REVIEW ESSAY: Designing Effective Instruction (4th Ed.) by Gary R. Morrison, Steven M. Ross, and Jerrold E. Kemp

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Eugene Kowch
ekowch@ucalgary.ca
University of Calgary

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The 4th edition of *Designing Effective Instruction* provides an elegant, updated framework for helping new instructional designers to learn about instructional design processes and current issues. The work is also a resource aid for professors who teach instructional design. The 4th edition has been compiled and reviewed by senior scholars; Gary Anglin, Barbara Bichelmeyer, Rob Foshay and Michael Spektor, to name a few, who are accomplished researchers in the field of instructional design. As such, Morrison, Ross & Kemp declare that they write for an intended audience of graduate students. However, this review suggests that the audience is broader than that specifically targeted by the authors – there are parts of this work that are useful for a whole range of educational needs ranging from new trainer development to organizational leaders who are increasingly pressed to understand instructional technology for their technology imbued organizations in a knowledge era (Maurer & Davidson, 1999; Roberts & Grabowski, 1996).

Along with the presentation of a great deal of content in this text, the authors of the 4th edition continue to offer their particular instructional design model as a template for exposing new industry (training) and education (K-12+) designers to fundamental design elements and processes. Like previous editions, this book has an emphasis on instructional design business settings (p. v.). The original version of this instructional design work was published in 1994 with subsequent revisions published in 1998 and 2004. In the latest edition, the organization, content and literature that Morrison, Ross and Kemp draw upon to update this resource once again offers readers a cross-section of information and examples by current writers in the instructional systems design field. New "expert" inserts in each chapter present richer cases or scenarios that indicate, without prescribing, the common complexity of many current instruction design elements, issues and the surrounding organizational configurations affecting the design team today.

The organization of this book "allows the instructor to adapt the sequences to the class as well as to the instructor's own perspective" (Morrison, Ross & Kemp, 2004, p. vi). An instructor can also vary the emphasis in each chapter. For example, an introductory course might place most of the emphasis on Chapters 2 through 12 (the basic design processes). An advanced course or an energetic group might place more emphasis on Chapters 3 to 15 (project management, the role of the designer, and implementation). Another approach would be to start with the chapters on evaluation and assessment (10-12) or project management (14), and then teach the basic design processes (p. vi). The content elements for systems based prescriptive instructional design learning are all there.

This reviewer sees the greatest strength of this text by comparing its conceptual framework to others in the field today (Dick, Carey & Carey, 2002; Smith & Ragan, 1999; Gagne, Briggs & Wager, 1992; Reigeluth, 1983, 1999; Seels and Glasgow, 1998). The strength of this resource for both face to face and distributed graduate teaching and learning rests subtly in the particular *manner* in which these authors present a (text) resource of basic instructional design elements and processes. As this review presents, it is the careful offering of information about both the concepts and the processes of instructional design that makes this text powerful for instructors and learners alike. For example, *Designing Effective Instruction* offers instructional design as a presentation of processes that are found within a number of wider theoretical and practical contexts. A conceptual framework for a book that allows both instructor and student interpretation of the resource, to a degree, is worth a look.

In *Designing Effective Instruction*, each chapter's "expert edge" inserts anecdotes and snippets related to the key constructs in the chapter, presenting the usual "instructional design content" along with issues that are specifically related to the (future) practice of prospective new instructional designers. Readers who expect more directed prescriptions for K-12, higher education or more specific business sectors may be too easily distracted by the many business context examples in the book. In my opinion, such recurrent references to the role of the instructional designer along with presentations of the institutional contexts for design can only strengthen the capacity of graduate learners to perform well in future communities of practice (Jonassen & Barab, 2000). The organizational contexts used by Morrison, Ross and Kemp (2004) to imbue the many design scenario examples throughout this text translate directly to organizational dynamics (both behavioral and structural conditions) that experienced K-12 instructional designers, instructors and organization leaders alike will quickly recognize (Roberts & Grabowski, 1996).

