



Coiro, J., Dobler, E., & Pelekis, K. (2019). *From curiosity to deep learning: Personal digital inquiry in grades K-5*. Stenhouse Publishers.

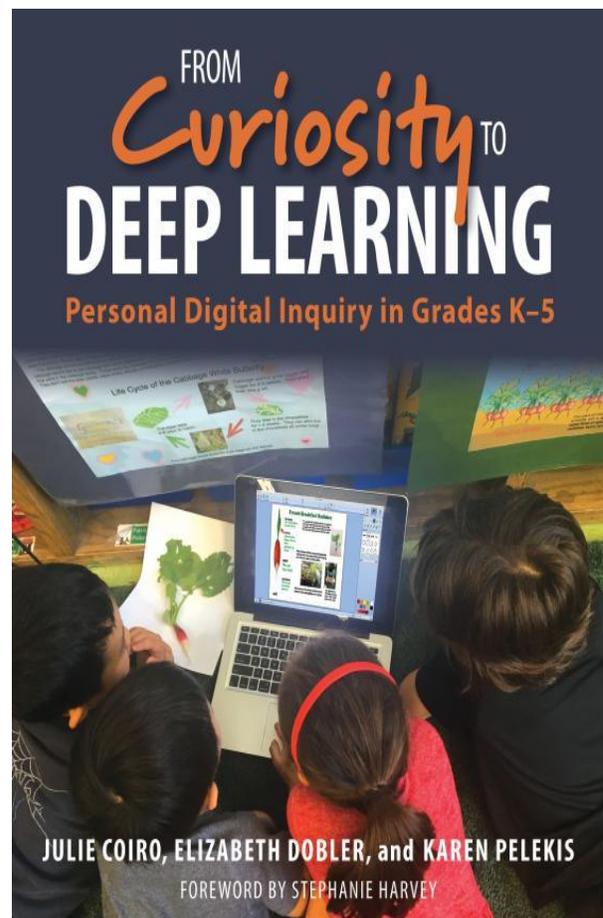
Pp. 229

ISBN: 978-162531157-3

**Reviewed by Laurie J. McCormick and Lisa A. Heaton
Marshall University
United States**

The timing of this book could not be more propitious for educators around the globe. Professors and teachers are scrambling to put their classes online because of the Coronavirus. The need to integrate collaborative technology into their curriculum is urgent. Although the concepts and tools in *From Curiosity to Deep Learning* could be used by all educators, it is a resource manual focused on helping K-5 teachers and library media specialists design class and individual projects that foster collaborative learning with ready-made guides for technology-enhanced lesson plans.

The Personal Digital Inquiry (PDI) concepts of reading, discussing, collaborating, and reflecting are not new, nor are they limited to the elementary grades. The authors mention that Seneca, a Roman philosopher, taught by these methods. They spell out in detail how to integrate these concepts into a K-5 classroom by providing resources to inform teachers' lesson plans, the digital devices and tools relevant for current classrooms, and figures and tables to illustrate each chapter's concepts.



The authors collectively have more than 50-years experience in education. Coiro, a 30-year veteran of the classroom and now a professor of reading and digital literacy at the University of Rhode Island, developed PDI. Dobler, a former library media specialist, now teaches information literacy and language arts at Emporia State. Pelekis, an elementary teacher in Scarsdale, New York, has been implementing PDI for more than a decade.

Coiro and her coauthors argue that students become engaged in their own learning when they are given “voice and choice” (p. x). These experts promote students’ “voice” by having teachers *listen* to their students’ answers. They foster “choice” by allowing the students’ questions to be studied more in depth during the school year, thereby shaping the curriculum and choosing what technology may be used in assignments.

From Curiosity to Deep Learning is textbook style, with chapter overviews and bulleted learning strategies at the beginning of each chapter. Each chapter includes Personal Digital Inquiry (PDI) lessons constructed around three elements: Personal—the authors emphasize building relationships with students; Digital – they offer technological enhancements for each lesson; Inquiry – students reflect and take action.

