

Producing Teachers with a Balance of Content and Pedagogical Knowledge: Recommendations for Success

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Introduction

- Teacher Preparation Programs
 - Pedagogical Knowledge
 - Content Knowledge
 - Pedagogical Content Knowledge (PCK) (National Research Council, 2010; CAEP, 2013)
- Well developed programs are needed to ensure quality teachers enter the classroom (National Research Council, 2010; CAEP, 2013)



Pedagogical Content Knowledge

- Transformation of content and pedagogy unique to teachers (Shulman, 1986)
- PCK is recognized as a critical knowledge-base for teaching (Rice & Kitchel, 2010)
- Increased need for PCK in teacher prep (Ballantyne & Packer, 2004; Loughran, Berry, & Mulhall, 2004)
 - Traditional separation of content and pedagogy (Beck, 1961)



PCK Development

- Achievable through teacher preparation via (Magnusson, Krajcik, & Borko, 1999)...
 - Purposeful instruction
 - Dedicated time for development
 - Support from instructors/peers



UGA Course Development

- Series of “For Teachers” Courses
 - Agriscience
 - Greenhouse Management
 - Natural Resources
 - Floral Design
 - Animal Science
 - Agricultural Mechanics



Course Goals

- Increased content, pedagogical, and pedagogical content knowledge
- Assignment flexibility
- Promote “career ready” skills
- Build evaluation skills
- Teach lessons utilizing new knowledge
- Enhance reflective abilities



Course Development

- Meeting with Content Expert and Pedagogy Expert
 - Integrate both components
 - Establish curriculum
 - Create agreement between both departments



Course Development

- Barrier for New Teachers:
 - Teaching natural resource content through outdoor labs
- **FANR 5690: Natural Resource Management for Teachers**
 - Forestry, Wildlife, and Fisheries content knowledge
 - Students team teaching outdoor labs on camera
 - Emphasis on middle school and high school student data collection in the field
 - Technology integration (e.g., Project Noah app)



Recommendations

- Faculty
 - Teacher educators work to develop courses that distinctively develop PCK
 - Content Experts support the growth of PCK through content specific courses
 - Purposefully engage preservice teachers in breaking down content in a tangible manner to increase comprehension and retention



Thank you!

Any Questions?!?

