Moving towards non-traditional methods of Math and Science content preparation for alternate-route educators

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This best practices session will provide an overview of methods being employed to provide standards-based undergraduate mathematics and science content preparation in an online and distributed format to adult learners who are seeking alternate routes to teacher certification. These methods have served to address the nationwide shortage of highly qualified math and science educators by attracting those interested in a career in teaching who have often been highly successful in other professional venues.

Much has been said in national conversations regarding methods to address these shortages; this presentation will address non-traditional adult learning methods used by one institution to provide content preparation in math and science areas, including the extensive use of prior learning assessment, ‘traditional’ online courses, examinations, and individual evaluation. These methods are resulting in the development of individuals, often career changers, who have the necessary expertise in high-demand mathematics and science areas to enter alternate certification programs.

Upon completion of the undergraduate content preparation program, conducted entirely online and at a distance, candidates then complete a short term teacher preparation introduction including a content certification examination, also completed entirely at a distance. Candidates are then eligible for initial teacher certification and are routinely and regularly placed in high-need school districts and other placements as teachers in STEM fields. These new teachers will then work in conjunction with one of the institution’s partners to complete additional hands-on pedagogical training and graduate coursework in a manner that is conducive to their professional needs.