The text is divided into two parts. The chapters in Part I build an understanding of PDI layer by layer. Here the authors present models of personal inquiry through analysis and reflection, and an explanation of the PDI triangle, which contains questions for teachers to use to foster student ownership and learning with intent. By “learning with intent,” the authors mean “inquiry-based efforts are really geared toward moving students ever closer to becoming self-directed learners empowered to use their knowledge and turn it into action in ways that matter to them” (p. 78).

Part II integrates PDI into teaching and learning. The chapters contain detailed

examples of how elementary teachers and library media specialists have applied the PDI process in their classrooms. For example, Chapter 8 elaborates on the four practices used to create a culture of inquiry within PDI – Wonder and Discover, Collaborate and Discuss, Create, and Take Action, and Analyze and Reflect – illustrated in a color-coded circle (p. 18). The circle’s center features the question, “How will digital texts, tools, and technologies be used to support and/or facilitate each of these inquiry practices?” Prompting teachers with this question, the authors encourage them to consider the role that technology may, *or may not*, play in the teaching and learning connected to the PDI framework. The authors created a website, bit.ly/PDIInquiry, along with a QR code to supplement each chapter’s information. The website contains digital versions of student artifacts and a study guide for each chapter.

In the book’s Foreword, Harvey describes the PDI process:

As kids ask questions, they are given time to address them and discover answers. As they work collaboratively, discussions naturally emerge. As they create new ideas and share them, they want to act. Ultimately, they analyze their findings and reflect on them. (p. x)

The role of the teacher in PDI is to provide scaffolding for students’ inquiry processes, and gradually releasing responsibilities to the students themselves. Instructional scaffolding is a metaphorical term meaning the temporary support teachers offer students to build new knowledge. Once the student masters a task, the teacher gradually removes the support. The challenge for teachers employing the PDI framework is to maintain a balance between giving enough support to guide students’ inquiry, but not so much support that the students lose their sense of agency.

One of the goals of PDI is teaching how to create and take action. Teachers have students share their projects with an outside

audience, and then they are enabled to become activists in their communities. In a previous article, Coiro elaborated, “The goal of inquiry-based learning [PDI] is to develop engaged citizens, with an integrated focus on fostering individual growth, democratic participation, and social change” (2015, p. 160). One of the class projects included students promoting a local animal shelter’s needs to the public using digital tools. The shelter’s director thanked the students by making them volunteers of the month in her newsletter.

The PDI framework should also be distinguished from the personal (or solitary) learning movement; that is, students working alone on their devices for individualized or differentiated instruction. Both methods incorporate student-centered learning. The difference is that PDI emphasizes the “personal” dimension between teacher and student. The authors note, “The affective quality of teacher-student relationships is a central and critical motivator of student engagement and performance” (p. 11). For example, media specialist Beth Dobler endeavored to develop a relationship with each one of her fourth graders by offering them choices in selecting an inquiry question, resources, and project format. She reflected:

Offering choices not only let me get to know their learning preferences but also let the students know that I valued each one as a learner with unique learning needs, which went a long way to developing trust, which led to loyalty. (p. 202)

The authors include an extensive bibliography of research focused mainly on the education philosophies behind elements of PDI. In the Forward, Harvey mentions *Curiosity* uses a “constructivist” approach (p. ix), based on Jean Piaget’s cognitive development theory that children have prior knowledge and experiences that teachers can build on. He believes these experiences are learned through

social interactions and cultural environment (Cherry, 2019).

The core of the PDI framework, inquiry, is based on John Dewey’s child-centered teaching philosophy. The authors draw extensively on his work: “Like John Dewey (1938/1997), we wholeheartedly believe that learners grow and change with opportunities to identify problems in their community, generate personal wonderings, and engage in collaborative dialogue around these problems” (p. 13).

To help educators create opportunities for PDI in their curricula, the authors include appendices with practical resources such as a self-reflection questionnaire, a knowledge continuum, and a planning guide, as well as a list of media tools and texts mentioned throughout the book. Each chapter contains vignettes of how teachers applied inquiry-based curriculum in their classrooms.

