INTRODUCTION

Since Ralph Tyler published his first edition of *Curriculum Development and Evaluation* in 1949, this book has been offering continued and timely guidance for both scholars and practitioners in the field of education and across all disciplines where curricula and programs are developed. To date, every curriculum developer recalls the four fundamental questions that Ralph Tyler asked to guide the curriculum and program development process:

- What is the purpose of education?
- What learning activities and experiences are we supposed to provide?
- How can these learning activities and experiences be organized to attain the purpose of education?
- How is this learning evaluated?

Although they are not exactly the same questions Ralph Tyler has asked, evidently his questions flow directly from behaviorism or a liberal education philosophy, which mirrors the American philosophy at the turn of the 20th century. Numerous universities have developed educational models based on Tyler’s curriculum development model. One outstanding model was developed by U.C. Berkeley; it is termed a “four step instruction.” Even to this day, numerous universities still teach this model, which has specified the following four steps:

- Motivation or preparation of learners.
- Presentation of course materials.
- Assigning homework to learners.
- Evaluation of learning objectives.

While the four-step instruction has proved to be useful and helpful in K-12 education, the father of adult education, Malcolm Knowles found it less useful in the education of adult learners, who now make up more than 47% of the student population on North American campuses. Out of the Tyler fundamental questions and the four-step instruction model, Knowles developed an innovative “seven-step process” that serves as a theoretical framework for curriculum and program development for adult learners. In 1980, Knowles advocated this seven-step process to implement and capitalize upon the assumptions of andragogy.
• Creating a cooperative learning climate;
• Planning goals mutually;
• Diagnosing learner needs and interests;
• Helping learners to formulate learning objectives based on their needs and individual interests;
• Designing sequential activities to achieve these objectives;
• Carrying out the design to meet objectives with selected methods, materials, and resources; and
• Evaluating the quality of the learning experience for the learner, including reassessing needs for continued learning.

The seven-step process is a further step forward from Tyler’s model. However, neither the seven-step process nor Tyler’s model takes into consideration critical theory or the theory of transformative learning, let alone societal and cultural differences, institutional differences, subject matter differences. All these factors put a strain on Tyler’s and Knowles’ beautifully formulated models for curriculum and program development.

Traditional books on curriculum and program development offer a “how to” or “comprehensive guide,” similar to a recipe for chefs. We seldom can find a book on curriculum and program development that is based on in-depth and broad research that is bound to generate new knowledge about curriculum and program development. To attain this goal, theorists such as Stephen Brookfield and Patricia Cranton as well as practitioners have contributed their cutting-edge chapters to this groundbreaking volume. Indeed, we are surrounded by these outstanding theorists and scholars in both the present and the past. Historically, great educators such as Plato, Aristotle, Confucius, Dewey, and Knowles have prescribed not only a particular teaching methodology, but also a whole different approach to education. That is why the Chinese have developed a proverb to emphasize the importance of curriculum and program development, “Without rice, the cleverest housewife cannot cook for you.”

As Carl Rogers noted, we are living in an environment that is continually changing. This environment is characterized by the fast pace of technology that drives our society to move forward and causes our knowledge to increase at an exponential rate. Tyler’s pedagogical model may still be useful in K-12 education. K-12 students may also benefit from Knowles’ seven-step process given that many of today’s students are gifted and self-directed at a young age. Similarly, field-dependent adult learners or those who have not had the opportunity to learn to be self-directed may require Tyler’s pedagogical model as they transition into self-direction.

This research-based volume addresses both pedagogy and andragogy as well as theories by Brookfield and Cranton. Readers of this volume will find the chapters have been arranged from andragogical curriculum and program development to pedagogical curriculum and program development, including chapters to assist in curriculum and program development in relation to online teaching, technology, and science education, as well as perspectives from Europe and Africa. No doubt, this groundbreaking volume is for scholars and practitioners in all fields of education from across the continents.
OBJECTIVE OF THE BOOK

Andragogical and Pedagogical Methods for Curriculum and Program Development features full-length chapters authored by leading experts and offers an in-depth description of key terms and concepts related to curriculum and program development for educators, students, program designers, instructional program developers, trainers, and librarians.

