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## Developing Inquiry for Learning: Reflecting Collaborative Ways to Learn How to Learn in Higher Education

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# THE INTERDISCIPLINARY JOURNAL OF PROBLEM-BASED LEARNING

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## BOOK REVIEW

### Developing Inquiry for Learning: Reflecting Collaborative Ways to Learn How to Learn in Higher Education

Xun Ge and Qian Wang (University of Oklahoma)

Ovens, P., Wells, F., Wallis, P., & Hawkins, C. (2011). *Developing inquiry for learning: Reflecting collaborative ways to learn how to learn in higher education*. New York, NY: Routledge. 240 pp. ISBN 978-0415598774. \$160.00 (hardcover); \$52.95 (paperback).

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The book titled *Developing Inquiry for Learning: Reflecting Collaborative Ways to Learn How to Learn in Higher Education* is organized in several parts, including: "Introduction"; Part I: "The General Approach of Inquiry Into Learning"; Part II: "Using the Inquiry Into Learning Approach in Two Modules of a Childhood Studies Programme"; Part III: "Using Experiment of the Inquiry Into Learning Approach to Address Topics Related to Developments in Higher Education"; Part IV: "Theoretical and Philosophical Bases for the Inquiry Into Learning Approach"; and "Conclusion".

Part I provides an overview of the Inquiry Into Learning (IIL) approach and consists of two chapters: Chapter 2 and Chapter 3. Chapter 2 (the first chapter of Part I), discusses some fundamental questions in higher education, such as "What is learning?" and "What is learning to learn?" from a philosophical standpoint. From the authors' perspective, learning is not acquisition of knowledge; rather, it is the cultivation of the ability to think critically and act creatively. Learning is about how to learn, that is, to become scientifically educated by using knowledge and skills to think more deeply and act more wisely. Learning is a practice that is an iterative blend of thinking and doing through a social and personalized process of inquiries. Following the discussion above, both the tutors' perspective and the students' perspective about learning are analyzed and examined. From the tutors' perspective, their primary role is to teach the students content. From the students' perspective, learning is dependent on the effectiveness of the transmission of information provided by the tutors.

Moreover, Chapter 2 makes a distinction between *training* and *education*. According to the authors, "*training* is learning and teaching for acquiring and recalling informational kinds of knowledge and developing psychomotor kinds of skill . . . *Education* subsumes Induction and Skill training,

but goes further to include Induction and Initiation" (p. 14). *Induction* means inducting a learner to professional activities in order to gain a deeper understanding of the profession. *Initiation* refers to developing learners' values about the profession. *Induction* and *initiation* are two inseparable processes. To claim to be educated in science, students must be able to think like a scientist (*induction*). They must also be able to demonstrate their commitment to scientific values and attitudes (*initiation*). This perspective reflects the views of Community of Practice (CoP) (Lave & Wenger, 1991) and situated cognition (Brown, Collins, & Duguid, 1989; Collins, Brown, & Holum, 1991). Providing a theoretical rationale for the needs to conduct IIL, Chapter 2 builds a solid ground for the book and sets the background for Chapter 3, which officially introduces the IIL pedagogical approach and its related concepts.

Based on the discussion of theoretical framework set out by Chapter 2, Chapter 3 specifically discusses the characteristics and processes of the IIL approach based on the authors' initial experience of designing an IIL curriculum for a BA program in Childhood Studies. The authors gave considerable thought to the importance of learning how to learn as they designed the curriculum. Chapter 3 describes the IIL approach and provides detailed illustrations of the aim of the program and pedagogical principles for the inquiry processes. The IIL curriculum focused on various dimensions that were intended to help students become critical and reflective learners, who not only learn how to learn a subject domain, but most importantly, develop personal and professional autonomy.

