Reigeluth and An’s new book, *Merging the Instructional Design Process with Learner-Centered Theory: The Holistic 4D Model*, is impeccably timed. As COVID-19 becomes endemic and the economy stabilizes, teacher attrition at the national level remains a concern (Goldhaber & Theobald, 2021). For educators considering a shift to the instructional design (ID) field, acquiring a copy of Reigeluth and An’s book is wise as it provides practical guidance and foundational instructional design knowledge. A mixture of a textbook and job aid, the 200-page book is packed with resources, classroom exercises, and templates that can also be found on a companion website. The targeted readers of the book include (1) practicing instructional designers, (2) students of instructional design, and (3) teachers, instructors, and trainers. The book also benefits those considering a career shift to the instructional design field, as well as instructional design faculty, given the book’s potential to be a foundational text across multiple ID courses.

From the onset of the book, Reigeluth and An masterfully detail the need for their work. The authors argue that ID process models have not kept pace with advances in learning, instructional strategies, technological tools, and instructional design processes. To address this need, Reigeluth and An put forth what they refer to as a *Holistic 4D Model of ID*, which contrasts with fragmented hierarchical ID approaches. Concisely, the process can be summarized as *Define – Design – Develop – Deploy*, with three levels (Top-level, Mid-level, Lower-level) of holistic design and iterative cycles of analysis, design, and evaluation (ADE; see Fig. 1).

Born out of a year-long ID process model update for the U.S. Air Force, the authors highlight several key benefits of their holistic approach to ID, which include the following innovative features:

1. A holistic design process.
2. Analysis-design-evaluation cycles and design document templates.
3. Integration with instructional theory.
4. Teaching topic and task expertise.
5. Holistic instructional sequences.
6. Learner-centered instruction.
7. Non-instructional interventions.
8. Rapid prototyping.
9. Designer objectives and demonstration objectives.
10. Product and process evaluations.

It is imperative to note that several of the innovative features within the model are not overtly visible in the diagram that the authors provide (Fig. 1). For example, the figure does not encapsulate the guidance detailed within the book with respect to instructional theory or learner-centered instruction, topic and task expertise, etc. To fully understand the Holistic 4D Model of ID, one must look beyond the diagram (Fig. 1) and dive into the text where the reader will find detailed guidance on sequencing and executing key activities – analysis, design, development, implementation, and evaluation – within an ID project.

The authors ground the application of the model in real examples that are relatable to all readers. For example, when speaking to task complexity, Reigeluth and An have the reader envision learning how to drive a car and how that may vary according to the complexity of the task (e.g., weather conditions, difficulty of route, manual shifting). The authors break down the Holistic 4D Model of ID in detail in chapters 5, 6, 7, and 8. Readers with strong ID backgrounds will find chapters 5 through 8 particularly informative, as the top, mid, and lower levels of the holistic cycles of ADE are detailed in-depth. The book...
advocates not only for a holistic approach to instructional design and task analysis, but also a holistic approach to instructional sequences.

The book is broken into “Units” that guide the reader through the overarching steps of the Holistic 4D Model of ID (Define, Design, Develop, Deploy). Reigeluth and An are always transparent noting when action steps are NOT necessary. The authors do not expect instructional designers to carry out unnecessary processes or analyses that are outside the nature or scope of a given project, so that money, time, and resources are not wasted. They regularly remind readers that instructional designers play multiple roles and work in collaboration with Subject Matter Experts (SMEs), project managers, task experts, and instructional experts. The authors do an excellent job detailing how to carry out critical skills required of an ID practitioner (e.g., task expertise, topic expertise) and offer tips and rules of thumb that can streamline one’s work (e.g., have an SME as part of one’s development team; develop a design document when working on large-scale ID projects; list all subjects and topics that should be taught within a domain; do not duplicate assessments at the lower-level ADE process).

Reigeluth and An do so many things incredibly well throughout their book. They clearly define relevant terms (e.g., technology, media) and concepts (e.g., instruction, good design), followed with explanations that are stated in an alternative way, which are complemented by examples situated in a familiar context. They clarify possible points of confusion (e.g., instructors vs. instructional designers, learning theory vs. instructional theory). If an instructional strategy is particularly important, the authors bold parts of sentences for additional emphasis. The authors point the reader in the direction of additional readings where appropriate (e.g., instructional theories); however, this is an area for growth in the next edition. For example, when speaking to learning theories or design theory, suggesting additional seminal books in those areas could be beneficial to the reader (e.g., The Cambridge Handbook of the Learning Sciences, The Design Way).

Reigeluth and An are also skilled at guiding the reader through the book by providing compelling overviews of all units and chapters, signposting throughout each chapter, detailing to the reader what they are about to read, and summarizing key points from this chapter using this cue: Where
Are We? Additionally, the authors provide classroom-based exercises for teachers who may use the book as part of an ID course. Reigeluth and An wisely recommend that educators select an ID course project for their students to work on as they progress through the book as a means of practicing the skills covered within each chapter. The authors encourage educators to have students work in groups of three and to remain in those groups throughout the duration of the project.

The authors are also excellent at defining limitations as it relates to the scope of their work. For example, Reigeluth and An note that due to the complexity of affective learning and the emerging research in that area, they limit their instructional guidance to attitudes and values in the affective learning domain. Readers with K-12 teaching experience will appreciate examples grounded in classroom contexts (e.g., teacher-centered vs. learner-centered perspectives as it relates to duties of an elementary school math teacher; conceptual vs. theoretical understanding in biology). Those with military backgrounds will recognize the military references throughout the book, particularly the “Deploy” component of the Holistic 4D Model.

At the end of every chapter, the authors invite readers to provide feedback stating frequently that they, “would love suggestions for improvement.” Their sincerity is refreshing and sincere. At the end of the book, the authors encourage readers with ID expertise to help them through the Holistic 4D Model evolve. Reigeluth and An note that they would like the next edition of the book to have sections authored by other ID experts. The authors also request that ID faculty reach out to share ideas and resources for using the book within ID courses, as the companion website (www.reigeluth.net/holistic-4d) can house student projects, syllabi, examples, etc. As a reader, I would argue that the book’s companion website is a valuable resource for ID students, practitioners, and faculty, as the authors note that the main limitation of their Holistic 4D model is that it does not yet include all kinds of instruction for all kinds of situations. As the companion website grows, it will be beneficial to see concrete examples and case studies of how the Holistic 4D Model is used in practice.

The greatest strength of this book, its timelessness, could also be considered a limitation. Since the application of the model depends on many variables and contexts, ID practitioners must employ design judgment frequently (see Boling et al., 2017; Honebein & Reigeluth, 2021). Truly, Reigeluth and An do their best to bring awareness of the sheer number of design judgments that practitioners need to make and provide templates that aid ID practitioners in that work. As a tip to faculty who decide to integrate this book into their instructional design courses, one should be aware that the high/mid/lower-level ADE process put forth in the book will likely be intimidating to novice instructional designers given the complexity of ID work. To address this issue, Reigeluth and An recommend keeping the scope of projects reasonable (e.g., a very small ADE document) as students practice and apply the skills within the Holistic 4D Model. The authors also write, “In many situations, the most effective medium is an expert, typically working one-on-one with the learner on real problems in real situations” (p. 108). Those new to the ID field will find that this book will work best in conjunction with an expert (a professor or ID mentor) who can help guide them through the Holistic 4D Model while working on a real project in collaboration with others.

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