# Adopting a developmental model constitutes a new paradigm for undergraduate education

# A New Paradigm for Liberal Education

ROBERT J. THOMPSON JR.

HIGHER EDUCATION in the United States has been a source of pride but also the target of continuous debates, criticisms, and calls for reform. In the first decade of this century, concerns were focused on the effectiveness of educational practices and the quality of student learning, as well as access and escalating costs. As a consequence, there were increasing de-

mands for accountability. These de-

mands for accountability, however, masked the fact that colleges and universities were being asked not just to perform their traditional functions better and more efficiently, but also to be responsive to a new set of societal needs reflecting the challenges and opportunities of our knowledge-based economy and the pluralistic, globally interconnected world of the twenty-first century.

As costs continue to escalate and confidence that higher education is fulfilling its promise declines, the fundamental purposes, value, and underlying educational model are now being questioned. On the one hand, colleges and universities are being criticized for not engaging the "big questions" that involve ultimate values and standards and there are calls to include moral, civic, and political development and preparation for reflective citizenship as central goals of undergraduate education. On the other hand, colleges and universities are being called on to abandon their commitment to providing a broad, liberal education and instead focus on connecting college education more directly to the needs of the economy.

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In Beyond Reason and Tolerance: The Purpose and Practice of Undergraduate Education, I argue that in order to be responsive to twenty-firstcentury societal needs for civic-minded graduates who have the capacities and dispositions to engage difference and generate knowledge in the service of society, higher education needs to transform its purposes and practices.<sup>1</sup> To meet this challenge, I argue in the book that higher education needs to recommit to providing a formative undergraduate liberal education and adopt a developmental model to guide educational practices. In this article, I argue that just as the shift to make student learning, rather than teaching, central constituted a paradigm shift, adopting a developmental model constitutes a new paradigm for undergraduate education. The impetus for the new paradigm comes from the social contract, higher education's responsiveness to twentyfirst-century societal needs, and advances in developmental science.

## The social contract

The dynamic tension between the purposes of an undergraduate education and its guiding model goes to the heart of the social contract for higher education. What does society expect from colleges and universities? How can the multiple expectations be integrated? What are colleges and universities uniquely able to provide?

Simply stated, colleges and universities are afforded a high degree of autonomy in the belief and expectation that they will operate in the service of society. This contract requires that higher education be responsive to societal needs through doing what colleges and universities are uniquely structured to do: generate knowledge in the service of society, and provide



an educational experience that prepares students to meet societal needs and realize a meaningful and rewarding life.

One distinguishing characteristic of American higher education is that it adapts in response to societal needs for knowledge, expertise, and leadership. American higher education—especially in its most formative moments—has been characterized by a sensitive recognition of its civic role. As Harold Shapiro points out, "Higher education in America, whether public or private, has always drawn its most creative energy from the desire to meet its civic responsibilities."

Other distinguishing characteristics include fundamental commitment to the value of individual differences and bringing diverse perspectives to bear on major issues and recognition of the importance and power of knowledge in modern life. Louis Menand identifies "the pursuit, production, dissemination, application, and preservation of knowledge" as "the central activities of a civilization" and suggests that the "ability to create knowledge and put it to use is the adaptive characteristic of humans." This view of knowledge as a form of human capital, along with the recognition that it is unevenly distributed and affords advantages to those who have knowledge or access to it over those who have less, is the basis for another defining characteristic of American higher education that Menand identifies: "As a society, Americans are committed to the principle that the production of knowledge should be uninhibited and access to it should be universal. This is a democratic ideal."4

William Sullivan argues, however, that the view that "the academy exists to research and disseminate knowledge and skills as tools for economic development and the upward mobility of individuals" has resulted in a focus on individualism that leaves "the larger questions of social, political, and moral purpose out of explicit consideration." Similarly, Donald Harward claims that by allowing higher education to be framed as a commodity and students as customers, "we have reinforced the popular understanding of higher education as a private gain." When the investment in higher education is perceived as a benefit to the individual rather than to society, funding drops lower on the public's priority list.

Responsiveness to societal needs is one source of guidance for formulating higher education's purposes and practices. However, in being adaptive and responsive to societal needs, it is also essential to understand and maintain the special nature and role of the university as a place of inquiry and critique. As Menand observes, "It is the academic's job in a free society to serve the public culture by asking questions that the public doesn't want to ask, investigating subjects it cannot or will not investigate, and accommodating voices it fails or refuses to accommodate."

