

Valuable Characteristics of the **MODULE(S²)** Curriculum Materials & Online Space

- MODULE(S²) materials support meeting the standards in the Association of Mathematics Teacher Educator's (2017) *Standards for Preparing Teachers of Mathematics*.
 - They help teacher candidates reach all 4 of the teacher candidate standards, with particular emphasis on C.1 (Knowledge of mathematics content and practices).
 - The MODULE(S²) Statistics & Modeling materials also place particular emphasis on C.4: Social contexts of mathematics teaching and learning. They advance teachers' content knowledge simultaneously with development of their critical consciousness through exploring, understanding, and responding to social inequities (Aguirre et al., 2019; Casey & Ross, 2022).
 - They help programs meet the program standards, particularly P.2 (Opportunities to learn mathematics) and P.3 (Opportunities to learn to teach mathematics).
- Research has shown that many secondary mathematics prospective teachers think their upper-level content courses are not useful; they view these courses as disconnected from secondary teaching practice and don't feel the courses build the mathematical knowledge they need for teaching (Goulding, Hatch, & Rodd, 2003; Zazkis & Leikin, 2010). The MODULE(S²) curriculum materials solve this problem: .
 - MODULE(S²) connects advanced mathematics to the work of teaching secondary mathematics.
 - MODULE(S²) materials develop prospective secondary mathematics teachers' mathematical knowledge for teaching and expectation of success in carrying out core mathematics teaching practices (Lai et al., in press).
 - Prospective secondary mathematics teachers found the MODULE(S²) materials valuable and useful. They valued how the MODULE(S²) materials provided opportunities for them to apply their content knowledge explicitly to the work of teaching (Lai et al., in press), and they valued the materials' emphasis on using equitable teaching practices (Sutton & Callow-Heusser, 2022).
- Instructors who have taught with the MODULE(S²) materials found them valuable, easy to use, and supportive in improving their teaching (Sutton & Callow-Heusser, 2022).
 - Instructors valued the improvements in prospective teachers' engagement and understanding of mathematical concepts as a result of using the MODULE(S²) materials.
 - Instructors found the materials easy to use, supported by extensive instructor materials and the online professional learning space. They appreciated the flexibility of the materials so that use of the materials can take place in a variety of ways (e.g., one module from three different content areas can be used to form the curriculum for a capstone course).
 - Instructors reported gaining content and pedagogical knowledge that improved their teaching. The materials are designed to help instructors run discussion-based courses, and instructors found the materials supported a student-centered, active learning, discussion-based pedagogy.
 - Instructors also valued that the materials supported them in modeling a pedagogical approach that they want their prospective teachers to use in their future classes.



MODULE(S²)
Mathematics Of Doing, Understanding, Learning
and Educating for Secondary Schools



References

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