

## **BNU Instructional Innovations Workshop**

Shengquan Yu, Su Cai, Guang Chen, Min Chen from China

### **Cases of Augmented Reality in Science Education of Middle School**

Su Cai

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***Abstract:** Augmented Reality (AR) provides new possibilities in simulating teaching environments, experiencing teaching processes, demonstrating teaching results and promoting teaching interaction, due to certain characteristics such as being virtual-real blended, real-time interactive, three-dimensional immersive, etc. This presentation will illustrate the 3D AR learning environment and the long-distance augmented video system developed by the author.*

### **Educational Affordance of eTextbook in Primary Schools: a Case Study**

Chaohua Gong, Guang Chen, Ronghuai Huang

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***Abstract:** Educational affordances are worthy of being explored because the affordances of etextbooks provide the pedagogical effects for promoting classroom teaching and learning. This study aims to explore educational affordances of eTextbooks within iPads. To address this research goal, this case study reports findings from a four-week pilot study of etextbooks within iPads in a primary school in Beijing. Our primary research question is as follows: whether and to what extent did eTextbooks with redesigned instructional activities keep the classroom running smoothly? Whether and to what extent did eTextbooks with redesigned instructional activities impact the teaching approach and learning mode? And if such changes improved students' learning outcomes?*

### **A New Form of Learning Resource in u-Learning Environment——A Brief Introduction to**

#### **Learning Cell**

Min Chen

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***Abstract:** With the development of pervasive computing and Internet technologies, information space will be blended with physical space seamlessly to form a ubiquitous information space combining reality with fantasy. All of them make learning become more and more ubiquitous, which means learning happens anytime, anywhere and on demand. Learning will be*

*more social, situated, context awareness and adaptive. So ubiquitous learning needs quantitative, situated, adaptive and evaluative learning resources. And “human” also will be a kind of important resources in ubiquitous learning. How to organize learning resources to satisfy the needs of anytime, anywhere, on demand and adaptive learning is an emerging problem. Prof. Yu Shengquan proposes Learning Cell (LC) in 2009 and explores the organizational model and key technologies of ubiquitous learning resource. He and his team focus on solving that problem: to research on the organization model of learning resources and to explore on the organizational framework theory and practical foundations of learning resources within the context of ubiquitous learning supported by pervasive computing technology. This presentation will introduction to LC, including its design conception, concept and model, prototype system, application scenarios and ongoing exploration by the author, the core member of LC team.*