## Societal needs of the twenty-first century

With this understanding of the social contract, we can consider the particular needs of society in the twenty-first century to which higher education must be responsive. I believe that the major challenge is to improve the quality of undergraduate education so that students are prepared to meet society's twenty-first-century needs for civic-minded individuals who have the personal skills, dispositions, and intellectual capabilities to work effectively and live together in a more global society with many different kinds of people with tolerance, understanding, and mutual respect. The major problems confronting society exceed the talents of individuals working in isolation and require the collective power of human diversity reflected in the range of individual differences in creativity, problem solving, talents, and experiences.

Problem solving requires the formation and integration of teams of individuals with diverse talents, skills, and knowledge. Effective leadership is no longer a matter of command and control but requires the skills to connect and collaborate and the ability to enable and empower others to maximize their contributions to team functioning. Effective leaders engender support, trust, and confidence and inspire performance by understanding the interests, values, and intensions of others. Effective leadership requires emotional intelligence—which John Mayer, Peter Salovey, and David Caruso define as "the ability to engage in sophisticated information processing about one's own and others' emotions and the ability to use this information as a guide to thinking and behavior"8—and the capacities for perspective taking and empathy, as well as cognitive skills. These capacities are essential for leadership in a world increasingly characterized by both multicultural engagement and the need for collaborative team functioning. Furthermore, the forces of globalization result in not only increasing engagement of countries, cultures, and markets but also interdependency and heightened potential for conflict among

diverse groups and cultures, along multiple dimensions of difference, around numerous issues. In particular, society has a pressing need for higher education to prepare individuals who have the capabilities to go beyond tolerance and constructively engage political, ethnic, and religious differences.

To be responsive to this societal need and prepare students to engage difference construc-

tively, higher education must adapt by transforming its educational goals and practices. Developing the skills of reasoning, critical thinking, problem solving, and effective oral and written communication have been long-standing goals of higher education. These goals are no less important in the twenty-first century. In fact, students will need to develop the higher-order intellectual skills necessary to discern among competing claims, construct meaning from complex information, and generate and

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apply knowledge to address complex problems. While necessary, however, these traditional goals are not sufficient.

From my perspective as a psychologist, the ability to engage difference constructively also requires the development of an interrelated set of intellectual and personal capabilities: a personal epistemology that reflects a sophisticated understanding of knowledge, beliefs,

and ways of thinking; empathy and the capacity to understand the mental states of others; and an integrated sense of identity that includes values, commitments, and a sense of agency for civic and social responsibility. In *Beyond Reason and Tolerance*, I address the nature and development of personal epistemology, empathy, and identity and review the evidence regarding effective practices that colleges and universities can employ, such as service learning, to promote the development of these essential capacities.



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Here, the focus shifts to the adoption of a developmental model as a new paradigm for liberal education that is intentionally formative. But first, we will consider the reframing of liberal education for a new era, a process that has been ongoing for some time.

# Reframing the liberal arts and sciences model

Beyond transforming its educational goals and practices, adaptation to the societal needs of the twenty-first century requires a reframing of the underlying liberal arts and sciences model of undergraduate education for a new era. The reframing has been an ongoing process fostered by higher education professional associations. For example, the Association of American Colleges and Universities (AAC&U) has maintained a several-decades-long focus on promoting the role of higher education in fostering social responsibility, civic engagement, and practical liberal education as the most empowering form

of learning for the twenty-first century. Practical liberal education reflects the intentional integration of the traditional liberal education focus on developing intellectual and personal skills with the traditional professional and technical focus on solving complex problems.

AAC&U also has sustained a multiyear dialogue among colleges, universities, and employers to improve the quality of undergraduate education through formulating learning outcome objectives, identifying and implementing highimpact practices, and adopting an approach to accountability in which assessment is designed to improve learning. These efforts have amounted to a twenty-first-century "re-invention" of liberal education for all students that is characterized by three formative themes: cultivating inquiry skills and intellectual judgment; personal and social responsibility and civic engagement; and integrative and applied learning.9 More specifically with regard to personal and social responsibility, Robert Reason argues that multiple

# Higher education also needs to adapt to advances in our understanding of human development

objectives are involved, including recognizing and acting on one's responsibility to the wider society; engaging diverse and competing perspectives; and developing competence in ethical and moral

reasoning and action. Reason further contends that, "Even in an era of decreased resources and increased accountability, a comprehensive approach to encouraging the development of personal and social responsibility is needed." <sup>10</sup>