Designing Effective Instruction continues to provide both new and experienced designers with an opportunity to learn. The authors portray prescriptive instructional design processes by following a particular model as a vehicle from which readers can "peer out" to learn instructional theory and to generate positive (effective) student learning outcomes. Because *Designing Effective Instruction* offers instructors and students *different* ways to learn from it, this review focuses not only on the organization of content, but on the conceptual framework employed by these authors. Taking a close look at the way material is presented, at this time in the changing landscape of instructional design, may be more beneficial to prospective students and instructors in particular than a play-by-play review of the contents in the book. As such, the following review of the

conceptual framework for *Designing Effective Instruction* identifies the resource along the continua of changing learning theory, instructional theory, and instructional design issues today.

An Analysis of the Conceptual Framework of the Book

Changes in Learning Theory

Instructional design is the application of theory to create effective instruction (Morrison, Ross & Kemp, 2004; Jonassen, 2001; Reigeluth, 1999). As such, learning theory informs instructional design theory, which in turn informs instructional design. Instructional design theory has changed to follow changes in the underpinning learning theories that have evolved from behavioral models (Skinner, 1965). Nevertheless, those roots "extend deeply into instructional systems technology practice" to this day (Jonassen, 2001, p. 55).

In most of the educational technology field, the earlier (objectivist) behavioral models for learning evolved into developmental or cognitive learning models eventually (Bruner, 1966). Those descriptive laws about learning were extended to include new learning models including social-cognitive learning theory (Vygotsky, 1978) underpinning Winn's "open systems view of the learner" – a more "organic" or holistic view of the learner as one who impacts with the environment and acquires the knowledge, skills and competence from it while promoting cognitive strategies within instructional design (Winn, 1989).

Learning theory developed in the 1970s and 1980s to more developmental, less atomistic, models to build on the idea that learners gain knowledge and skills in social contexts; the instructional design field has for the most part acknowledged this change. When the field of instructional design further evolved to consider student learning as a contextual experience, wherein socially affected learner cognition is a feature in learning, a less objective and more subjective constructivist perception of learning resulted in newer constructivist instructional design theory approaches that evolved in the 1990s (Jonassen, 2001). Therefore, in the 4th edition of this book, Morrison, Ross & Kemp provide a learning resource where the constructivist possibility or perspective of learning theory itself is left as an available option to instructors and students learning ID via this resource. Choice is good.

Changes in Instructional Theory

Instructional theory (a model for helping designers understand that the desired learning occurs) has changed as a function of our contemporary understanding of learning theory (how we learn) (Morrison, Ross & Kemp, 2004). In this book, Morrison Ross & Kemp state, "While learning theories are descriptive and generic, instructional theories should be prescriptive and situation-specific" (p. 4). It is this underpinning realist ontology and reductionist epistemological stance that forms the instructional model (foundation) used by Morrison, Ross & Kemp to create this resource text for beginning designers. *Designing Effective Instruction* makes reference to the most current learning theory available, and while this instructional model represents a systematic instructional design theory, students and instructors may choose how to apply the model using almost post-systematic recursive or iterative ways, so the theory behind the resource construction is not nearly as prescriptive as some others. As such, the authors have created a resource that

offers learners and instructors a rich guide or process for learning about instructional design elements and processes where numerous approaches to utilizing the concepts in the model are promoted throughout the text (p. 41). This kind of resource offers learners and instructors the flexibility to learn the elements of design theory at a cursory level without getting bogged in the philosophical polarities endemic to contemporary social science fields today. The way the content is sequenced and scoped (see the next section on content organization) gives learners of design using this resource glimpses of the intricacies and dichotomies surrounding both the how (process) and the why inherent to "systematic" design theory today. Overall, the authors lets students decide what "good design" is in their own general way, while learning the general systems design theory construct that instructional objectives must be achievable by the learner (p. 5). Four fundamental components of design inform the Morrison, Ross & Kemp framework for teaching new designers about design itself. These components are: "learners, objectives, methods and evaluation" (p. 11) – standard principles for instructional design that have emerged since the inception of instructional design theory (Reigeluth, 2002).