ORGANIZATION AND IMPACT OF THE BOOK

In terms of curriculum and program development, while most scholars do not deviate too much from pedagogy or andragogy, worldwide famous scholars, such as Stephen Brookfield and Patricia Cranton, may go beyond such a dichotomy or continuum as debated by contemporary scholars/researchers in the field. While Tyler addresses curriculum and program development by using pedagogy, Knowles examines curriculum and program development by using andragogy. Others in the field simply follow the aforementioned scholars and theorists in developing curricula and programs. It is important for scholars, as well as practitioners to develop curricula and programs either pedagogically or andragogically because children and adults learn differently. The bottom line is curricula and programs are developed for either children or adults. In other words, the distinction between the education of children and the education of adults in relationship to curriculum and program development made by Knowles in the 1970s has been absorbed in the academia worldwide. Trying to make the distinction blurred is tantamount to saying that children and adults follow the same principles of learning and possess the same characteristics as learners. While there has been the argument that pedagogy and andragogy should be seen as a continuum rather than a dichotomy on the spectrum, the argument has not been well tested and accepted as a theory in the field. To support both Tylerian and Knowles’ models in curriculum and program development, the following cutting edge chapters have been written by first-rate scholars and practitioners in the field.

Chapter 1, “A Critical Theory Perspective on Program Development” by Stephen Brookfield and John Holst, addresses the dominant modes of program planning in the field of adult education, which are drawn from three intellectual traditions: humanistic psychology, progressivism, and behaviorism. The authors propose a model of program planning drawn from European critical social theory. This chapter analyzes modes of program planning and the model of program planning by using the Frankfurt School of Social Theory, a critical perspective that emphasizes the role of adult education programming in fostering social movements for democratic social change. In addition, the chapter focuses on specific goals of a critical theory approach to program development and poses a number of questions that can be asked to determine the success of such an initiative. The chapter takes andragogy to a new height in the field.

Chapter 2 titled “Distributing Power through Curriculum Development” by Patricia Cranton explores how power can be distributed in the process of curriculum and program development in adult and higher education. In doing so, she draws from Brookfield’s writings on power and, in turn, Foucault’s writing on power. She also focuses on power by relying on practical strategies for distributing power through curriculum development. As Cranton argues, these strategies encompass learners’ selection of topics, learners’ setting of objectives, learners’ selecting methods and materials, learner self-evaluation, equi-
table discussions, questioning styles, and structural issues. One cannot help but conclude that Cranton is promoting andragogy or Carl Rogers’ freedom to learn in curriculum and program development. Her strategies can be considered a step forward from Knowles’ instructional formula, seven-step instructional process.

Chapter 3, “All Roads Lead to Curriculum Inclusive of Social Justice and Democracy” by Victor C. X. Wang, Marianne Russo, and Valerie C. Bryan, delves into pedagogy by analyzing several factors such as curriculum history, curriculum theory, curriculum philosophies, curriculum processes, curriculum implementation and evaluation, in order to develop sound/meaningful curriculum(a). As the authors point out, the value of such a review is to assist those individuals seeking a teaching credential in education to have the confidence to blend curriculum development with their prior occupational knowledge and skills. The authors take a bold move by linking social justice and democracy to curriculum and program development.

Chapter 4, titled “Starting with the Learner: Designing Learner Engagement into the Curriculum” by Jonathan E. Taylor, posits that in order for effective learning to occur, teachers must facilitate learner engagement, and in order to do this, learning resistance has to be conceptually understood, acknowledged, identified, and addressed as a part of the curriculum for any given class, course, or program. Taylor focuses on such issues as learning resistance, and addresses three significant disjunctures between the theory and practice of curriculum development and instructional systems design. The author also explores the relationship between learning resistance and the theory-practice gap. Taylor does not advocate the mass production of curriculum. Rather, he suggests taking motivation and learning as an integrated whole into consideration.

Chapter 5, “Co-Constructed Curricula: An Adult Learning Perspective” by Vivian W. Mott, and Kathy D. Lohr, discusses an adult learning perspective toward effective co-constructed curriculum, beginning with an overview of three distinct models, theories, or concepts felt to be seminal in the field of adult and continuing education. The central theme of their chapter is how curricula can be co-constructed. The authors address learners’ involvement and the various roles of co-constructed assessment by presenting three case studies. This chapter shows how adult learning principles can be applied in terms of curriculum and program development.