If we employ an accepted model of technology integration, like the Technology Integration Matrix (TIM; Florida Center for Instructional Technology, 2005-2020a) to evaluate PDI, Coiro and her co-authors’ strategies tend to achieve the higher levels of technology integration (Adaptation and Infusion). At the Adaptation Level, “the teacher encourages the innovative use of technology tools” (Florida Center for Instructional Technology, 2005-2020b). At the Infusion Level, “the teacher provides the learning context and the students choose the technology tools to achieve the outcome” (Florida Center for Instructional Technology, 2005-2020c). For example, one of the teachers illustrated in the book gave her students the option to use one of three digital applications they prefer for their projects (Adaptation), and another used technology stations to enhance her students’ learning (Infusion).

Surprisingly, these digital scholars do not emphasize the technology part of their inquiry-based curriculum. The authors state, “It’s our goal in this book to focus on the

purposes for using digital resources rather than getting bogged down in particular apps and programs” (p. 109). Instead, they recommend allowing the lesson to determine which digital application to utilize. They also suggest that teachers have the choice of not using technology when incorporating PDI. For instance, within their list of tools for organizing information (Table 4.2), the authors indicate the use of a technological application for each format is optional (p. 58).

From Curiosity to Deep Learning is not a guide to education technology devices and apps, or which company’s software works best

in the classroom. It does, however, contain several resources a teacher will need to implement the PDI framework. Supporting their curriculum with research and examples, Coiro, Dobler, and Pelekis speak the language of their intended audience of elementary teachers and library media specialists, and equip them with practical tools necessary to implement their own PDI curriculum. For educators needing a technology-enriched lesson plan to meet their current online teaching needs, and for those teaching face-to-face again in the future, this book has much to offer.

References

- Cherry, K. (2019, August 12). The four stages of cognitive development: Background and concepts of Piaget’s theory. *VeryWellMind.com*. Retrieved from <https://www.verywellmind.com/piagets-stages-of-cognitive-development-2795457>
- Coiro, J. (2016). Let’s get personal: Balancing talk with technology to truly personalize learning. *Literacy Today*, 33(4), 6-7.
- Dewey, J. (1938/1997). Experience and education. In J. A. Boydston (Ed.), *John Dewey: The latter works. 1938-1939*. Vol. 13. Southern Illinois University Press.
- Florida Center for Instructional Technology. (2005-2020a). *The technology integration matrix: Table of summary descriptors*. University of South Florida, College of Education. Retrieved from <https://fcit.usf.edu/matrix/matrix/>
- Florida Center for Instructional Technology. (2005-2020b). *The technology integration matrix: Adaptation level*, para. 2, University of South Florida, College of Education. Retrieved from <https://fcit.usf.edu/matrix/project/adaptation-level/>
- Florida Center for Instructional Technology. (2005-2020c). *The technology integration matrix: Infusion level*, para. 2, University of South Florida, College of Education. <https://fcit.usf.edu/matrix/project/infusion-level>

About the Reviewers

Laurie J. McCormick is pursuing a Doctor of Education degree in Curriculum and Instruction, with a specialization in Instructional Technology, within the College of Education and Professional Development at Marshall University. She works as a teaching assistant in the Curriculum and Instruction department.

Lisa A. Heaton, Ph.D., is a professor in the College of Education and Professional Development at Marshall University. Her teaching focuses on providing instructional technology experiences for graduate students pursuing master’s and doctoral degrees. Her research interests include exploring 1:1 mobile technology initiatives and promoting best practices in distance learning.

Education Review  **Reseñas Educativas**
Resenhas Educativas

 *Education Review/Reseñas Educativas/Resenhas Educativas* is supported by the Scholarly Communications Group at the Mary Lou Fulton Teachers College, Arizona State University. Copyright is retained by the first or sole author, who grants right of first publication to the *Education Review*. Readers are free to copy, display, and distribute this article, as long as the work is attributed to the author(s) and ***Education Review***, it is distributed for non-commercial purposes only, and no alteration or transformation is made in the work. More details of this Creative Commons license are available at <http://creativecommons.org/licenses/by-nc-sa/3.0/>. All other uses must be approved by the author(s) or ***Education Review***. ***Education Review*** is published by the Scholarly Communications Group of the Mary Lou Fulton Teachers College, Arizona State University.

Disclaimer: The views or opinions presented in book reviews are solely those of the author(s) and do not necessarily represent those of *Education Review*.

Connect with *Education Review* on Facebook (<https://www.facebook.com/pages/Education-Review/178358222192644>) and on Twitter @EducReview