Montessori Classroom Action Research

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Brofenbrenner's ecological systems theory of child development

- Action Research is a practitioner based research...Action research is characterized as research that is done by teachers for themselves. It allows teachers to study their own classrooms - for example, their own instructional methods, their own students, and their own assessments - in order to better understand them and to be able to improve their quality or effectiveness.

Action Research

- Recognizes the importance of teachers in promoting change in teaching practices. Sees their position in the middle of the research as essential rather than as an insurmountable bias.
- Made possible by rise in humanism and recognition of importance of qualitative research alongside quantitative research. Whole person research.

Action Research

- Reflective Teaching - teachers who are reflective practitioners are always doing a type of informal action research.
- Action Research is a way to formalize this reflection so that teachers can more effectively evaluate changes in their practice on student learning.
- Most importantly, action research leads to change in the classroom, from the ground up rather than imposing change from the top down. Action research has an immediate and direct impact on your practice.
- Look (observe), think, act, reflect spiral

Planning - Finding my question

- Observe class - identify ‘problem’ or area for improvement
- Gather information
- Pose a question - passionate about answering that arises from this observation
Possible areas to question:

- Classroom environment
- Instructional materials
- Classroom management
- Instructional methods
- Human growth patterns and educ. (interests/learning preferences/self regulated learning, etc.)
- Grading and evaluation
- Conferencing

Lea’s Concern - E2:

- Create a bridge between Positive Behavior Interventions and Supports (PBIS) curriculum and Montessori Grace and Courtesy
- Provide a structure for the teaching of Grace and Courtesy in my classroom
- Develop pro-social behaviors for a more cooperative, respectful classroom

Lea’s Topic and Questions:

**Effects of Positive Behavior Intervention through Grace and Courtesy on an Upper Elementary Classroom Community**

- How do I teach Grace and Courtesy in a relevant way for upper elementary students?
- How does increased focus on Grace and Courtesy affect the classroom environment and the work period?
- Can I create a similar matrix for Grace and Courtesy as is used for PBIS?
Literature Review - Phase 1

- Investigate how others have addressed similar problems/ opportunities
- Refine question; subsidiary questions
- UWRF - model using library databases. Advise that initial lit review helps to define topic; find a reference that will inform you on each of your three questions
- In groups - take your three questions and share what you have learned about your questions. Narrow down to one topic phrased as a question.

Literature Review - Phase 2

- Add information and continue to investigate what others have found out that is relevant to question.
- UWRF example -
  - Recommend - 12 references at least 10 from peer reviewed journals.
  - Share summary of each resource and relevance to study.
  - Reply to two on discussion board
Leah’s Literature Review
The studies Leah found gave her insights into the following:

- Positive behavior intervention and ‘grace and courtesy’
- Positive behavior intervention to improve school climate
- Identifying behavior expectations
- Increasing pro-social behaviors and emotional regulation
- Classroom management through grace and courtesy

Internal Review Board

- Universities and Colleges have internal review boards for research with human subjects. Includes subjects, question, methodology, dissemination plan
- Action research – gray area as usually involves teachers doing what would normally do in the classroom and hence no danger to human subjects. Also action research often changes as spiraling process.
- For non-university programs: permission letters/parents/principals/district. Need to ensure that doing what would be doing anyway in classroom. No possibility of harm coming to a child.

Data Collection

- Create an instrument to gather data (quantitative and/or qualitative)
- Obtain a baseline measure (which might be based on observations to specific guidelines) and a post implementation assessment.
Lea's Method

- Qualitative study using pre- and post- student surveys about Classroom Climate
- Comparison of work completion percentages from Q2 to Q3
- Classroom Observations

Action - Implementation Plan

- Implement a procedure or strategy for addressing the problem/opportunity based on your experience, reading on methodologies and literature review.

Data Collection

- Existing sources:
  - Student work (portfolios or samples)
  - Archival evidence
- Tools for capturing Everyday Life
  - Diaries, logs, journals
  - Videos
  - Photographs
  - Shadowing and sampling
  - Observation reports including checklists/rating scales
Tools for Questioning
- Interviews
- Written surveys
- Tests

Adapted from Sagor 1992

Lea’s Implementation Plan
- Observe and identify behaviors in the classroom that are disrupting the learning community
- Develop lessons to address the observed behaviors
- Define to the class what Grace and Courtesy entails and discuss why it’s important
- Midway Class Experiment: “What happens if I am completely responsible for my voice and my work efforts?”

Results and Data Analysis
- Evaluate Results
- Have problem incidents increased/decreased?
- Has researcher discovered patterns?
- Decide on best way to show these results - e.g. graphs, charts
Lea’s Results and Analysis

- The pre-survey responses to classroom climate showed that the majority students felt that the class worked cooperatively and respectfully often or always (Figure 1). There was no significant change in this result in the responses in the post-survey. There was a slight increase in work completion for Quarter 3 (50.6%) over that of Quarter 2 (42.1%).
- Observations of the class and their interactions to see if were happening to the overall atmosphere in the classroom. I noticed that students appeared to be more patient with each other and were more likely to solve disagreements in a cooperative, constructive manner without adult intervention than prior to the study.

