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## Designing and Revising a Course Using Evidence-Based Teaching (EBT) in Higher Education

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## **Designing and Revising a Course Using Evidence-Based Teaching (EBT) in Higher Education**

During a year-long New Faculty Learning Community experience, the writer looked at evidence-based teaching (EBT) through an Action Research model to re-structure a Higher Education course to increase students' ability to turn theory into successful professional practices through active learning. After analyzing the threshold concepts for an Educational Administration Credential course, the following needs were found: (1) to deepen administrator candidates' problem-solving skills through discussion-based learning and reflection; (2) to deepen administrator candidates' skills in equity-based decision-making through relevant case studies; and (3) to apply inquiry-based structure to model and measure the administrator candidates' decision-making and problem-solving ability. The action research found these EBTs were effective in transferring theories and concepts into professional practice and improving students' confidence. These findings could be applied to any field of study that require problem-solving and decision-making skills.

### **Keyword**

Action Research, evidence-based teaching, course re-structure, equity-based, decision-making, discussion-based learning, active learning, case study, inquiry-based assessments, problem-solving, reflection practices, Q2S, and Higher Education

### **Introduction**

In September 2013, the California Commission on Teacher Credentialing (CTC) amended the requirements for earning the Preliminary Administrative Services Credential. As a result, all Preliminary Administrative Credential Programs implemented the required non-consequential Administrator Performance Assessment (CalAPA) beginning in Fall 2018. The CalAPA assessment design was motivated by advancements in both the research regarding the multidimensional practices of effective school administrators and by the complex needs of California's public schools in the 21st Century. Implementation of CalAPA in 2018, inspired the redesign of most California Preliminary Administrative Services Credentialing Programs, including the California State University, San Bernardino Program. Thus, leading to my action research focus on EBTs that would be best for engaging administrator candidates in real-world problem-solving and decision-making for equity-driven leadership.

### **Teaching Challenges**

Educational leaders today face a variety of managing the dynamics of differences; diversity, political, structural, and social issues, and need tools in their toolbox to address equity and opportunity gaps within our educational system (Lindsey, Robins, & Terrell, 2009). What I'm finding in my graduate courses is that the administrator candidates have the passion and desire but lack the knowledge, communication skills, and self-awareness, to lead their staff towards the needed equity-driven institutional changes. The EBTs I studied and implemented in my courses to overcome these challenges are (1) guided inquiry, (2) decision-based learning, and (3) case studies. I also implemented the following teaching strategies within my re-designed courses: dialogue and reflective practices, equity-driven leadership, active learning, adult learning, and cultural proficiency frameworks for transformational educational change. Below are the three EBTs I incorporated to enhance my courses.

### **Guided Inquiry**

According to McDermott (1991), when designing course content, you should consider the intellectual development of your students and deepen their learning through scaffolded learning activities. To revise my course, the EBT of Guided Inquiry aligned with the new CalAPA

key concepts and gave a platform to develop the administrator candidates' learning experiences. Guided Inquiry objective is to guide learners through a student-centered investigation process while targeting higher-order thinking and procedural knowledge (Ismail & Elias, 2006).

Using a backward design planning model, I organized my course and structure of my signature assignments based on four inquiry-oriented steps: (1) investigate, (2) plan, (3) act, and (4) reflect. These four inquiry steps aligned with the California Administrator Performance Expectations (CAPE) and the California Professional Standards for Educational Leaders (CPSEL). My goal is to ensure guidance for our administrator candidates to embark on a personal journey, exploring the cacophony of diverse cultures each person experiences in the school setting and building an awareness of the culture and politics of communities, districts, and schools as well as personal development and awareness. Appropriate field-based activities and assignments were needed to contextualize the course material and to deepen learning.