Chapter 6, titled “Mentoring in Graduate Education: Curriculum for Transformative Learning” by Catherine A. Hansman, examines and analyzes power and critical reflection to determine how these concepts help with transformative learning in graduate mentoring models and programs. The author discusses how research and models reflect these concepts in program design and curriculum for mentoring. In attaining this goal, Hansman analyzes two mentoring models/programs and offers suggestions for future research and practice in mentoring in higher educational institutions that may lead to transformative learning.

Chapter 7, “Transformative Curriculum Design and Program Development: Creating Effective Adult Learning by Leveraging Psychological Capital and Self-Directedness through the Exercise of Human Agency” by Sharon E. Norris, considers improvisational self-directed learning as a transformative approach to developing effective adult learning. Norris introduces improvisational self-directed learning as a method that encourages individuals to leverage their psychological capital and self-directedness through the exercise of human agency. She provides a theoretical framework based on human agency, psychological capital, improvisational behavior, and adult learning. The author advocates the use of improvisation as a technique for leveraging psychological capital, human agency, and self-directedness to create thriving 21st century learning communities.
Chapter 8, titled “Andragogical Curriculum for Equipping Successful Facilitators of Andragogy in Numerous Contexts” by John A. Henschke, discusses numerous aspects of andragogical curriculum development. Henschke argues that effective andragogues (adult educators) should design, implement, and facilitate the curriculum of andragogy instead of pedagogy. The author explores various approaches and different sides to self-directed learning in andragogy: becoming better self-directed learners as well as facilitators of self-directed learning; learning styles and their help to complete the action and experimentation part of the learning cycle along with reflection, concrete experience, and abstract thinking; brain research and emotional intelligence in andragogical learning that helps one become a more well-rounded person and the society to become more well-rounded; application of andragogical learning to various parts of life.

Chapter 9, “Using Creativity to Facilitate an Engaged Classroom” by Amy L. Sedivy-Benton, James M. Fetterly, Betty K. Wood, and Bronwyn D. MacFarlane, examines such aspects of curriculum development as student achievement, learning, and engagement. Their primary concerns are how does a teacher create lessons that lead to student engagement and how can teachers structure these learning experiences in a creative way to obtain their objectives? They suggest creative practices that allow for critical thinking and engagement. Perhaps, what the authors advocate in this chapter does not deviate from Tylerian model in curriculum and program development.

Chapter 10, titled “New Mindsets: The Promise of Employing Adult Learning and Development for Educational Leaders’ Learning” by Ellie Drago-Severson and Pat Maslin-Ostrowski, argues that adult learning and adult developmental theories have been employed recently to inform the practice and preparation of school leaders. In doing so, the authors discuss seminal theories of adult learning and development as a promising foundation to improve curriculum and learning spaces for aspiring and practicing leaders. The authors indicate that theoretical lenses are helpful for curriculum design and content in Pre-K-20 learning centers and also higher education as they believe that school administrators and teachers face complex educational challenges.

Chapter 11, “Hubble’s Expanding Universe: A Model for Technology Infused Adult Learning” by Judith Parker, encourages us to adopt a new model for the expanding the universe of learning that is provided by technology by using Edwin Hubble’s discoveries in 1924. With a firm background in physics, the author argues that technology has provided us with an expanding view of our personal and collective adult learning universe. Indeed, in terms of curriculum and program development, we should go beyond just pedagogy and andragogy. As the author suggests, our learning communities can span our neighborhood, field of interest, and the globe.

Chapter 12, titled “Designing Online Curriculum for Adult Learners” by Laura L. Bierema, examines adult learners in online higher education by addressing such concepts as change and automation brought to us by the Digital Age. In doing so, Bierema delves into the most effective pedagogy for facilitating eLearning in higher education settings. She also addresses emerging trends, challenges of living and learning with technology, impact of technology, and the characteristics of online learners and online learning. Finally, the author provides strategies for designing and facilitating eLearning in higher education.

