Evaluating Research Projects –
Different Perspectives and Actions

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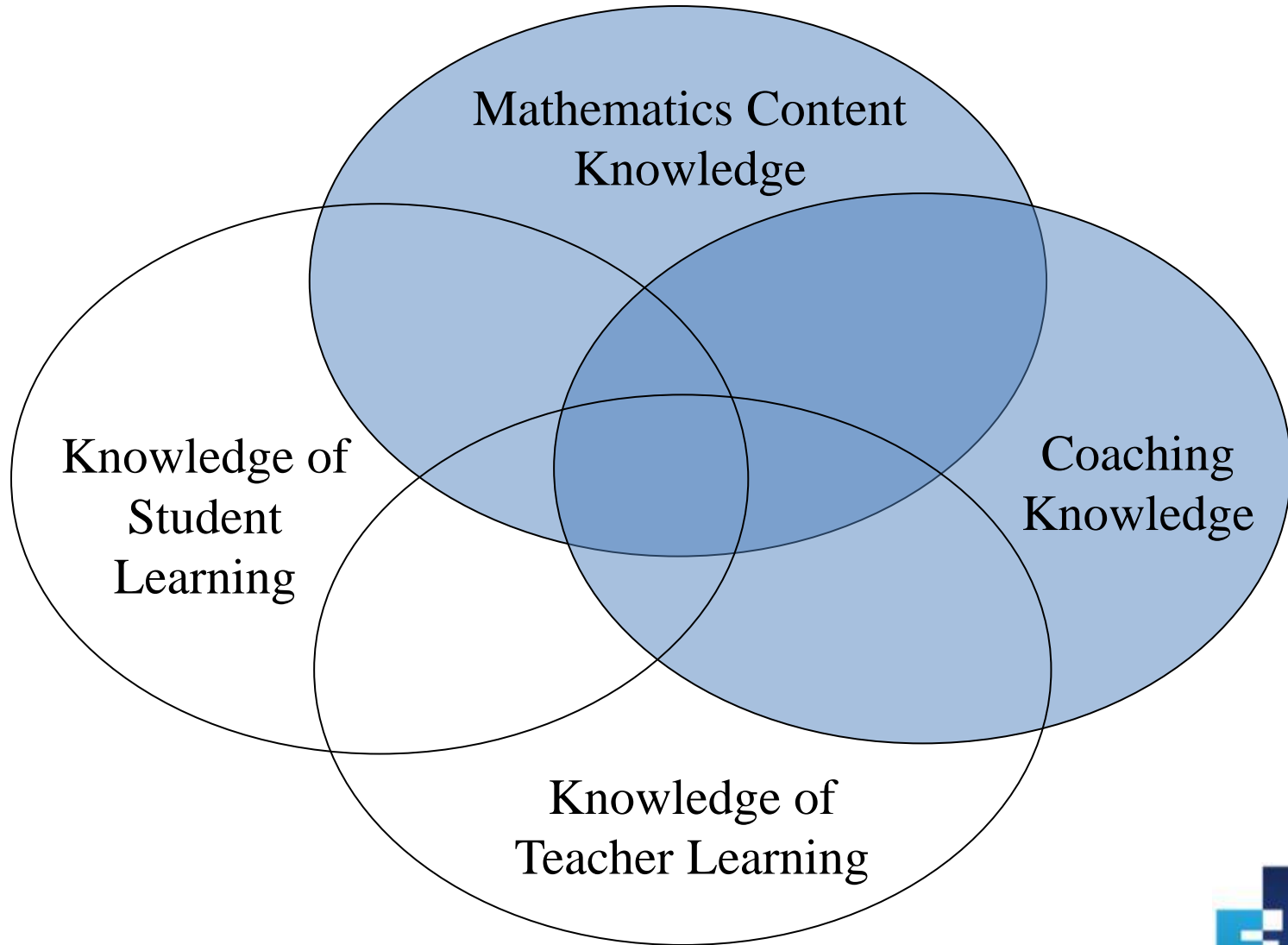   Kenneth Wareham (Lewis and Clark College)

