennedy Center for the Performing Arts

DEVELOP DATA COLLECTION IDEAS
1. Anecdotal records
2. Photographs
3. Sociogram
4. Student and parent surveys
5. Student writing assignments

DATA ANALYSIS AND INTERPRETATION
1. Cooperative situations--review of anecdotal records, October-March:
   a. A huge change in attitude occurred on the part of the teacher.
   b. Students moved from constant tattling to working together and complimenting one another; students showed independence; and cooperative growth of students was observed.
2. Photographs: Photos were especially effective with freeze tableaus; they revealed great student progress in working together
3. Graphs and Charts
   a. Packing up time was reduced by 4-5 minutes
   b. Number of times/day that students were asked to control their voices: 1/9-3/30

<table>
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<th>Tallies</th>
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<tr>
<td>1/9</td>
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<tr>
<td>2/2</td>
<td>23</td>
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<tr>
<td>3/1</td>
<td>10 (1/2 day)</td>
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<tr>
<td>3/19</td>
<td>9</td>
</tr>
<tr>
<td>3/26</td>
<td>6</td>
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</tbody>
</table>
4. Reflection on cooperativeness
   a. Toolbox survey: reaffirmed that students needed to work on all skills
   b. Sociograms (2)
      January—There were 6 students who no one in the class chose to work with.

      March—Some of the 6 students not chosen in January were chosen to participate in groups.

5. Self-description assignments
   a. January: Less than 25% of descriptions were negative; probably a result of teacher reinforcement (“You’re fabulous—this is what you could be and should be in 5 months.”)
   b. March (end): Descriptive words more accurate and specific. “I do not think it is a coincidence that almost half of the words they chose to describe themselves were directly related to the synergy they felt when they worked together. They now see themselves as cooperative.”

6. Pluses/Deltas and parent surveys: The teacher thought she might get a different perspective at home with adult guidance. However, responses were more in line with what the teacher observed in the classroom.

March (end)—Parent Survey
   a. Few responses
   b. A parent of an ADHD student observed that—“The Toolbox is very useful at home.” The student said “Saturday is great because I get to be home and not good because I don’t get to go to school.”

   In the sociogram, this student gained 7 peers who wanted to work with her.
7. Drama
   a. At the end of March, the teacher asked students “What do you think of the drama (tableau) we’ve been doing? How has it helped you?”
      9—helps to control body
      3—helps to control voice
      2—helps to control concentration /focus
      4—helps to control cooperation
   b. Positive comments from Toolbox, One-Minute Challenges, and Cooperation Circle

CONCLUSIONS

1. October to March: Clear evidence of growth
   a. We work together instead of complaining about each other.
   b. We make creative, relevant tableaus in a small group to show what we are learning.
   c. We have to be reminded 48 times less per day to control our voices.
   d. We know that we are cooperative and say those things to and about each other.
2. “I cannot ‘prove’ empirically that doing drama in our classroom made my students more cooperative, (though much of my data shows a positive shift), but I know by looking at my students that it did. I employed all of my tried and true strategies and they helped, but they did not cause the tremendous shift from buzzing bees to honey makers. By its very nature, drama gave us a common language to talk about improvement and focused opportunities to cooperate that really mattered because we needed everyone to work together productively to be successful at the art form.”
3. The teacher will use results to plan for the future.
   a. Use Toolbox and Concentration Circle beginning on first day of school
   b. Use the Toolbox to create class rules
   c. Build a solid foundation through drama
DRAMA/SOCIAL SKILLS, P. 7

SOURCES CITED


VISUAL ART

HOW DOES THE INTEGRATION OF VISUAL ART AND MATH, WITH A FOCUS ON VOCABULARY, IMPACT STUDENT LEARNING IN THE SPECIAL EDUCATION POPULATION

LINDA TRUSILO, VISUAL ART SPECIALIST, DUFIEF ELEMENTARY SCHOOL, 2008.

AREA OF FOCUS STATEMENT

“Our special education population are our most ‘at risk’ learners; they are also the most challenging to teach. How can we reach our special education students and engage them in the learning process? Arts integration explores relationships among curriculum, content, processes, and skills. The experience of connecting the visual art and math curriculum will hopefully provide opportunities for these students to learn.”

DEFINE VARIABLES

Math achievement scores of special education students on the Maryland State Assessment test.

DEVELOP RESEARCH QUESTIONS

1. Does the integration of Visual Art and Math, with a focus on vocabulary, impact student learning in the special education population?
2. How can I measure and show evidence of that learning?
3. Could this help our students do better on the MSA yearly assessments?

DESCRIBE THE INTERACTION OR INNOVATION

Making masks: Students will learn words to describe how to measure materials and words that describe how to apply the material.
ART/MATH, P. 2

DESCRIBE THE MEMBERSHIP OF THE GROUP BEING STUDIED

Students in the 4/5 Learning Center at the school. The Learning Center is comprised of students from several schools who perform at least two years below grade level on grade level assessments.

