Teacher Research and Impact on Classroom Practice
Teacher Research

Terms:
- Action Research
- Teacher Research
- Practitioner Inquiry
- Practitioner Research
Teacher Research in PK-12th Grade Contexts

Traditions of Practitioner Research

1. Literacy Education
2. Early Childhood Education
3. Teacher Education
   M.Ed. Capstone/Thesis
   Student Teaching
   National Board Certification
4. School Districts
   School or district initiatives
   Differentiated supervision/
   alternative evaluation
5. Teacher Networks
Action Research in PK-12th Grade Contexts

Publications dedicated to teacher research

- Inquiry in Education Journal
- Journal of Practitioner Research
- Voices of Practitioners
- George Mason University Networks
- Journal of Teacher Action Research
- Canadian Journal for Teacher Research
1. Identifying the problem/developing a question for investigation
2. Understanding the field, current understanding of the problem (exploring the professional literature)
3. Determining Research Design
4. Securing Permissions, Following ethical procedures
5. Collecting Data/Implementing Intervention
6. Analyzing & Interpreting Data
7. Discussing Findings and Conclusions
8. Determining Implications & Action Plan

REFLECTION
Teacher Research should...

- Maintain a focus on the improving teaching practice, student learning, and/or student experience.
- Be grounded in developmentally appropriate practice, effective subject area pedagogy, relevant contextual factors.
- Follow guidelines for ethical research, school/site approval processes, and protect participants’ well-being & anonymity.
- Lead to the researcher’s understanding of her/his teaching, students’ learning or daily experiences.
- Lead to improvement or change in daily teaching/interactions with students, families, others.
Teacher Research can...

- Assist teachers in developing habits of systematic inquiry into their own practice
- Provide a framework to identify & examine problems of practice, leading to change in teaching/student learning
- Create opportunities for teacher collaboration, sharing, collegial professional development
- Enhance teacher confidence in leading within the classroom and school
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What Do Teachers Investigate?

Teachers research specific:

- Curriculum Initiatives
- Instructional Methods
- Materials
- Specific Student Needs or Sub-Groups’ Needs
- Classroom Environment
- Relationships
- School-Wide Programs or Initiatives
## Instructional Methods

<table>
<thead>
<tr>
<th>Context</th>
<th>Research Topic or Question</th>
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<tbody>
<tr>
<td>Pre-K to Elementary</td>
<td>Using free-play centers in Kindergarten: Authentic use of literacy skills</td>
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<td>Effectiveness of various sight word strategies in Grade 1</td>
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<td>Implementing mathematics problem-solving strategies via small group direct instructional settings</td>
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<tr>
<td>Middle/High</td>
<td>Strengthening MS student mathematics homework participation</td>
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<td>Morpheme-based vocabulary in MS science</td>
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<tr>
<td>Special Area</td>
<td>Implementing choice-based and student-directed learning in a 3rd grade Art classroom</td>
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<td>Using iPads to enhance student planning in Art</td>
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<td>Daily check-ins: Guidance &amp; elementary collaboration</td>
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<td>Loose Parts and Nature-Based Learning in PK</td>
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<td>Materials for introducing early science concepts to toddlers - solids and liquids</td>
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<td>Using a social stories to support children with Autism in Kindergarten</td>
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<td>Picture books: Exploring contemporary depictions of play and impact on teachers’ choices in materials &amp; methods</td>
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<td>Nature-based materials in upper elementary science</td>
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<tr>
<td>Middle/High</td>
<td>Digital mathematics portfolios to support middle school mathematics learning</td>
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<tr>
<td>Special Area</td>
<td>Materials for music curriculum alignment with Habits of Mind</td>
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<td>Music preparation and teaching: International comparisons</td>
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## Student Needs

### Individual, Sub-Group, Full Group

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<td>Pre-K to Elementary</td>
<td>The use of student-led literature discussions to improve comprehension students reading below grade level &lt;br&gt;Use of self-assessment to increase student awareness writing conventions and content for striving writers &lt;br&gt;Reluctant/uninspired readers-motivation for reading in upper ES &lt;br&gt;Increasing motivation and achievement in reading via student-selected book clubs</td>
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<tr>
<td>Middle/High</td>
<td>Tracking in mathematics-self perception of beginning high school students &lt;br&gt;Peer mentoring: Students in general &amp; special education</td>
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<tr>
<td>Special Area</td>
<td>Supporting striving readers via reading specialist pull-out intervention time</td>
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## Classroom Environment or Relationships

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<td>Pre-K to Elementary</td>
<td>Implementing Movement and Purposeful Breaks in the Early Elementary Classroom&lt;br&gt;Using cooperative learning structures in an online setting to support relationships among peers&lt;br&gt;Building the school-home connection; alternative methods of engaging parents&lt;br&gt;Stress reduction for teachers-collaborative after school groups&lt;br&gt;Stress reduction for students-integrating relaxation techniques during subject transitions</td>
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<tr>
<td>MS/HS</td>
<td>Kinesthetic learning in the MS science classroom: Enhancing student experience and achievement&lt;br&gt;MS Advisory: Purposeful activities to enhance student experience and relationships</td>
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## Curriculum & School-Wide Initiatives

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| Pre-K to Elementary | Integration of STEAM to encourage social, linguistic and cognitive development in Pre-K  
                      Second Step: Social Emotional Learning &  
                      Purposeful play: Reintegration of play in the Kindergarten classroom  
                      Implementation of Eureka Math in upper elementary  
                      Implementation of PBIS in MS |
| Middle/High      | STEM in the Middle School: Use of maker-spaces and collaborative teaching of STEM content and concepts  
                      Use of 1:1 devices in content areas: MS Math; MS Science; HS Science, |
| Special Area     | 1:1 Devices in the Arts or FCS  
                      Linking the Music Curriculum to the Habits of Mind Framework |
Future Directions

Supporting Teacher Researchers in Generating Knowledge about Teaching and Learning

- Individuals
- Collegial Groups
- School-University Partnerships
Future Directions

Supporting Teacher Researchers in Disseminating Findings, Adapting Practice

- Individuals
- Sharing
- Teams, PLCs, PD
- Conferences, Written Publications