Examining Mathematics Coaching (EMC) Project Description
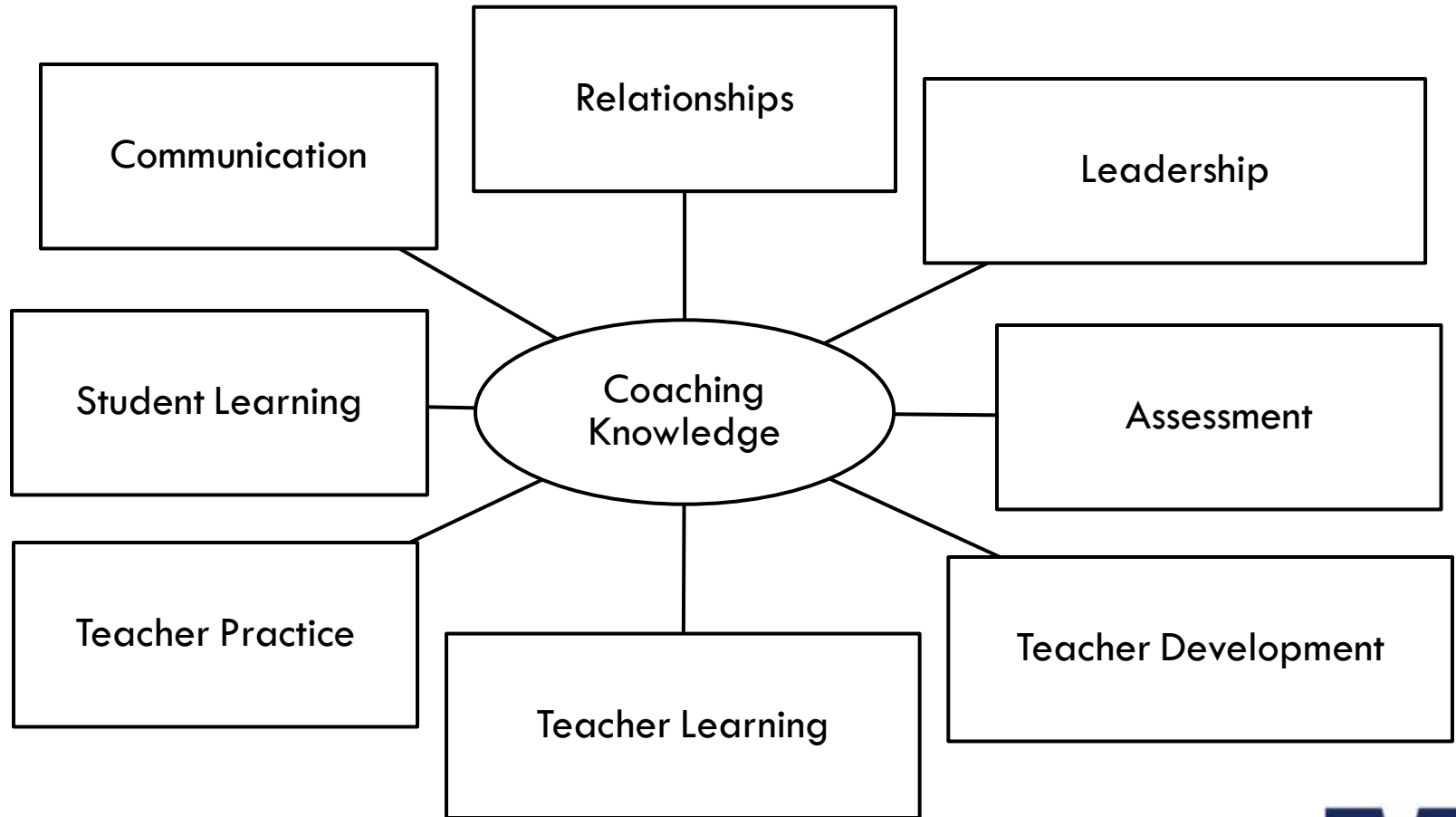
EMC is a 5-year research and development project funded to examine the effects of a coach's *knowledge for coaching* on a diverse population of K-8 teachers.

