

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

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**Textbook details:**

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

Newby, T., Stepich, D., Lehman, J. & Russell, J.  
2000, 2<sup>nd</sup> ed., Columbus, OH: Prentice-Hall  
(ISBN: 0-13-914052-2)

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.

Technology for Learning and Teaching: Empowers educators to efficiently personalize learning with access to data, content and the cloud. Prepares students for the 21st century workforce with modern technology skills and competencies. On the path to personalizing learning, technology empowers students by giving them ownership of how they learn, making education relevant to their digital lives and preparing them for their futures. With technology and access to resources beyond classroom walls, students are inspired to become problem-solvers, critical thinkers, collaborators, and creators. Where technology has been successfully integrated into classrooms, students develop a lifelong love of learning. Educators are always striving to personalize learning for students. Are the terms Instructional Technology and Educational Technology considered synonymous? Instructional technology is a systematic way of designing, carrying out, and evaluating the total process of learning and teaching in terms of specific objectives, based on research in human learning and communication and employing a combination of human and non-human resources to bring about more effective instruction [3] – President's Commission on Instructional Technology (PCIT). Start by marking "Instructional Technology for Teaching and Learning: Designing Instruction, Integrating Computers, and Using Media" as Want to Read: Want to Read saving; Want to Read. Let us know what's wrong with this preview of Instructional Technology for Teaching and Learning by Timothy J. Newby. Problem: It's the wrong book It's the wrong edition Other. integration of information technology into teaching and learning process becomes inevitable. Also in preparing these students, classroom use of technological tools and applications must be supported so that. in instructional delivery should be classified as a teaching device because computer cannot substitute a. Journal of Educational Media and Technology, Volume 14 No 2. 2010. 19. Nigeria do not have the needed experience and competence in the use of computer for educational and industrial purpose while Afolabi, Adedapo and Adeyanju (2005) posit that ICT facilities are not utilized in teaching and learning in Oyo State college of education.

Integrate Technology and Adaptive Learning into Your Writing Instruction. McGraw Hill. Follow. May 23, 2018 • 3 min read. If you're looking to integrate social media into instruction, consider using it as a way to teach writing using technology after all, it's possible that your students will be using social media at one point in their lives for a purpose related to learning or job skills, and the short, concise writing style it demands allows for practice in brevity and. We focus on learning science, educational equity, social and emotional learning, and evidence-based teaching strategies. Be sure to check out The Art of Teaching Project, our guest blogging platform for all educators. Follow. The field of Learning and Instructional Design Technology (LIDT) has had many periods of rapid development. Reiser (2001) noted that training programs during World War II sparked the efforts to identify efficient, systematic approaches to learning and instructional design. It would be another 20 years before the first models emerged, but the 1960s and 1970s gave way to extracting instructional technology and design processes from conversations about multimedia development (Reiser, 2017), which in turn produced more than three dozen different instructional design models referenced in the literature. Instructional media for effective teaching and learning. Solomon Adeniregun. Download PDF. In other words, multimedia means "an individual or a small group using a computer to interact with information that is represented in several media, by repeatedly selecting what to see and hear next" (Agnew, Kellerman and Meyer, 1996). Instructional media are information carriers designed specifically to fulfill objectives in a teaching-learning situation. They are very important in language teaching, especially the foreign language, because they facilitate the direct association between sounds and their symbols and also words and the objects they represent. Successful technology integration is more than just getting the tools into the classroom; here are some ideas on how to engage students and enliven your lessons with those tools. From our Technology Integration Professional Development Module. By taking small steps, teachers can begin to reap the benefits that technology can bring to their teaching and to student learning. This process does not have to be painful, and no one will become a tech-integration whiz overnight. However, even with limited access, with careful planning, some risk taking, and an open mind, teachers can successfully use technology to enhance their teaching and bring learning to life for their students. Continue to the next section of the guide, Workshop Activities.

Instructional media for effective teaching and learning. Solomon Adeniregun. Download PDF. In other words, multimedia means "an individual or a small group using a computer to interact with information that is represented in several media, by repeatedly selecting what to see and hear next" (Agnew, Kellerman and Meyer, 1996). Instructional media are information carriers designed specifically to fulfill objectives in a teaching-learning situation. They are very important in language teaching, especially the foreign language, because they facilitate the direct association between sounds and their symbols and also words and the objects they represent. Integrate Technology and Adaptive Learning into Your Writing Instruction. McGraw Hill. Follow. May 23, 2018 · 3 min read. If you're looking to integrate social media into instruction, consider using it as a way to teach writing using technology – after all, it's possible that your students will be using social media at one point in their lives for a purpose related to learning or job skills, and the short, concise writing style it demands allows for practice in brevity and. We focus on learning science, educational equity, social and emotional learning, and evidence-based teaching strategies. Be sure to check out The Art of Teaching Project, our guest blogging platform for all educators. Follow. Out of print. Instructional Technology for Teaching and Learning: Designing, Integrating Computers, and Using Media (One-color). Timothy J. Newby, Purdue University. Donald Stepich, Boise State University. If You're a Student. K-12 educators: This link is for individuals purchasing with credit cards or PayPal only. Contact your Savvas Learning Company Account General Manager for purchase options. Order. Order. Pearson offers affordable and accessible purchase options to meet the needs of your students. Used to support both teaching and learning, technology infuses classrooms with digital learning tools, such as computers and hand held devices; expands course offerings, experiences, and learning materials; supports learning 24 hours a day, 7 days a week; builds 21st century skills; increases student engagement and motivation; and accelerates learning. 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.