Comparison with PBIS: Properly thought out lessons and the ability to act immediately on an unfolding situation allows grace and courtesy to be an effective way to develop the pro-social behaviors that PBIS seeks to promote.

Findings

- Was the intervention successful?
Lea’s Findings

- There does seem to be a parallel between the goals of PBIS and Grace and Courtesy
- Grace and Courtesy lessons could be structured and written in a way to comply with PBIS matrices
- Students were observed to be more patient and less reactive than prior to the study

Discussion & Reflection

- Should the intervention be modified or maintained? Are there new questions arising from the research?
- What are the long term impacts?

Lea’s Discussion and Reflection

- Continue to utilize the flexibility of grace and courtesy lessons to have immediate impact on situations
- Allow students time to reflect on changes and lessons and how they affect their learning
- Use what I have observed and reflected on to be a leader in my building on how to use grace and courtesy lessons appropriately for each grade level
**Action Plan**

- Will the researcher continue the action plan?
- Are there opportunities for further improvement?

**Lea’s Action Plan**

- Create a practice society where students can discuss behaviors and debate possible courses of action
- Look at ways to make grace and courtesy teachings more cohesive across the different grade levels
- Create a structured lesson sequence for the beginning of each school year

**Dissemination of Research**

- Candidates share research as a Plan B paper (with university designated panel and peers) or a certification project report (with Montessori faculty and peers).
- If Plan B becomes part of library collection
- Program director assesses research report (rubric under session online handouts) and submits with application to Angela Murray for inclusion in Montessori Action Research Warehouse.
- Possibility of Poster Presentations
References:


Action Research in Non-University Settings

Year Long Special Interest Project

- Offers possibility for action research
- Not all adult learners choose action research for their YLP
  - Action Research - 30%
  - Review of Literature - 30%
  - Special Interest Project - 40%
- The main goal is to identify a topic of passion and to nurture the study of that topic
Process for YLP Action Research at HMEI

**Summer Academic Session:**
- Introduction of the YLP
- Offer examples of past projects and research
- Adult learners choose a topic of interest and a backup topic
- Begin to think of their research question
- Independent work begins—developing question & developing implementation plan

**Practicum Phase—Fall Advanced Seminar:**
- Update on all YLPs including action research
- Topic and Question should be clarified and approved by faculty
- Literature review should be in progress or finished
- Action plan developed
- Offer support with clarifying topic, question, and simplifying implementation plan

**Practicum Phase—Winter Advanced Seminar**
- Update on all YLPs including action research
- Action plans should be in place and underway
- Offer support with implementation plans, collection of observations, encouragement
Process for YLP Action Research at HMEI

- Practicum Phase - Spring Advanced Seminar
  - Update on all YLPs including action research
  - Implementation plans should be in underway and wrapping up
  - Offer support with writing
  - Some are mostly finished at this point
  - Those that are finished share their project or research with their cohort.

- Practicum Phase - End of May
  - Year Long Project is due
  - Offer continued support with feedback for writing and revisions

What we have experienced

- The YLP is a great opportunity to take:
  - Sustainable action in an area of strong interest
  - Synthesis theory and practice
  - Formalize the observation/action/reflection cycle
What we have experienced

- Some adult learner graduates are in their 3rd and 4th year of focusing on and extending both knowledge and practice of their YLP topic
- Some adult learners have presented their YLP at regional and national conferences
- Those with prior university experience, especially those who hold master degrees, feel more comfortable with this process

Case Study - Sydney

- Cultivating inner peace in the early childhood classroom
- Questions:
  - What impact will a small peace table have on activity in the classroom?
- The Setting: A small suburban private Montessori school providing care for children birth-6 years old
- The Participants: 16 children ages 2 ½-5 ½

Case Study-Sydney

- Implementation Plan
  - Add a small custom peace table to the classroom
  - Rotate peace materials on the peace table
Case Study - Sydney

- Data collection
  - Daily observations
  - Photographs
  - Video
  - From Sydney and her supervising teacher.

Findings

- All children in the class gravitated toward the peace table
- All children engaged with the peace materials
- Provided an opportunity for silence, solitude, and stillness

Further Action

- Integrating additional peace activities to the classroom
  - Sending Love
  - Peaceful Person
  - Love Lights
  - Yoga
  - Mindful Breathing Exercises
Find the page in your handout - blank on Embarking on an Action Research Project

Fill in the problem area: Identify an area of your classroom or school or your teacher education program where there is a problem or opportunity.

Now keep this in mind as you visit two of the 7 tables for discussion. Discussion at each table is appropriate for an individual project or for implementing the process in a non-university or university setting.