Chapter 13, “Online Education Programs for Adult Learners in Higher Education” by Victor C. X. Wang, and Valerie A. Storey, posits that online education (e-learning) has the potential to open wider the door to greater access and advancement for learners across life spans than the traditional four-walled classroom. They address major issues such as policy, access, completion, and equity in online adult education. The authors also identify future technology trends and advocate reliance on practice and research to harness the great yet untapped potential of online education to promote online education programs among adult learners in higher education.
Chapter 14, titled “Dynamics of Informal Learning in Two Local Markets in Ile-Ife, Southwest Nigeria” by Tajudeen Ade Akinsooto and Olutoyin Mejuni, looks at a recently concluded research study of the nature of adult informal learning in two local markets in Ile-Ife, Nigeria. The authors examine such issues as what adult buyers and sellers learn as they interact in two local markets, who learns from whom, and how to acquire the specific learning experiences identified. In completing such a research study, the authors rely on informal learning as a theory.

Chapter 15, “Artful Learning: Holistic Curriculum Development for Mind, Body, Heart, and Spirit” by Randee Lipson Lawrence, argues that holistic learning engages the mind, body, heart, and spirit of the learner in relationship to the learning environment. Holistic learning is earth-centered, participatory, and inclusive of the cultural context of the learners. The author considers traditional models of curriculum development as overly rigid, fragmented, and disconnected from the true nature of the learner. Lawrence offers examples of arts-based and creative learning activities along with holistic ways of developing learning objectives and assessing learning.

Chapter 16, titled “The Transformation of Collective Intelligence” by Lesley S. J. Farmer, explores collective intelligence by citing several studies in relationship to social media. Farmer argues that as heterogeneous groups bring different expertise and perspectives, their gathered and organized knowledge can lead to more informed decisions and resultant actions. Her chapter explains collective intelligence and its elements, theories that relate to collective intelligence, conditions for its optimum collective intelligence, and its transformation through digital technology, particularly social media. Farmer’s chapter also explains human interaction for collective intelligence, and how it can be enhanced through technology, citing several studies.

Chapter 17, “Traditional Teacher Evaluation Models: Current and Future Trends for Educators” by Katina M. Leland and Amy L. Sedyiv-Benton, examines method evaluation in teacher preparation programs. In doing so, the authors focus on the current trends that exist for both pre-service teachers as well as teachers of record. A brief history is examined as well as issues that currently exist within these structures. Finally, the authors offer future trends and recommendations for evaluating teachers at both the pre-service experience level and when they are employed in the classroom.

Chapter 18, titled “Impact of Technological Advancement on the Higher Education Curriculum and Program Development” by Snezana Scepanovic, Vania Guerra, and Maren Lübcke, analyzes the current situation in higher education, in terms of why a demand for transformation of educational models has been almost entirely unable to generate sustainable changes in curriculum development. The author also analyzes literature and what the practitioners have to say in that respect. The ultimate goal of their chapter is to set the basis for an analytical framework for discussions about the transformative process of higher education in order to be able to bring curriculum development a step forward, in a sustainable way.

Chapter 19, “Expanding the Discourse of Identity in the English Language Arts Curriculum” by Philomena S. Marinaccio, Kevin Leichtman, and Rohan Hanslip, discusses how the English Language Arts (ELA) curriculum in United States (US) schools is failing students from ethnically and economically diverse communities. The authors indicate that the Common Core State Standards (CCSS) for ELA and Literacy in History/Social Studies, Science, and Technical Subjects have been accused of perpetuating inequality and causing a spiral of marginalization to continue for diverse learners. They further point out that the criticism is that the conceptualization of ELA and literacy linked to the CCSS does not reflect the complex set of diverse social, cultural, and linguistic dynamics inside and outside the classroom that influence the curriculum. This profound chapter finally argues that changes in the literacy curriculum need to be made that mirror changes in the world and that reading is a crucial skill that allows citizens to compete in an advanced society.
In reading the cutting edge chapters in this book, students, academics, and professionals will conclude that curricula and programs can be designed and implemented either pedagogically or andragogically by following the models prescribed by Tyler or Knowles. In addition, the authors of this volume encourage students, academics, and professionals to go beyond these pedagogical and andragogical approaches to develop meaningful and holistic curricula and programs that reflect prevalent theories advanced by theorists in Adult Education and K-12/Higher Education. It is wonderful that our readers may have a direct dialogue with the authors of this groundbreaking volume. As students, academics, and professionals develop curricula and programs for different organizations, they will find this volume extremely relevant, timely, and profound.

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