Chapter 50 Promoting Critical Thinking Through the Use of Student– Generated Case Studies

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ABSTRACT

Often, using case studies as instructional prompts and methods can lead to frustration by both the teacher and the students. This has led many in the field of teacher education to question the utility of this instructional method. The purpose of this chapter is to describe how preservice educators may enhance their critical thinking by learning how to create student-generated case studies. The authors also provide the psychological and educational evidence which supports purports the importance of critical thinking in preservice k-12 education. In this chapter, the authors discuss why student-generated case studies are an effective teaching tool and explain how research on elaborative interrogation and worked examples explains why using student-generated case studies promote critical thinking. Two examples of student-generated case studies are provided (one from elementary and one from secondary education) along with guiding questions and prompts students may use to develop their own effective, elaborative, and worked-example of case studies in a teacher education course.

INTRODUCTION

K-12 classrooms are complex, demanding environments that require teachers to continually make decisions that directly impact their students. Shavelson (1973), one of the first scholars to situate decision-making as central to more fully understanding and improving teaching, posited, "any teaching act is the result of a decision, whether conscious or unconscious, that the teacher makes after the complex cognitive processing of available information. This reasoning leads to the hypothesis that the basic teaching skill

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is decision making" (1973, p. 18). Following this logic, a teacher's ability to create a cohesive, enriching and collaborative classroom requires they develop the necessary decision-making skills to support the academic, social, ethical and emotional development and well-being of their students. For beginning teachers to do this effectively, they need meaningful opportunities during their preparation to analyze, discuss and reflect on challenging classroom situations they observe and experience, work through these examples with the support of teacher educators, and develop effective solutions that inform their practice.

At the heart of this process is an intentional emphasis on developing teacher candidates' critical thinking skills. With this instructional context in mind, critical thinking can be conceptualized as, "the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action" (Foundation for Critical Thinking, 2017). This approach to critical thinking rests on the assumption that in teaching, there is an interactive relationship between thought and action, and decision-making is a central aspect of both teacher cognition and teacher development (Borko & Shavelson, 1990; Shavelson & Stern, 1981).

Many teacher education programs dedicate a considerable amount of time within both coursework and clinical experiences to developing teacher candidates' knowledge, understandings and skills to ensure they can effectively promote critical thinking among their students. For example, it is typical for a program to require, at numerous junctures, that teacher candidates demonstrate their abilities to develop objectives and lessons plans and implement instruction that engages students in higher-levels of thinking and is aligned with Bloom's Revised Taxonomy of Learning (Anderson et al., 2001). Likewise, teacher education faculty in many programs spend significant time creating, structuring and aligning curricula to ensure that there are many opportunities for pre-service educators to develop their critical thinking skills to help them become more reflective and impactful practitioners.

One specific example to support this work to enhance teacher candidates' critical thinking skills may be to embed Student Generated Case Studies (SGCS) within coursework. SGCS provides a constructivist instructional approach to engage pre-service teachers in the design and analysis of authentic classroom scenarios to consider how they can and should professionally and ethically respond. This task requires pre-service teachers to establish connections between what they are learning in coursework and experiencing in clinical placements to develop and assess solutions for addressing the issues situating their case studies. This type of learning experience, which intentionally attends to the development of critical thinking, can be integrated to help better prepare pre-service teachers for the realities of day-to-day classroom life.

The following chapter is organized into three distinct, but interrelated parts. First, two case studies along with guiding questions to prompt and promote critical thinking are introduced as examples of SGCS. Second, we provide a step-by-step guide to support teacher educators on how to scaffold an SGCS assignment in a teacher education course. This includes addressing the defining attributes of SGCS as well as prompts to support the development of these authentic, real-world scenarios. We then conclude with a discussion of the research highlighting why SGCS may be effective for developing critical thinking as well as the potential benefits of using SGCS for preservice teachers.

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