Options for Teaching and Learning about Instructional Design

However "prescriptive" the Morrison, Ross & Kemp (2004) text may seem at first blush, the actual design processes that students witness by learning from this text (once they learn the key concepts and elements of design) are not prescribed by the authors. Of course, learning is a function of the approach of the instructor, too, but on its own, students are still presented with an understanding of ID that provides them with a multitude of options for understanding their own (first approach) to instructional design. In fact, the relationships between the design elements for "appropriate instructional design methodologies" are presented by the authors in a graphical context where the elements "float", giving the student the freedom to pick the best design strategy (by connecting the dots on their own, so to speak) for a particular context that they contemplate (p. 4). As such, both the instructors who use this book to teach instructional design as well as students who learn about the field have a book that is a resource and not a "cook book". Rather, the work is elegantly crafted to present students of instructional design with a subjective (yet systems theory based) model of instructional design that the authors themselves describe as "based on what we know about learning theories, information technology, systematic analysis and management methods" (Morrison, Ross & Kemp, 2004, p. 5). So, both students and instructions learning with this resource have choices about how they may want to approach the teaching and learning process.

Offering Situativity

While philosophers in the educational technology field struggle to move beyond systems theory and its limitations in the instructional design context (Salomon, 2002; Tessmer & Richey, 1997), few models exist as an integrated instructional resource for teaching instructional designers in these changing times. Hence, notwithstanding promising paradigmatic trajectories by some in the field, Morrison, Ross & Kemp (2004) offer a model that has been taught, tested, critiqued, challenged and refined over a period of nearly ten years. By my measure, it appears far more useful as a teaching and learning resource than the simplistic ADDIE (Analyze, Design, Develop, Interpret and Evaluate) process models (embedding the term "design" in the model itself). This approach to developing a text is far less prescriptive than other approaches offered

by Dick and Carey (2000), for example, as learners in this text are left to "draw their own lines" to turn design elements into design processes. (The Dick and Carey text provides solid ground for experienced designer investigations of finer elements in their systematic instructional design practice). In *Designing Effective Instruction*, Morrison, Ross & Kemp introduce contexts for design by presenting a multitude of situations in the "expert" inserts and from the provocative inquiry puzzles or "problems" introduced in each chapter. This provision of context (situations) and content consistently though all 15 chapters in the book presents students with motivational and relevant material by which they better learn from different instructional design process configurations that are possible (Keller, 2001).

As a conceptual model and as a resource for graduate students learning about the elements and processes in instructional design, these authors offer a well grounded design model based on available teaching and learning theory. Morrison, Ross & Kemp do not "lock" readers into investigating linear processes or rigid procedures via that model; readers can investigate instructional design concepts by applying or testing the model. The real genius in this conceptual framework, given the limitations of theory at hand, is that the authors include current excerpts from designers with completely different ontological perspectives to challenge students' perceptions of the design elements and processes that they are learning. I can see great implications for instructors using this model in a distributed learning environment. For example, in our instructional design (core) course in the educational technology program at the University of Calgary, students engage in a term-long project to create their own informed instructional design model with a good amount of peer review and collaboration. My experience teaching this course in an online (Blackboard and audiographic conferencing software augmented) mode is that students relish the opportunity to create such a personal construction with personal guidance and peer mentorship. The most challenging teacher task is to provide those students with the appropriate amount of text information (online) that does not include too much of this or too little of that prescription or philosophy in the design process from one source or another – so having this text to draw upon could be a real asset to online instructional design instructors.

