



## **AMS Research Committee White Paper Series: Action Research in Montessori Classrooms**

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AMS is providing this White Paper to encourage research on Montessori education to further its role in the broader education community. One of the goals of AMS is to support efforts which give Montessori education a voice in scholarly dialogue about educating children.

### ***Overview of Action Research***

Action research is sometimes called “teacher research” or “teacher-as-researcher” (Gay and Airasian, 2003). The formal definition of action research is “the process of using research principles to provide information that educational professionals use to improve aspects of day-to-day practice” (McMillan and Schumacher, 2006, p. 414). In other words, action research involves educators engaging in structured information gathering to improve instruction and learning within their own classrooms or schools. Some of the benefits of action research include:

- encouraging change in schools,
- empowering individuals through collaboration with one another,
- encouraging teacher reflection,
- developing greater understanding and appreciation of student needs, and
- examining new methods and ideas (Gay and Airasian, 2003).

Action research usually focuses on a specific problem, issue, or concern within a particular school or classroom (Gay and Airasian, 2003). Action research is a structured process in which educators identify, examine, and improve their practice. Thus, effective action research integrates theory, practice, and practical applications of research results (Gay and Airasian, 2003).

Much of the current interest in action research stems from an emphasis in the field of education on critical reflection about teaching practice. The primary difference between action research and other types of research is that the goal of action research is to generate knowledge that is specifically relevant to the local setting while the goal of traditional research is to produce knowledge that can be generalized to the field. The quality of action research is judged by the extent to which it provides credible data used to successfully change practice (McMillan and Schumacher, 2006).

### ***Action Research in a Montessori Setting***

The basic principles of action research apply to any educational setting, including Montessori classrooms. Furthermore, action research aligns well with Montessori education because it:

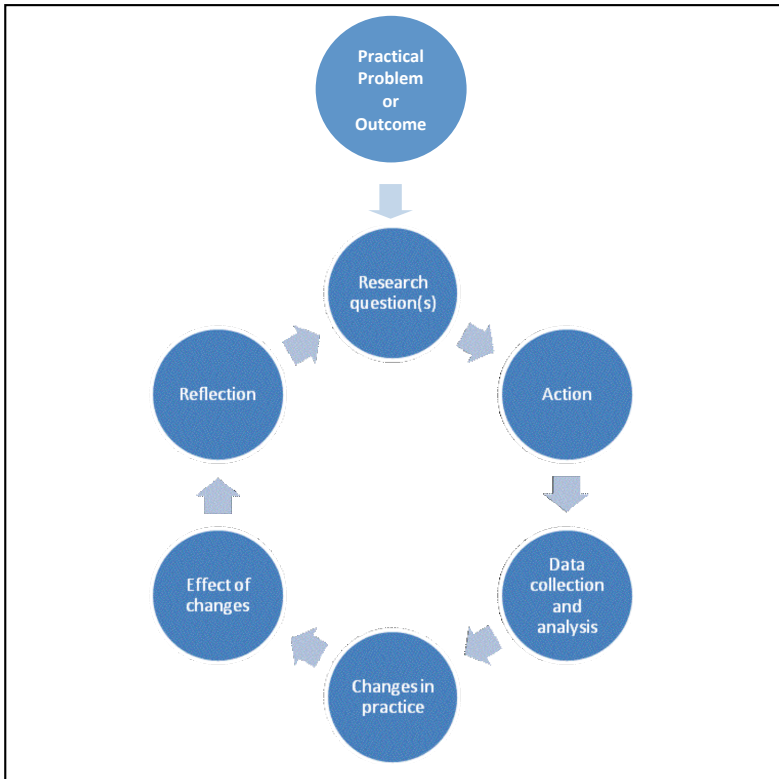
- is participatory and democratic,
- is socially responsive and takes place in context,
- helps teachers examine the everyday taken-for-granted ways in which they carry out professional practice, and
- generates knowledge which can liberate students, teachers, and administrators and enhance learning, teaching, and policy making (Gay and Airasian, 2003).

## ***Process of Action Research***

The basic steps that comprise the process of action research often occur in a cyclical pattern. The outcomes of one examination often reignite the process as reflection on implementation of previous results sparks new inquiry in an iterative process.

### **Cyclical Nature of Action Research**

Source: McMillan and Schumacher, 2006



#### **1. Research Questions**

The teacher-researcher's experiences with the situation usually generate the research questions. When a problem is encountered in the classroom or school, educators often review existing literature to generate ideas for potential solutions. For example, a classroom teacher may investigate alternative strategies for dealing with classroom conflict in a lower elementary classroom.

#### **2. Action**

Action takes the form of implementing possible solutions in the classroom. In the example mentioned above, the teacher may decide that the use of a peace table is a promising strategy for addressing classroom conflict. So, s/he creates a plan for introducing the peace table concept to the children.

#### **3. Data Collection and Analysis**

Along with planning the implementation of the new strategy, the teacher-researcher must also plan to collect relevant data to help evaluate the relative effectiveness of the intervention. The information gathered in action research can take the form of quantitative data, qualitative data or a combination of the two. Sources can include classroom observation, interviews or recorded conversations, questionnaires and attitude scales, and other naturally occurring data. Different types of information will be appropriate depending on the research question at hand. In the peace table example, the teacher will likely use observation along with possible interviews with the children about their reactions to the experience.

Keep in mind that there are ethical issues to consider any time information is gathered on children. Most often, it is only necessary to explain that research is being conducted in the classroom if the researcher is the regular classroom teacher. Parents should be informed of the information to be collected, that participation is voluntary, and that participation will remain confidential. It is important to check with administrators to determine any other considerations (Gay and Airasian, 2003).

#### 4. *Changes in Practice*

Results of the research may lead to immediate changes to classroom practice or may lead to additional questions requiring further investigation (Gay and Airasian, 2003). The peace table in the previous example would either be incorporated as a permanent feature in the classroom or not based on the results of the research.

An important step after making conclusions is sharing the results with other teachers and administrators within the school. Identifying a broader network of fellow educators dedicated to continuous improvement can be valuable for professional development and leveraging best classroom practices as a community of educators. For example, the teacher-researcher conducting the investigation of the peace table would have an opportunity to discuss this experience with other teachers at teacher networking sessions held at AMS or other educational conferences.

#### 5. *Effect of Changes and Reflection*

After implementing classroom changes, teacher-researchers would monitor the program over the long term to see if its impact continues to be positive. Reflecting on the effects of the changes often leads to identification of additional questions for subsequent research. In the peace table example, the teacher-researcher may find that the peace table begins to lose its effectiveness as older children move to upper elementary classrooms. Upon reflection s/he may begin to wonder if reintroduction is necessary each year as the composition of the classroom shifts and younger children enter the community. Or, s/he may wonder if modifying some elements of the peace table may reenergize the children's interest in the resource. These questions can serve to restart the cycle of inquiry which is the basis of action research.

#### **Resources for Action Research**

Action Research Network: <http://actionresearch.altec.org/>

Action Research Online Journal: <http://www.arexpeditions.net/>

American Educational Research Association Action Research Special Interest Group:  
<http://coe.westga.edu/arsig/index.html>

Jack Whitehead's Living Educational Theory Approach: <http://www.actionresearch.net/>

#### **Sources**

McMillan, James, & Schumacher, Sally. (2006). *Research in education*. Allyn & Bacon.

Gay, L., & Airasian, Peter. (2003). *Educational research*. Prentice Hall.