In addition, Chapter 3 outlines *Patchwork Text* assessment, which is the last important component of the IIL process. *Patchwork Text* is an alternative assessment used by some researchers (e.g., Crow, 2005; Winter, 2003) to

address assessment issues in higher education. The authors of this book applied this method to assess students' learning progress and outcomes in the IIL process. Patchwork Text is derived from students reviewing their own collections of pieces of writing, each of which is called a patch. The patches are "stitched together" to form a final piece of Patchwork Texts, which reflects their entire inquiry learning process over the IIL curriculum. The Patchwork Text approach not only facilitates learners' self-exploration and self-questioning, but also encourages students to share their patches and provide constructive feedback to each other. This process makes the students' thinking visible, which enables them to reflect on their IIL learning experience (Collins, Brown, & Holum, 1991). Most importantly, the Patchwork Text allows a tutor to assess students' understanding and learning progress.

Part II includes Chapter 4, "Inquiry Into Learning 1", and Chapter 5, "Inquiry Into Learning 2", which describe the two modules over a two-year IIL program. Chapter 4 illustrates Module 1 of the IIL curriculum in a childhood studies program, which demonstrates how to foster students to become critical, reflective and inquisitive learners in Year 1. Chapter 5 describes the details of Module 2 of the IIL curriculum, which focuses on cultivating students to become professional inquirers in Year 2. From a macro level, Chapter 4 provides a description of the operation of the IIL approach and shows key features of teaching and assessment in IIL, particularly the cycles of students' action inquiry into the improvement of their learning. Activities in each session are described in great details, providing much useful information for tutors and other educators who would like to implement the IIL approach to their program. Chapter 5 describes the four phases of IIL Module 2: the professional inquiry, the commissioned inquiry, reflective professional practice, and the Patchwork Text. During the professional inquiry phase, the students were asked to choose particular themes they would like to explore and techniques they preferred to carry out their inquiry. The commissioned inquiry phase was the time during which the students carried out a genuine inquiry. During the reflective professional practice phase, the students were prompted to reflect on their experience as practitioners. The Patchwork Text is the final phase of the IIL approach, during which students were engaged in self-reflection and self-assessment for summative evaluation of their IIL learning. The two modules, which took place over a span of two years of the IIL curriculum, were intentionally designed so that learners gradually become inquirers in a broader and more professional context.

Part III includes three chapters: Chapter 6, Chapter 7, and Chapter 8. This part provides evidence and analysis of the issues involved in the IIL process based on the authors' action research during the IIL implementation. Chapter 6

explores the IIL approach from students' perspectives, examining their needs and struggles and responding with strategies that would support the development of students' interpersonal and intrapersonal awareness of their learning. The chapter illustrates how the *Intervision* method can be used to elicit student perspectives, nurture their voices, and promote reflective inquiry of their own learning process through informal and formative assessment. *Intervision* is a strategy to structure group interactions. In the group interaction process, there is no tutor "supervision," but rather peer facilitation (i.e., *intervision*), during which everyone contributes to the social process of knowledge construction and scaffolds each other. Chapter 7 deals with setting expectations for IIL, particularly the criteria used for both formative and summative assessment. The purposes of assessment and criteria are explained, and student and peer feedback for formative assessment are discussed. Chapter 8 describes how technology can be used as an additional platform to support student sharing of ideas and experiences during IIL. The authors shared the challenges they encountered when students first started their learning inquiry in a virtual learning environment, and how later a blended learning environment was introduced with students sharing information on a wiki space.

Part IV of the book, consisting of three chapters (Chapter 9, Chapter 10, and Chapter 11), addresses the philosophical, theoretical, and pedagogical bases for the IIL approach. Although Chapter 3 provides an overview of Patchwork Texts, Chapter 9 discusses in fuller account how Patchwork Texts can be used as a method of the IIL curriculum design and assessment, focusing on its process and the development of Community of Practice (CoP) (Lave & Wenger, 1991; Wenger, 1998) among students and between students and tutors. As mentioned earlier, patches are not formal essays, but rather short pieces of writing of reflective inquiries done regularly and over time, accumulated to contribute to the final assignment when fitted together into a Patchwork Text, which is motivating in itself. Many of the IIL patches are accounts of learning inquiries, such as "How dyslexia affects my note taking and concentration?" and "Becoming a better reader by reading more effectively?" (p. 157). The beauty of the Patchwork Text method is that both students and tutors enter into a CoP and a discourse of learning inquiries, which shows values in three dimensions: mutual engagement, joint enterprise, and shared repertoire. Chapter 10, "Action research for personal professional development", focuses on conducting action research for IIL as part of the professional development. It provides a collection of the authors' research accounts of their personal journeys, inquiries, and reflections in the process of designing and implementing IIL, which is a valuable contribution to the IIL research project. The chapter ends with a list of useful questions for

