

**Chunling Niu, EdD, PhD**  
Dreeben School of Education,  
University of Incarnate Word,  
San Antonio, TX 40506  
Phone: (210)829-3133  
Email: cniu@uiwtx.edu

## **TEACHING PHILOSOPHY STATEMENT**

When I came to the U.S. to start my first doctoral program a decade ago back in 2011, the professor who taught me Introductory Statistics and Quantitative Methodology became my closest mentor and friend. I was fascinated by both what she taught (so many new, fancy methodological “tools” that I could choose from to investigate the pressing problems in theoretical and applied educational research) and how she taught it (she seemed to possess the magical power to make very complex concepts instantly simple and clear to understand)! So, near the end of the first semester, I could not wait to rate her methodology classes and overall teaching “five stars” on the student feedback survey. However, I would never forget the look on her face when she told me later that she and another methodology professor were both rated by their students the lowest in teaching performance and class quality.

“But why?!” I asked her unbelievably, “I think your teaching was amazing, and honestly I have learned SO MUCH from your classes!” She just laughed and said, “Well then, at least I have ONE satisfied student.” As I continued to learn and teach research methodology since then, I have been asking myself constantly: *Why do people hate methodology classes and teachers?*

**It is irrelevant.** Based on my methodology learning and teaching experiences, there could be roughly two types of students sitting in a research methodology classroom: those with a clear purpose of learning, and those without.

The former type of students come to learn research methodology because they are personally interested either in solving problems related to a specific applied research area or in improving their methodological competence in general. Intrinsically motivated, they are often the quiet hard-workers and active problem-solvers; they usually do not complain about the *relevance* issues unless they lose confidence in finding what they are looking for in the classes.

I once had a doctoral student in my Advanced Quantitative Methods class who wanted to learn how to conduct action research on relationship-building in diverse classrooms as part of his dissertation research. As an experienced high school math and chemistry teacher, he firmly believed himself as a “quantitative” person and was eager to learn new quantitative methods to enable his action research. Although he showed great interests in learning structural equation modeling (SEM), he told me after the mid-semester exam that he increasingly felt SEM and quantitative measurement alone might not be able to answer all the exploratory research questions in his action research. We sat and talked through several office-hour periods and decided together that he should change his final class project to a more manageable SEM-related study and continue to pursue mixed-method approach for his original action research.

In contrast, the latter type of students may take methodology classes for general interests, or simply, for fulfilling the requirements of their degree programs. For these learners, *relevance*

can easily become an issue and must be addressed from the onset. One thing I have kept doing in my methodology teaching practice is to conduct pre- and post-semester surveys on student needs assessments (as part of the students' course requirements), and I would pay special attention to the students' responses to the following two questions:

- What specific problems (e.g., research/practice/policy-related) would you expect this methodology class can help you address? (Pre-Semester Survey Question)
- To what extent has this methodology class helped solving the problem(s) you identified at the beginning of the semester? (Post-Semester Survey Question)

These survey responses provide extremely useful information for me as a teacher to understand each student's expectation of my methodology class (or the lack of it), and to support their research efforts and/or practical needs on an individual basis. For those students who have never learned how to identify and/or formulate "good" research questions, the process of taking the needs assessment surveys and the related discussions afterwards often become their first lesson in research methodology, and "a very practical one too", as many of them told me later.

**It is hard.** Unlike the classes that focus on teaching content in a specific area, methodology courses (especially at the undergraduate level) usually must accommodate students from all kinds of academic and/or professional backgrounds whose knowledge and skills regarding research methodology vary greatly. It is almost certain to expect some or even many students to struggle academically at certain points throughout the methodology course. While it is practically infeasible for the instructor to provide continuous, extensive individual support for every student, several strategies in terms of curriculum development, instructional design, and/or learning assessment can be applied to make methodology courses manageable for all learners.

First, curriculum must be developed taking full consideration of the students' pre-existing knowledge and skills, as well as the overall blueprint of all the available methodology courses offered for a certain degree program. In this regard, requiring certain prerequisites (based on instructional scaffolding sequence) for taking a particular methodology course may be necessary and effective for helping students make the best-informed decisions in their course selection and registration. Moreover, the learning goals, instructional framework, and student assessment plans specified in the syllabus should target the typical/average student while allowing certain flexibilities catering to the learning needs of both advanced and struggling learners. Such flexibilities may take the format of recommended further readings and bonus projects/tasks for advanced learners, as well as learning and/or assessment alternatives for struggling learners.

Further, innovative instructional methods can also be instrumental in achieving better learning outcomes. For instance, I have always strongly encouraged peer learning where students learn from and with each other in both formal and informal ways. Advanced learners are usually very motivated to help and support other students as peer learning leaders; and struggling learners feel more comfortable asking for peer assistance whenever necessary, since they understand their struggles more easily from the student perspective compared to the instructor's. Another example is the integration of computer-assisted adaptive learning technology into the regular classroom instruction. With the advancements of educational technology, a wide variety of free online adaptive learning resources can be selected and re-arranged for supporting the individual learning needs of research methodology students at their own pace (e.g., OpenLearn, DataCamps, YouTube Tutorials, etc.)

**It is boring.** Essentially, research methodology provides “tools” for solving concrete research problems. When taken out of the context, the study of the tools in itself can be senseless, and therefore, **boring** for most students. If left unaddressed, this issue may gradually cause diminished intellectual curiosity and learning motivation for the students, which would inevitably lead to negative educational outcomes. In other words, bored learners just refuse to learn. Based on my teaching and mentoring experience in research methodology, I came to find out the best way to increase students’ learning interests was to put the instructional content into the theoretical and practical contexts.

I remember once when I was teaching Path Analysis in a graduate-level methodology class, a doctoral student in Early Childhood Education raised a question that probably resonated with many other research methodology students,

- “I learned some Exploratory Factor Analysis and Confirmatory Factor Analysis before, and I also heard about Structural Equation Modeling...My guts tell me they are all somehow connected to each other, but I don’t know exactly how, and I doubt I could make any sound methodological decisions if I have to select from these methods to solve my research questions.”

The fact that many research methodology courses can only focus on one or a few research methods often gives students fragmented theoretical knowledge, which makes it almost impossible for them to systematically weigh the pros and cons of different methods in applied research scenarios. Thus, it is vital for the methodology instructor to connect what is currently being taught to the related body of methodology literature by contrast and comparison. This is what I call “Fit the Piece into the Puzzle” so that students are allowed to have a glimpse at the theoretical big picture and to make better sense of the applicability of the particular research methods they are learning.

More importantly, what is the point of learning about the “tools” without learning how to put them to proper use? Therefore, I have always tried to adopt the project learning approach in my instruction to place the research methods into the contexts of applied research and/or policy considerations. For example, in my Program Evaluation class, students are encouraged and supported to identify and work with a “real” organization/institution in proposing a program evaluation plan as their final class project. During the process, students are not only allowed to work on their “pet projects” but also to experience first-hand the problem-solving complexities in actual program evaluation scenarios.

**In sum,** I believe the above-mentioned three teaching approaches/philosophies will continue to advance me towards my goal of motivating students and assisting them in learning and using research methods effectively. My teaching passion and commitment have remained unchanged: through teaching research methodology, I aim to foster the next generation of educational researchers/program evaluators/practitioners who are capable, confident, resourceful, independent, lifelong learners and problem-solvers.