

# METHODOLOGIES IN SOTL

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Diverse perspectives of SoTL research are shaped by ontological and epistemological assumptions each with different implications for: (1) the questions we ask, and (2) the claims that we seek to make.

## WHY THIS MATTERS

As researchers, our ontological and epistemological assumptions highlight our understanding of reality and the ways in which we come to know the world around us. These assumptions, often unexplored, influence the type of (research) questions we ask, the data we gather, and the analytical frameworks that we apply to the data, therefore influencing every aspect of our SoTL research.

## WHAT CAN WE DO

Framing our research begins with ontology and epistemology. Ontology ("world view") refers to one's assumptions/perspective about the nature of reality and claims about what exists, i.e. "what is going on in this educational setting?" In SoTL contexts, ontological perspectives have implications for framing and formulating the research question in order to investigate issues such as effective program development and impact analysis. Epistemology refers to the beliefs about how one acquires knowledge (e.g., "how do we know what we know in this educational setting?"). In SoTL contexts, epistemological considerations have implications for the theoretical underpinnings and selection of appropriate research methodologies, which best align with the research question(s) and the circumstances of the practice-based SoTL context (e.g., insights to the effectiveness of program development, program implementation, and educational reform/initiatives). When beginning a SoTL inquiry, we have to let the research question(s) drive.

- **Research Design** encompasses the whole of the research plan and identifies the specific plan for gathering evidence in support of the research question. It is based on the SoTL research context, the alignment of central Research Question, methodological framework, and data collection methods, including a sampling strategy that identifies which and how many participants (e.g., data will be gathered using a purposive sample of diverse representative stakeholders with particular consideration to gender and area of academic focus).
- **Research Methodology** should be selected based on its contextual alignment with the central Research Question (e.g., action research, appreciative inquiry, case study research, grounded theory methodology, the scientific method, etc.) including a rationale for the selection of appropriate methodology, as different methodologies will produce different data and results.

*"One of the defining features of SoTL research is the opportunity to combine conventional educational research methodologies with disciplinary expertise"*

(Webb, 2015)

- **Research Methods** are the forms of data collection, selected based on their alignment with the central research question and methodological framework. Research methods could include relevant contextually-bound evidence (such as planning documentation, program website information, semi-structured interviews, student/faculty portfolios, etc.) The research proposal should include a rationale for the selection of specific data collection methods related to triangulation.
- **Data analysis** explains the process of data handling, analysis, and transformation (e.g., Drawing on triangulated mixed methods data sources, qualitative data will be analyzed using the constant comparative method/Nvivo analysis to examine major themes, patterns, categories, strengths, contradictions, and limitations pertaining to the evidence. Quantitative data will be analyzed using descriptive or inferential statistics).

*"As a field, SoTL scholars must continue to advocate for an increased connection between SoTL scholarship and practice, focus on articulating rigorous, literature informed methodologies as well as methods, and continue to theorize with the scholarship of teaching and learning."*

(Webb & Tierney, 2019)

## KEY TAKEAWAYS

When conducting SoTL research, we have to adjust our thinking so the research question, not our usual methods, guides the research design. When framing the research, it may be necessary to adopt different methodologies and methods in order to best answer the question. Don't underestimate the value of a reliable Educational Research Methods text.

## REFERENCES

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## NOTES

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