Taking the traditionally taught classroom to the inquiry-based online learning model

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With universities, teacher education institutions, and high schools gearing up heavily in online course delivery in every discipline, science educators specifically are asking themselves «How do we provide this access to our students and still maintain our pedagogical integrity in science instruction? [1]. This question seems to be at the heart of a national discussion. The shift to online learning has created apprehension among academics throughout education at all levels. This new pedagogy is creating a myriad of myths about teaching online. Online learning or E-learning offered over the internet, is contrasted with traditional courses taken in a brick-and-mortar school building [2]. Online learning environments provide a greater degree of flexibility than traditional classroom settings in presentation mode. They can be a hybrid model that combines face-to-face and online instruction, which has two modes: asynchronous and synchronous [3]. With this shift in teaching and learning methodologies, instructors and students may have different perceptions about their responsibilities in online courses. This presentation contends that instructors need to be actively involved with providing direction and support to enhance student learning in online courses. At the same time, responsibility for knowledge and skill development also rests with the students [4]. Suggestions are offered for curriculum developers how on to enhance the quality of course content and improve communication that will strengthen the learners' experience for success [5].

References

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