

Curriculum Development and the Research Process: How Can They Relate

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Two ways to look at the results

- What they mean for the developers of *Tools of the Mind*
- What they mean for researchers who study implementation of Early Childhood curricula

From the developers' perspective: lessons learned

- The implementation of a complex curriculum such as *Tools of the Mind* needs to involve multiple formative evaluations prior to determining its efficacy as an entire curriculum
- Formative evaluations need to focus on separate components of the curriculum itself as well as the mechanisms of its implementation (e.g., formats of professional development and coaching)

From the developers' perspective: lessons learned

- The issue of the number of activities in the curriculum
 - The actual number
 - The reasons why new activities are added
 - To address requests from the sites (standards etc.)
 - To make sure activities change over the course of a year as children master the early ones
 - The perceived number (the way they are presented in trainings and manuals)

From the developers' perspective: lessons learned

- The issue of professional development
 - How *Tools* trainers work with coaches
 - Trainers were trained in the content of the curriculum but not on how to work with the coaches
 - No system in place to evaluate effectiveness of the trainers
 - How coaches work with teachers
 - Coaches were trained in the content of the curriculum but not on how to work with the teachers
 - No system in place to evaluate effectiveness of the coaches

From the developers' perspective: lessons learned

- The issue of fidelity measures
 - We understood fidelity as accurate and complete implementation of *all* of the activities in all of their steps...
 - And we communicated this understanding to teachers and coaches
 - For the curriculum that requires teachers to individualize scaffolding and to adjust the activity to the level of children we may need a different definition of fidelity

From the developers' perspective: lessons learned

- The issues of scaffolding mature make-believe play
 - Teachers did not know how to scaffold play to its next level
 - Not being properly scaffolded, children lost interest in playing or became unregulated which resulted in shorter play time
 - Coaches did not have a detailed rubric to observe play so that they could focus on teacher supporting its specific components

From the researchers' perspective: issues specific to *Tools of the Mind*

- The issue of play
 - To determine if play is in fact related to the development of self-regulation, the measures of play need to match our understanding on mature vs. immature play
 - The unit of observation in this case might be a group of children in one center or across several centers rather than individual children

From the researchers' perspective: issues specific to *Tools of the Mind*

- The issue of private speech (self-talk) as being positively (or negatively) related to self-regulation
 - Is it the overall amount of self-talk that matters or
 - What are children saying when they talk to themselves?
 - In which activities self-talk occurs the most?
 - Is there a relationship between the content and frequency of self-talk and the nature of the activity?

From the researchers' perspective: general issues related to curriculum implementation

- The issue of curriculum stability and how to capture it in the research
 - Some degree of stability needs to be present in order for the curriculum to stay the same over the study or over multiple studies
 - but
 - The curriculum to be successful needs to change based on many factors including the on-going feedback during its implementation

From the researchers' perspective: general issues related to curriculum implementation

- The issue of evaluation criteria
 - The role of experts' opinion?
 - The role of functional classroom measures?
 - The choice of measures for assessing short-term and long-term outcomes?

From the researchers' perspective: general issues related to curriculum implementation

- The issue of teachers' attitudes towards change
 - Comparing teachers implementing a new curriculum to teachers implementing a familiar one
 - How long does it take for the teachers to embrace change? How do we know?

From the researchers' perspective: general issues related to curriculum implementation

- The issues of fidelity
 - Do different curricula require different approaches to measuring their fidelity of implementation?
 - How do we measure the fidelity of coaching?
 - How do we measure the fidelity of delivering professional development if not delivered by the authors of the curriculum?

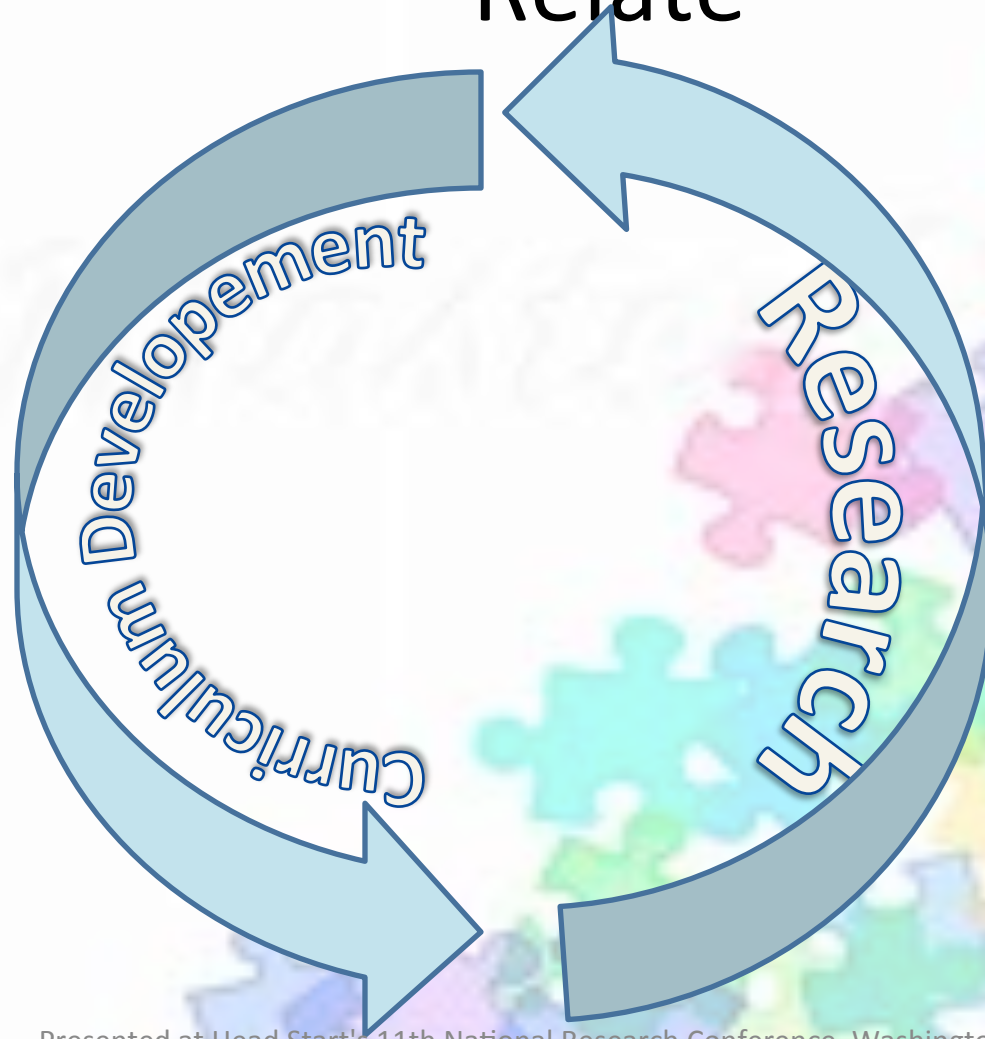
From the researchers' perspective: general issues related to curriculum implementation

- The issues of design
 - Are there differences in teachers' attitudes towards implementing a new curriculum and subsequent fidelity of implementation when participating in a RCT vs. when the curriculum gets adopted by the school district?

From the researchers' perspective: general issues related to curriculum implementation

- Life after RCTs
 - What are the factors that determine whether a district adopts a new curriculum that has been a subject of a study?
 - What do these factors mean in terms of the efficacy of this curriculum?

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