DESCRIBE ANY NEGOTIATIONS TO BE UNDERTAKEN

Working cooperatively with the 4/5 Learning Center teacher.

DEVELOP A TIMELINE

1. Discussion with the 4/5 Learning Center teacher: “…what math vocabulary would be valuable for the students to learn and own before the MSA tests are given? We decided on words that focus on measurement and direction. I started this action research with a list of eight words and a visual art lesson that I felt had genuine connections to the grade level math curriculum and vocabulary.”
2. Students failed to retain math vocabulary. The decision was made to focus on two high frequency words: horizontal and vertical.
3. With help from the art teacher, the Learning Center teacher taught art lessons that emphasized vertical lines, horizontal lines, primary colors, and shape. Kinesthetic activities that demonstrated horizontal and vertical were used.
4. Art lesson: “Students created their own delicious looking brownies in the style of ‘the hungriest artist in C.A.’”

DEVELOP STATEMENT OF RESOURCES

1. Math curriculum
2. Art curriculum
3. Materials to make masks, and brownies
DEVELOP DATA COLLECTION IDEAS

Observation: Success in student artwork; recognition of horizontal and vertical lines in a variety of settings; use of words in the correct context in the art and special education classrooms on a regular basis.

DATA ANALYSIS AND INTERPRETATION

Based on observation and student work, students have demonstrated understanding of the words and evidence of learning.

CONCLUSIONS

“I do not think this focus on two high frequency words had any impact on the students’ MSA scores, but I do think students felt positive about themselves and especially proud of themselves when they made connections on their own.”

The researcher reaffirmed her belief that: 1) traditional assessments do not reflect what special education students have learned; 2) teaching through the arts and assessment through different modalities are truly effective ways to teach and assess our students.
MUSIC

READING ACHIEVEMENT OF INSTRUMENTAL MUSIC STUDENTS AND NON-INSTRUMENTAL MUSIC STUDENTS IN SIX HARFORD COUNTY ELEMENTARY SCHOOLS
JAMES BOORD AND MICHAEL MARK, AUGUST 2004

AREA OF FOCUS STATEMENT

“Numerous studies have indicated that elementary school students who are involved in school music education perform as well as or better than students not involved. These studies, however, reflect schools in a variety of locations and are not necessarily reflective of Harford County students.”

DESCRIBE VARIABLES

Title I vs. non-Title I schools
Scholastic Reading Inventory: This scoring framework allows for a student’s reading skill to be reported in terms of the difficulty level of the text they are able to read.
Instrumental music instruction by various teachers.

DEVELOP RESEARCH QUESTIONS

1. Are the growth rates of the average scores of 4th and 5th grade instrumental pull-out students different from those students who do not take instrumental music?
2. How does the reading achievement of instrumental students in Title I schools compare to students in non-Title I schools?
3. Is there a difference in reading achievement between instrumental students in Title I schools?
4. Is there a difference in reading achievement between instrumental students in non-Title I schools?
DESCRIBE THE INTERACTION OR INNOVATION

Provide pullout instruction for interested students.

DESCRIBE THE MEMBERSHIP OF THE GROUP BEING STUDIED

4\textsuperscript{th} and 5\textsuperscript{th} grade students in instrumental music pullout programs in three Title I schools.
- African-American 48%
- Hispanic 5%
- Asian 4%
- American Indian 1%
- White 44%

4\textsuperscript{th} and 5\textsuperscript{th} grade students in instrumental music pullout programs in 3 non-Title I schools.
- African-American 5.8%
- Hispanic 2.7%
- Asian 2.3%
- American Indian .7%
- White 88.5%

DESCRIBE ANY NEGOTIATIONS TO BE UNDERTAKEN

Permission of Director of Elementary Education
Principals
Instrumental music teachers

DEVELOP A TIMELINE

3\textsuperscript{rd} grade: Recruit students for instrumental music instruction
4\textsuperscript{th} grade: Begin instrumental music instruction organized in two 30-minute pullout sessions per week
5\textsuperscript{th} grade: Compare end-of-year reading achievement using the Lexile Score of the Scholastic Reading Inventory.
MUSIC/READING, P. 3

DEVELOP A STATEMENT OF RESOURCES

Division of Instruction, purchase of instruments
Harford Co. Office of Student Data