### **Discussion-Based Learning**

According to Brookfield and Preskill (2005), discussion-based learning requires students to play an active role in learning through discussion. It requires them to exercise more critical thinking, communication, and cooperation skills. Discussion-based learning provides an open-ended forum for the collaborative exchange of ideas among administrator candidates or with their professors to further critical think, problem-solve, learn, and reflect on self-learning (Brookfield & Preskill, 2005). All discussions were framed around the inquiry-oriented steps: investigate and reflect. Using discussion-based learning in my course gave the administrator candidates the following benefits:

- Increased respectful listening that led to improved critical thinking and an awareness of others' thinking, as well as their assumptions and biases
- Developed confidence for clear communication based on repeated practice of their knowledge gained from synthesizing and integration of co-created content knowledge and problem-solving skills
- Led to transformational learning as it increased the breadth of understanding and empathy for other cultures

### **Case studies**

After giving the administrator candidates time to develop their communication, critical thinking, and problem-solving skills in a collaborative setting, I added the inquiry-oriented steps of plan and act. My goal was to have the administrator candidates apply conceptual frameworks learned to connect/identify equity issues, practice their decision-making skills, and reflect after gaining peer feedback. Case studies were an excellent EBT for accomplishing this goal. Case studies are an effective EBT for promoting diverse opinions, divergent viewpoints, expression of ideas, and decision-making (Johnson, Johnson, & Smith, 2006).

In small groups, administrator candidates outline case study facts, individuals involved, and the issues/concerns. I then had them co-create a plan of action and outline the steps they would take to address the case. After a group presentation, each administrative candidate would individually reflect on their learning process and set a goal from their learning. The case studies increased candidates' ability to apply their learning and gain confidence in their decision-making process.

### **Conclusion**

The New Faculty Learning Community allowed me to have a forum to discuss and reflect on my learning on EBTs, redesign my course, implementation, and gaining peer feedback. An inquiry-based course structure allowed my administrator candidates to gain better communication and critical thinking through discussion-based learning and reflection and feel more confident in equity-based decision-making by using relevant case studies.

### **Reference**

Brookfield, S., & Preskill, S. (2005). *Discussion as a way of teaching: Tools and techniques for democratic classrooms (2nd ed.)*. Jossey-Bass, San Francisco.

Ismail, N., & Elias, S. (2006). Inquiry-Based Learning: An Innovative Teaching Method. *Academic Journal of Social Studies*. 6 (2), 13-24.

Johnson, D., Johnson, R., & Smith, K. (2006). *Active Learning: Cooperation in the College Classroom*. Edina, MN: Interaction Book Co.

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- IDENTITY: The individual's or group's sense of self.
- BELIEF SYSTEM: The individual's or group's values, beliefs, assumptions, and meanings.
- CAPABILITIES: The individual's and group's reflective and dialogic skills to use new knowledge, understanding, and proficiencies.
- BEHAVIORS: The individual's or group's actions and reactions.
- ENVIRONMENT: Basic physical surroundings, tools, materials, supplies, and technology.

### **Problem-Solving Skills Through Discussion-Based Learning and Reflection**

According to Prah, 2017 The first restructure of the course was to use active learning to engage the administrator candidates (Small Group Method)

Cooperative groups encourage discussion of problem-solving techniques ("Should we try this?", etc.), and avoid the embarrassment of students who have not yet mastered all of the skills required.

- Explore diversity of perspectives
- Investigate their assumptions

### **Equity-Based Decision-Making Through Relevant Case Studies**

Case Study (Applied Learning, problem-solving, critical thinking, & decision making)

- Apply conceptual frameworks
- Connect/Identify Equity Issue

### **Inquiry-based Structure to Assess Decision-making and Problem-solving Ability**

The two job imbedded roles that needed to be assessed were: (1) the administrator as the instructional leader of the school and (2) the administrator as the school improvement leader.

Inquiry-based Assessment/Structure

- Investigate, Plan, Act, Reflect

### **Reflecting on Practice**

How do we deepen our administrator candidates' confidence in equity-based decision-making and promote deep individual learning within our courses?

Case Study (Applied Learning, problem-solving, critical thinking, & decision making)

- Apply conceptual frameworks
- Connect/Identify Equity Issue

Discussion-based Learning (Small Group Method)

- Explore diversity of perspectives
- Investigate their assumptions

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Inquiry-based Assessment/Structure

- Investigate, Plan, Act, Reflect

### Guided Inquiry Activities

Reading: [What we teach and what is learned - Closing the Gap](#)

- 1) Made us expand on our learning based on listening to others
- 2) EBT posters sharing