Knowledge Domains

Mathematics Content Knowledge

Knowledge of Student Learning

Coaching Knowledge

Knowledge of Teacher Learning

Coaching Knowledge

Professional Development

Two one-week professional development courses:

- **Knowledge of mathematics content**, specifically in the area of number and operation, with a focus on ratio and proportion.

- **Coaching knowledge**, addressing eight themes identified by coaching experts.

Evaluation

Evaluation

- An **external evaluation** of the **research project** was required by the funder

- The current evaluation team was contracted mid-way through the third year of the project

- The evaluation involved mostly document review without other data collection activities to provide evidence for typical evaluation purposes

Evaluation Approaches

- Often, external evaluations provide
  - **Formative feedback** to improve projects and suggest mid-course corrections
  - **Summative reporting** of project outcomes and impacts
  - **Project monitoring** for accountability
- This evaluation consisted of review of documents generated by project, including
  - The proposal and annual reports to the funding agency,
  - PI and research team meeting minutes,
  - Advisory Board documentation,
  - Research protocols and data analysis reports,
  - Project newsletters and website, and
  - Other electronic artifacts
- With a limited budget and no on-site collection of data, what rationale should be used for the evaluation of the research?

Measuring Research: Key Rationales

Advocacy	Demonstrate the benefits of supporting research, enhance understanding of research and its processes among policymakers and the public, and make the case for policy and practice change
Accountability	Show that money and other resources have been used efficiently and effectively, and to hold researchers to account
Analysis	Understand how and why research is effective and how it can be better supported, feeding into research strategy and decision-making by providing a stronger evidence base
Allocation	Determine where best to allocate funds in the future, making the best use possible of a limited funding pot

From Guthrie, Wamae, Diepeveen, Wooding, & Grant. (2013). *Measuring research: A guide to research evaluation frameworks and tools.* RAND Europe.

EMC Evaluation Framework

- Includes review of project documentation for
  - Accountability
  - Analysis
  - And as a by-product, Allocation of resources
- Intended to
  - Improve processes,
  - Increase potential for impact, and
  - Provide some oversight

Evaluation Impact

- Support for research team with regard to
  - What's going right
  - Key project decisions
- Verification that
  - The research team is doing what they proposed in the way they proposed it
  - There are challenges requiring mid-course corrections to implement longitudinal multi-site educational research
- Changes in
  - Research team processes
  - Analysis of the project's research data
 - Allocation of resources and funds

Research

Key Lessons Learned

Evaluation	Research	Project
• Low-cost evaluation of research with targeted rationale can have considerable impact on research processes and outcomes	• Research requires flexibility to account for unanticipated factors that influence designs, analysis, and outcomes	• Reflective practice allows multiple external experts to help oversee, inform, and guide key project decisions
• External evaluators' responsiveness and expertise play crucial roles in quality of feedback	• The contributions of feedback from external "eyes" on the project strengthened quality of research	• Communication across many sites and project teams with diverse roles requires careful orchestration

Keys to Evaluating Research

- ***Agreement on the Purpose***

- ***Clear Expectations***

- ***Open and Effective Communication***

- ***Responsiveness***

THANK YOU!
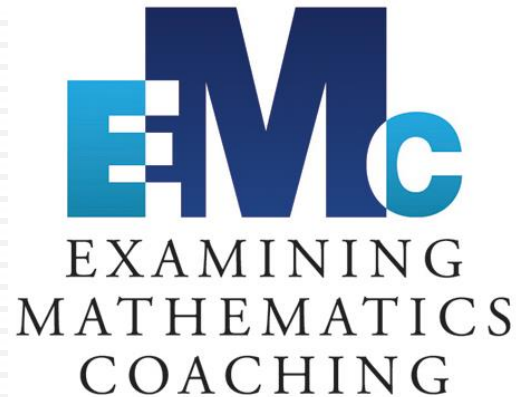
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