

Triangulating Pedagogical Content Knowledge in Beginning Band Instruction

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❖ Preamble

- What is pedagogical content knowledge?
- Can “musical knowledge for teaching” be described?
- Theory based on three related studies
- How is pedagogical content knowledge studied in other fields?
- How do music teachers interact with common “problems” in music?
- Focus: beginning band instruction

❖ Study One – *Describing Instrumental Music Teachers’ Thinking: Implications for Understanding Pedagogical Content Knowledge* (Millican, 2013)

- Presented experts with set of video problems
- Examples of “student work”
- Characteristics/traits
 - Importance of models and modeling
 - Specificity in language and thought
 - Sequencing and decision making
 - Manipulation of variables
 - Questioning as a teaching device
- So what?
 - Each of the traits highlights a meaningful *combination* of the areas:
 - Modeling = knowledge of students + content knowledge + general pedagogical knowledge
 - Specificity = contents of each “bucket” + general pedagogical knowledge
 - Sequencing = curriculum knowledge
 - Manipulation of Variables = curriculum, content,
 - Questioning = student + general pedagogical knowledge + content
 - Note knowledge in *action*
 - Guide music teacher educators in designing experiences for future music teachers

❖ Study Two – *Describing Pre-Service Music Educators’ Pedagogical Content Knowledge* (Millican, submitted)

- Set up similar study with a less-experienced population
- Quantitative – on site stimulus-response descriptive survey
- Results
 - Lack of specificity
 - Manipulation of variables
 - Sequencing
 - Maybe they just don’t know the answer? (“bucket” not filled?)
 - Problems, causes, solutions not always related (content knowledge)
 - Instead of modeling & questioning – “Work on” the problem was most frequent prescription
 - Interesting biases
- So what?
 - Pedagogical content knowledge really may be a window into “expert” teaching
 - Each “bucket” needs to be filled
 - *Combination* of each “bucket” important
 - We need to help our students form connections
 - Application – microteaching, knowledge in action
 - Field Experience

❖ Study Three – *Accounts of Practice Design* (Millican, in progress)

- Problems
 - Conjectural bias of first two studies
 - What specifically might go into each “bucket?”
 - Can we really describe individual topics in great detail?
- Qualitative “Accounts of Practice” design (Simon & Tzur, 1999)
- Analysis
 - Catalogue of “topics”
 - *Lip Slur Mind Map*
- Results
 - Teaching is intricate
 - Contents of each “bucket” can be described
 - Musical Skills (Content Knowledge)
 - Teaching Skills (General Pedagogical Knowledge)
 - Common problems (Knowledge of Students)
 - Sequencing (Curricular Knowledge, Content Knowledge)

- Concrete examples of teaching techniques/traits in action
 - Models
 - Specificity in language and thought
 - Sequencing
 - Manipulation of variables
 - Questioning as a teaching device

❖ Confluence of Ideas

- So what?
- Can we fill the “buckets?”
- What’s next in Pedagogical Content Knowledge research?

Questions? Comments?

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Supplementary Materials



Prezi – *Triangulating Pedagogical Content Knowledge in Beginning Band Instruction* –
http://prezi.com/vzw6gxnwhfovk/?utm_campaign=share&utm_medium=copy



Handout copies & other documentation – <http://music.utsa.edu/smte13>



Mind map – *The Pedagogical Content Knowledge of Lip Slurs* – <http://goo.gl/jQ7b8X>



Starting Out Right: Beginning Band Pedagogy - <http://www.amazon.com/Starting-Out-Right-Beginning-Band-Pedagogy/dp/0810883015/>

Selected Pedagogical Content Knowledge References

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