

## *Simplification of Teaching Materials in ITA Instruction*

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### Discussion Group Summary

This presentation discusses key aspects of teaching ITAs to design lesson plans effectively in order to meet American undergraduate students' cultural and educational expectations, with simplification of teaching material being one of the means of enhancing effectiveness of ITA instruction.

### Session Outline

The goal of the project and this session is to identify strategies that ITA trainers could use in order to lead ITAs to a better understanding of the challenges they face in planning their classes and adapting teaching materials to undergraduate students' needs, and to outline possible ways of helping ITAs overcome these difficulties. In this study, we offered ITAs activities aimed at identifying important features of teaching materials designed for three different levels, high school, undergraduate, and graduate. ITAs examined chemistry materials used at the three levels. As a result, ITAs identified the following variables: a) number of visuals, b) various degrees of complexity of the visuals (e.g. pictures "like advertisements," tables and charts, formulas and equations), c) complexity of terminology, d) number of repetitions of key concepts, e) number and depth of details. A number of ITAs admitted that these activities were very illuminating as they had considered content a higher priority while leaving out student motivation, audience awareness, and lesson assessment. One of the difficulties that has been identified as the result of the study is finding opportunities to expose ITAs to teaching materials used at different levels, however, close collaboration with ITAs major department faculty may provide a solution to that problem.

### Questions for Discussion

- Given the variable skills and knowledge of undergraduate students, some of ITAs felt that high school materials could also work well with undergraduate audiences, which raises the question of how far should undergraduate teaching materials be simplified without bringing them to a level inappropriate for college students.
- Both ITAs and their undergraduate students feel that the simplification of the teaching material leads to more effective teaching. However, some of the ITAs who participated in this project believe that simplification may distort the course content and result in unjustifiably curtailed syllabi that do not meet the university

standards. What simplification strategies may be recommended to ITAs that would not distort the course content?

- Our research has shown that one of the most common tendencies for beginning ITAs is to teach the material very close to the assigned texts, which causes apparent dissatisfaction in undergraduate students who would like to have the material presented differently. In addition to the strategies discussed at this session, what techniques of varying teaching materials do you think ITAs could use in their work with undergraduate students?
- Some of our ITAs believe that simplification of material, “teaching to the level of the student,” will eventually make undergraduate students less competitive on the global job market. Are there any reasonable grounds for such concerns?
- How do these issues relate to your experience?

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