

Education Seminar # 6: Restructure Lessons With 5 E's

Speakers: Dr. Glenn Markle and Dr. Jon Breiner from College of Education, Criminal Justice, and Human Services (CECH), University of Cincinnati

Date: July 10, 2009

Time: 1:00 to 3:30 p.m. (2.5 hours)

Prepared by:

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This seminar was jointly coordinated by Drs. Glenn Markle and Jon Breiner from College of Education, Criminal Justice, and Human Services (CECH), University of Cincinnati on July 10, 2009 in 641 Baldwin Hall from 1:00 to 3:30 p.m.

This session began by talking about incorporating the 5E's concept into lesson planning. This instructional model takes a constructivist approach to building on student's knowledge. It is based on the idea that knowledge is built upon previous knowledge and that learning new ideas should connect to ideas that are already known. The first section of the 5E's is *engage*. The main idea in this portion of the lesson plan is to find something to get the students interested in what the lesson will be about. This can be achieved through a thought provoking question or an interesting statistic that the students were unfamiliar with. The second portion is the *explore* phase. In this part the students are driven by their curiosity. They will all have some sort of common experience that will later be discussed. The students have an opportunity for hands on learning in which they use concrete materials to gain a better understanding of the concepts. The students explore the situation and have the ability to manipulate the situation in order to look at different outcomes. After the activity, there is typically a class discussion.

The class discussion portion of the 5E's model is the *explain* phase. This happens after the exploration and after students have had a chance to explain what their understanding of the concept is. The students verbalize what they observed and what happened when they manipulated different parts of the activity and how that had an effect on the activity. This is the phase in which vocabulary is introduced and discussed. After the explain phase, is the *elaborate* phase. This is an expansion of the students' knowledge and of their conceptual understanding of the experience. This is where students are given the chance to practice what they have learned and work to refine the skills they have learned. This is also a great opportunity for students to find out more about the specific parts of the concept that they find to be very interesting. The last phase of the 5E's model is the *evaluate* phase. During this section, the students must demonstrate the knowledge that they have discovered. Teachers may use both formative and summative assessments in order to gain a better understanding of how well the students know the material.

After exploring this model more, the teachers were encouraged to use it in their RET lesson plans. They also discussed the different components of their specific lesson plan template. The first component is the necessary materials section. This is followed by how the teacher will analyze the learners in which an overview and purpose using the STEM theme is provided. This section also contains the standards that will be addressed. This section is followed by the goals and objectives for the lesson. In this section the student, as well as the teacher has goals and objectives. Next is the instructional strategies section in which misconceptions will be addressed. This is an important area because many students will have misconceptions about varying topics and it is crucial for the teacher to introduce discrepant events in order to eliminate the misconceptions. Next is the technology portion. The teachers had recently spent a large amount of time discussing technology and how teachers can use it in order to get students interested, as well as providing tools that students will frequently see in their future jobs. Next is the section describing the activity and the student participation. The last part is the assessment section. This includes both formative and summative assessments in which the teacher will look at how well the student understands the key concepts and skills that were learned.

This seminar helped the teachers organize a good project lesson plan incorporating the 5E's into their lesson.