DEVELOP DATA COLLECTION IDEAS

Scholastic Reading Inventory

DATA ANALYSIS AND INTERPRETATION

1. 3rd Grade Students: The average Lexile score of third grade students planning to participate in the instrumental music program in the fourth grade is higher than those not planning to enter the program.
2. Lexile Growth Rate: The Lexile growth rate of instrumental music students remains as consistent as students who are not in the instrumental music program.
3. Achievement of satisfactory Lexile scores: Instrumental music students reach satisfactory Lexile scores at a slightly faster rate than non-instrumental students.
4. Title I Schools: Lexile scores of students in Title I schools increase at about the same rate for both instrumental and non-instrumental students.
5. Achievement of advanced reading level: Instrumental music students reach the advanced Lexile reading level at a faster rate than non-instrumental students.
6. Basic and At-Risk instrumental music students move to higher categories at a faster rate than non-instrumental students.
CONCLUSIONS

1. The Lexile scores of instrumental students reflect the schools they attend. The yearly gains of these students are parallel to those of non-instrumental students.
2. The percentage of instrumental students who move from the Proficient levels to the Advanced reading level is higher than that of non-instrumental students.
3. The percentage of instrumental students who move from Basic and At-Risk levels is also higher than that of non-instrumental students.

This study demonstrates that the “Pullout Instrumental Music Program” has no negative effect on the reading scores of participating students.
DANCE

SUMMARIZED FROM “BASIC READING THROUGH DANCE PROGRAM: THE IMPACT ON FIRST GRADE STUDENTS BASIC READING SKILLS,” MCMAHON, ROSE AND PARKS. PUBLISHED IN EDUCATION REVIEW, VOL. 27, NO.1, FEB. 2003, PP. 104-125.

AREA OF FOCUS STATEMENT

The purpose of this study was to evaluate the effects of the arts-based educational program, Basic Reading Through Dance, on improving student’s early reading skills. The study focused on understanding that letters are symbols for corresponding sounds, saying the sounds that specific letters represent, and understanding that sounds can be blended together to create words and that spoken words can be segmented to make individual sounds.

DEFINE VARIABLES

Student ability to:

a. Move & freeze their bodies on cue
b. Use their bodies as instruments of communication
c. Create and dance a locomotive movement sequence fluidly
d. Say the sounds of letters or letter combinations they see
e. Dance/write the letter or letter combination that represents a spoken sound they hear
f. Say the individual sounds of short vowel words they see and blend them into one spoken word
g. Say the individual sounds of short vowel words they hear and write the letters that represent them
h. Manipulate sound symbols to change words into other words

Physical disabilities of children.
DEVELOP RESEARCH QUESTIONS

1. What is the potential impact of dance on academic achievement in reading?
2. Can dance have a positive impact on students’ abilities to connect spoken consonant and vowel sounds to written consonant and vowel sounds?
3. Can the use of dance enable students to manipulate sound symbols to change words into other words?

DESCRIBE THE INTERVENTION OR INNOVATION

During the two forty minute sessions per week for 10 weeks students used their bodies to make the shapes of letters and letter blends. Early lessons focused on learning consonants and vowels. More advanced lessons focused on adjacent consonant letter combinations such as ooh. These lessons were part of the unstructured reading portion of the curriculum.

DESCRIBE THE MEMBERSHIP OF THE GROUP BEING STUDIED

328 first grade students from six schools receiving the program.
393 students from 9 schools not receiving the program.

NOTE: This study can be replicated in a single school with multiple first grade classrooms.

DESCRIBE ANY NEGOTIATIONS TO BE UNDERTAKEN

Permission of administrators.
Permission of teachers whom you hope will allow program to be administered to their students.
DEVELOP A TIMELINE

October, Phase I: Identify Area of Focus, develop research questions

November/December, Phase II: Negotiate with administrators and teachers. Decide which classes will receive the program and why.

January-May, Phase III: Conduct the research---present the program. Maintain a daily log of meetings with administrators and teachers to discuss early analysis of data.

May/June, Phase IV: Prepare an analysis and interpretation. Share information with administrators and teachers. Present a report at a faculty meeting.

DEVELOP A STATEMENT OF RESOURCES

America Reads PhonoGraphics Test
NOTE: The standardized reading test used by your school system can be substituted for this test.
Manipulatives to aid in forming letters.

DEVELOP DATA COLLECTION IDEAS

The PhonoGraphics Test was administered before and after instruction.

NOTE: You could use existing reading-readiness test scores as a baseline and compare results between students who received and students who did not receive the treatment in the program of your school system’s standardized reading test of choice.
DATA ANALYSIS AND INTERPRETATION

The results of this study are overwhelmingly positive regarding the impact of the Basic Reading Through Dance program on first grade students’ reading abilities. The program was so successful in the areas of consonants, vowels, and overall phoneme segmentation, that BRD students started out lower than (non-BRD students) and then actually performed better than (non-BRD students) on the post test. In three months of first-grade reading instruction, the program turned low-performing readers into significantly better readers.

NOTE: In addition to including a chart of quantitative results summarized above, the researcher could also include observations about individual lesson strategies for improving the plan in the future and implementing suggestions for expanding the program.