Instructional Technology for Teaching and Learning: Designing Instruction, Integrating Computers, and Using media

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Instructional Technology for Teaching and Learning: Designing Instruction, Integrating Computers, and Using media
Newby, T., Stepich, D., Lehman, J. & Russell, J.
2000, 2nd ed., Columbus, OH: Prentice-Hall

This book is not just a recipe of ideas for teachers to use educational technologies in their classroom. It contains some powerful pedagogical strategies to encourage teachers to reflect on their own practice when confronted with the use of these technologies in teaching and learning.

The authors spend some time explaining why this book was written, how it is organised and how to use it going so far as to say “if we were studying this textbook, we would…..”(p.2) and prescribing a reading approach. They have defined the work as a textbook and it is targeted at pre-service and in-service teacher education. Indeed, the work seems to be a self-contained course that tries to bring together three aspects of technology use in education: how instruction is designed, developed and improved; the types and uses of different media formats – especially the use of the personal computer; and how the design of instruction and media can be integrated to promote student learning (p.1).

The organisation of the text is very clear using the acronym of PIE representing the model of – planning, implementing, evaluating – and chapters are grouped around this. It is good to see a text emphasising the planning aspect of helping teachers to integrate technologies into their teaching and learning programmes as this is often the part that teachers have difficulty with. There is also a strong focus on learning theories and these underpin the advice and guidance given in the book.

Given this focus, I find it difficult to understand the use of the term instructional technologies. Because to my mind, this has connotations of a more didactic approach to teaching and learning. I would have preferred the use of educational technologies which I feel is more compatible with a learner-centered approach. Furthermore, I wonder why the writers do not use the term teacher as the majority of people who will use this text are almost certain to be teachers, not instructors. To me, the term learner-centered instruction is an oxymoron.

The inclusion of reflective questions and activities for teachers is a sound feature of this book because only by teachers engaging in this reflective process will they be able to fully integrate and understand the implications of using these technologies for student learning. In the Preface, the authors state that these are to “help readers think about the ramifications and application of many of the principles that are discussed” (p.vi). Examples of the use of specific technologies in the learner-centered classroom are given and the story of one teacher’s journey is advanced throughout the book. These features help teachers think in terms of their own experiences thus aiding the process of transferring theory into practice.

Other features included in the book are Toolboxes. These can be one of three types, tips, tools or techniques and a useful feature is that they are positioned close to relevant text materials in each chapter. A chapter is devoted to the evaluation of instructional materials and the assessment of student performance. Here again I have difficulty with the term instruction. Why not refer these resources as teaching materials? A variety of innovative assessment techniques such as electronic portfolios, logs and journals, writing samples and interviews, are given to help teachers evaluate student performance and a whole toolbox is provided that contains advice on the use of electronic portfolios.
This book contains valuable advice and guidance for pre-service and in-service teachers regarding the integration of educational technologies into their teaching and learning programmes. Especially valuable is the emphasis on learning theories and the use of a variety of pedagogical strategies to encourage reflective practice.
Computer-mediated instructional technologies can also be applied accordingly based on the different contexts of learning, and instruction. Théories de l’apprentissage et technologies numériques. Cet article tente de décoder les différentes écoles de pensées relatives aux théories de l’apprentissage et de l’intégration des. Learning Theories & Computer-Mediated Technologies 283. Table 1 Summary of theories of learning with examples. Behaviourism Stimulus and response e.g. $8 \times 5 = 40$. A contradiction for the use of instructive approaches complemented with other constructivist approaches. For example, ground rules and other foundational knowledge (e.g. alphabets and their sequence) can be ‘told’. Instructional technology for teaching and learning: designing instruction, integrating computers, and using media/. Saved in: Bibliographic Details. Similar Items. Instructional media and technologies for learning/ Published: (1996). Öğretim teknolojileri ve materyal kullanımı/ by: Smaldino, Sharon E. Published: (2015). Technology also has the power to transform teaching by ushering in a new model of connected teaching. Students enrolled in these schools are not attending a bricks and mortar school; instead they receive all of their instruction and earn all of their credits through the online school. State operated. The Florida Virtual School – An online school that provides full-time learning opportunities to students in grades K-12. Start by marking Instructional Technology for Teaching and Learning: And Portfolio Planner: Designing Instruction, Integrating Computers, and Using Media as Want to Read: Want to Read saving… Want to Read. This book successfully integrates instructional design principles, methods, media, and computing, and it uses a learner-centered approach that focuses on how to design solid technology-enhanced instruction that increases learning. It details the basic theories and applications of educational technology in a reader-engaging format. Digital Media & Design. Education & Learning. Engineering. Imagine being a teacher based in Boston and teaching your class about Switzerland. Your lesson might fall a little flat with just a book’s description and photos of the country. Giblin explains that through the use of technology, the students are able to detect patterns and non-verbal responses when they analyze the interviews. They are then able to create their own content based on what they learned to teach their classmates. For example, you might learn a new strategy for teaching cultural awareness from a teacher overseas, or your unique idea on how to conduct collaborative screenwriting with a tablet might inspire a teacher across the country. Technology is never meant to replace a trained and caring teacher, though.