In *Designing Effective Instruction*, different philosophical perspectives are embedded in the problems, expert edge sections and in the content itself. For example, in the preface of the book, the different design paradigms are covered and the "expert's edge" inclusion written by David Solomon, a fellow who recently "shook up" the readers of the preeminent educational technology journal, *Educational Technology Research and Development*, by suggesting a more philosophical approach to instructional design theory development using first principles and contextual analysis (Solomon, 2002). This is great context without driving deeply into doctoral level philosophical discussions requiring a lot of prerequisite skills - students are merely presented with the idea that philosophical perspective in design is critical. In the middle of the authors' explanation of the necessary rationale for a systems design model for instruction, Solomon's insert offers no (systematic) answer to the riddle "Is unexamined instruction worth designing?", but it sure makes a reader consider an alternate perspective. This is clever tactic for the text given that Solomon invites new design students in chapter one to consider the philosophical approach to design where new students are sure to encounter the paradigmatic and essential tensions of the day.

Such contextualization and problem presentation is a theme throughout the text and in all the content chapters. Using the outlined conceptual framework representing the current state of ID systems research findings and current theories in the field, Morrison, Ross & Kemp provide a steady helping of "inquiry questions" to students, problems that are written (and cited) from "expert's edge" inserts and placed in the chapter introductions. For example, one such insert is carefully inserted as a presentation by Kathy Shrock in chapter 11, where the subject of the chapter (content) is "Developing Evaluation Instruments". By this point in the book, Morrison, Ross & Kemp have exposed the traditional objective test methodologies and they have provided excellent examples of test instruments (p. 278) for the learner. Then they offer Shrock's telling question in the "expert's edge" as she asks: "Is the proof in the pudding, or is it in how you make the pudding?" (p. 283). (The small footnote to the expert question is a reminder in each "expert's edge" insert that experienced, credible scholars have problem-based ideas worth pondering).

Students and instructors alike are served up experts' questions in the context of learning about testing theory across this text - and each question allows learners to either deconstruct or unpack the premises supporting criteria referenced test creation, or they may instead choose to ponder testing validity and methodology concerns - it's up to the reader. Readers can "make their own sense" using this scaffolding because there are no "answers" to the problems provided at the end of each chapter. In fact, by choosing not to prescribe an objective reality about testing as a "real world" example at this point in the resource, Morrison, Ross & Kemp offer both students and instructors a moment amid test methodology lessons to ponder a non-prescriptive narrative. The narrative essentially asks design students to consider if the process of testing could be as important (to designers and to learners) as the test findings may be. These well-considered, beautifully written "expert's edge" pieces add a dimension to the book that could be appreciated by prospective instructors as proof of essentially constructivist praxis informing the design of this instructional media. That format sets the conceptual framework in this text apart from the excellent casebooks that offer a lot of context without room for presentation of the theoretical constructs in the instructional design process.

Conclusion

This text offers both learners and instructors of instructional design the opportunity to achieve a good understanding of the field, and to survey which content, in which context, they choose to self-actualize in order to understand their own perspective on design. The same option is available for instructors who use systematic approaches to teaching and to understanding instructional design. The book has great potential for use in constructivist distance education courses on ID too, and Morrison, Ross and Kemp have done a nice job of gaining a spectrum of American and international expert contexts for inclusion in the work. There is a lot of content in this text, so my inclination to suggest another chapter on leadership of the instructional design process would seem to ask too much of the text (or of beginning students). The same is true of a request to include post systematic design methodologies as they emerge over time, for while this would round out the presentation of the world of instructional design in a changing, exciting instructional design era, the text would be too long for regular courses. This book is well worth the $80 (CDN) price tag as a solid part of an educational technologist's professional reference library.

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Author Note

Dr. Eugene Kowch is an Assistant Professor in Educational Technology at the University of Calgary in the Faculty of Education. He teaches instructional design and development at the graduate level, and has published about the subjects of educational technology philosophy, virtual community design, and related leadership networks and communities. Primary research interests include the design and development of educational technology imbued organizations for the knowledge era, innovative policy networks and communities, and the leadership of technology and instructional design in K-12, higher education and private sectors. He can be reached by e-mail at: ekowch@uclgary.ca.