Welcome to the latest issue of the International Journal of Information & Communication Technology Education (IJICTE). This issue offers a variety of national and international articles that will interest the information technology educator.

From Greece, Managing the Decision Tree Life-Cycle with Components by Dimitris Kalles and Athanasios Papagelis presents a library of decision tree algorithms, one of the most successful machine learning paradigms. Decision trees are excellent tools for supporting assessment and evaluation when a host of complex information must be taken into account. They have two key merits. First, they can manipulate large amounts of information requiring only minimal computational power. Second, by providing classifications and predictions, they advance our insight into the problem. The system reviewed in this paper has been successfully used as a workbench in a Java programming laboratory for junior computer science students, providing a solid introduction to object-oriented concepts and practices.

Using the ADDIE Model for Teaching Online by Kaye Shelton and George Saltsman assembles best ideas and practices from successful online instructors and recent literature. Online teaching has brought a new modality to education. It has also introduced a degree of frustration and anxiety to instructors attempting this new method of instructing students. The authors provide suggestions that include strategies for online class design, syllabus development, and online class facilitation, along with successful tips for both new and experienced online instructors.

Human activities are at the core of the numerous advancements in technology and learning. The objective of The Top 10 Most Valuable Online Learning Activities for Graduate MIS Students by Yair Levy was to identify the most frequently observed learner activities found to be valuable when attending online courses. These activities provide a guide for those educators considering online learning systems. A review of activity theory and its implication for e-learning environments is provided as the theoretical background for this study. Results of the Levy study suggest that nearly all of the most frequently observed valuable activities are found in comprehensive and flexible online learning environments. Additionally, activities related to online research as well as synchronous and asynchronous communication between professors and peers appear to be very valuable for graduate MIS students. The paper
concludes with a summary, remarks, and implications of the study findings for research, as well as suggestions for future studies.

**CareerQuesting: Evaluating Web-Based Resources for Interesting Girls in STEM Careers** by Karen F. White and Mara H. Wasburn develops an educational strategy for fostering interest of middle school girls in science, technology, engineering, and mathematics (STEM) careers. Criteria are specified that enable middle school teachers to evaluate Web sites to serve as supplemental learning activities within prescribed curricula. In particular, these criteria help evaluate materials appealing to both boys and girls without concern that they are providing an unfair advantage to either gender.

**Overview of Using Vignettes to Develop Higher Order Thinking and Academic Achievement in Adult Learners in an Online Learning Environment** is a case study that investigates the use of vignettes as a teaching strategy in a hybrid online course. The generative learning model was employed for the study as students were asked to respond to various teacher-generated vignettes and to generate their own scenarios. Maria H. Z. Kish considered data from student work collected from a graduate school of education and shares the teacher-generated vignettes, diagrams and rubrics, student-created vignettes, and student thoughts concerning vignettes in reflective learning logs. Her research indicates that the use of teacher-generated vignettes can increase academic achievement, and that learner-generated vignettes can help students achieve higher order thinking.

Shuyan Wang and Sandra Turner investigate the learning experiences and learning processes that occur during student development of electronic portfolios. In **Learning Experiences in Developing Electronic Portfolios**, data were collected through in-depth interviews, participant observations, and document analyses from seven MEd students before, during, and after developing electronic portfolios. Findings indicate that creating electronic portfolios supports student mastery of technology-related knowledge and promotes critical thinking and problem-solving skills. Developing electronic portfolios created active, independent, and motivated learners. Students reported that they “learned by doing,” as they viewed samples, collaborated with peers, and reflected on final products. The presentation of the methodology, theoretical framework, and data collection procedures, combined with the analysis, findings, and recommendations provide an excellent example of a well-constructed research project and earned the authors the IJICTE Editor’s Award of Excellence for Issue 2(3). Well done.

**Using Business Plans to Anchor MBA-Level E-Commerce Courses** analyzes experiences in using a business plan to anchor the e-commerce course to address the diversity and currency of subjects covered in e-commerce courses at the MBA-level. Business plan requirements link the various subjects, offer students a real-life learning experience, and, with proper curriculum design and course delivery, give them an opportunity to be “reflective practitioners.” C. Derrick Huang’s results found that student learning and interest in the e-commerce subjects were high when the business plan requirement was implemented as a part of an e-commerce course.

**Increasing the IT Knowledge of Indiana High Schools** by Julie R. Mariga focuses on enhancing the information technology knowledge and skills of Indiana high school students.

teachers and students in biology, chemistry, physics, mathematics, computer science, and technology education. Specifically, her project addressed information in two critical areas: advanced manufacturing and biotechnology. The project considered the basic IT knowledge and skills both common and prerequisite to the specialty areas with a unique emphasis on information security; a specialized area that is becoming increasingly more important.

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