other researchers to engage in action research on learning how to learn. Chapter 11, “Why Inquiry Into Learning?,” serves as a reflective summary of the book by reviewing the fundamental question of why IIL is relevant and important and by probing into those underlying beliefs about IIL from philosophical and theoretical perspectives. Important issues were explored and discussed, for example, why person-centered approach is important; what knowledge, thinking, and knowing means; and why Inquiry Into Learning matters. This chapter clarifies and strengthens the theoretical basis of the IIL aspects to meet the current challenges to students’ learning in higher education.

The final chapter concludes the book, providing recommendations for learning how to learn in higher education. Specific guidelines for students and tutors are presented concerning the issues raised during this endeavor.

Although its intended primary audience is university tutors, this book has a far-reaching impact on higher education as the trend is moving away from the traditional teaching approach (e.g., Blessinger & Carfora, 2014; Conrad & Dunek, 2012), in which students receive information passively, to a student-centered learning environment, in which students are encouraged to become collaborative and self-directed learners and develop inquiry and reflective skills for professional development (Evensen & Hmelo-Silver, 2000; Loyens, Magda, & Rikers, 2008). This book is a great guide book, a useful resource book, and a handy tool book for any educator, instructional designer, or curriculum developer who is dedicated to carrying out inquiry-based learning or problem-based learning (PBL). Above all, this book provides insightful theoretical and pedagogical frameworks about why IIL matters after all.

We appreciate the book not only because it shows us how to implement inquiry into learning approach, but most importantly, it extensively discusses the fundamental question on why inquiry into learning is important. Through a wealth of examples, illustrations, graphics, and researchers’ personal reflective accounts, the book shows readers what learning should be, what tutors’ role should be, and how we can make that change on both the students’ part and the tutors’ part. From a philosophical perspective, the book calls for a paradigm shift, as Jonassen (1991) argued, from the objectivist paradigm to the constructivist paradigm for students, tutors, and educators in learning and instruction. This message is deep in the core of the book and weaves into different chapters of the book. Therefore, it is a book that once again reminds us of the need to transform education, the need to reexamine our (educators’) assumptions (not only the students’ assumptions) about knowledge, thinking, knowing, learning, and teaching. This book contributes to the literature and effort of transforming current higher education

and cultivating inquiry-driven learners (e.g., Blessinger & Carfora, 2014; Conrad & Dunek, 2012).

The main theme of the book is Inquiry Into Learning, focusing more on the metacognitive aspect of inquiry learning, which we categorize as one of the inquiry-based learning (IBL) approaches. IBL is regarded as a close relative of Problem-Based Learning, because the two approaches share the common characteristics by empowering learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a problem that allows learners to inquire freely with motivation (Hmelo-Silver, 2004; Savery, 2006). In both approaches, students work collaboratively and engage in self-directed and self-regulated learning integrated from a wide range of disciplines to inform the group’s decision-making process that leads to the development of a more robust solution (Hmelo-Silver, 2004; Loyens, Magda & Rikers, 2008; Savery, 2006). We noticed that the IIL approach does not discuss specifically inquiries into problems that lead to the development of solutions to problems, although it promotes inquiry into learning how to learn and provides strategies to help students become reflective inquirers and learners. Despite the fact, we believe this book offers valuable insights and experiences to inform the theory and practice of PBL and IBL in many ways. Many detailed examples, analysis, and evaluation of the IIL approach, as well as various scaffolding strategies and tools provided by the book, can be easily and readily adapted to other PBL-related contexts.

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