In "An Education for the Twenty-First Century: Stewardship of the Global Commons." Douglas Bennett and his colleagues argue that the earth has become a place of global cultures, and increasingly a global commons, with a high level of interdependence. The implication is that higher education must prepare women and men for participation in this commons through developing an array of literacies and, most importantly, the learning of skills that are essential to effective action, skills and dispositions that promote constructive rather than destructive engagement with others: "The common denominator we are seeking has something to do with providing learning experiences for our students that enable them to value, to examine, to struggle with, to negotiate, and ultimately to take joy in the fact of human differences."11 The paradigm shift of situating students in the context of a world held in common promotes expanding the traditional liberal arts focus to include collaboration with others in knowledge generation and decision making and constructively engaging differences.

Recently, a reframing of structural dimensions of undergraduate education has also been proposed. For example, Paul Lingenfelter has proposed a shift in the traditional undergraduate education model that has held time constant with learning the variable. He proposes making learning the constant and time the variable. Relatedly, consideration is being given to moving away from credit hours and toward developing more meaningful evidence of students' competency. 12 Similarly, because the traditional undergraduate degree does not indicate specific competencies and proficiencies, and in order to facilitate students studying at more than one institution, clearly defined degree qualifications frameworks have emerged in Europe and the United States. This model establishes specific learning objectives—that is, what students are expected to know, understand, and be able to

do—against which to assess students' learning and development of competencies across their undergraduate years. Such a model enables a finer level of representation of the individual student's qualifications than a

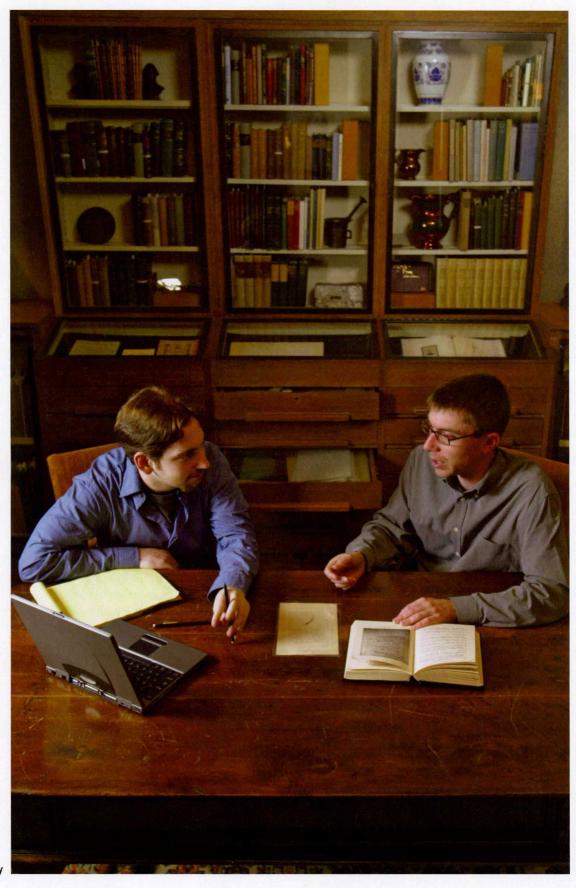
traditional degree or diploma conveys. It will take further consideration to reach agreement on the nature of the competencies and how best to represent student achievement.

Beyond responding to societal needs, higher education also needs to adapt to advances in our understanding of human development and learning that have direct implications for both the purposes and practices of undergraduate education. More importantly for our purposes, it is the adoption of a developmental model to guide the purposes and practices that constitutes the establishment of a new paradigm for undergraduate education.

# **Developmental science**

Major advances in our understanding of human development and learning have implications for educational practices. Key among these are the recognition of "emerging adulthood" as an especially dynamic time of reorganization and development of the brain; the corresponding changes in societal expectations that give rise to developmental tasks that need to be accomplished; understanding of learning as a process of "meaning making"; and the particular importance of reflective or evaluative thinking.

Emerging adulthood. The increasing length of the transition from childhood to adulthood in our postindustrial society has led Jeffrey Arnett to propose a new phase of development— "emerging adulthood"—spanning the period roughly of ages eighteen to twenty-five. 13 This period of life offers the most opportunities for explorations of possible life directions and commitments in the areas of love, education. work, and worldview. It is also marked by changes in physical, cognitive, and emotional development and self-consciousness. Neurocognitive development continues as the brain goes through a remodeling process, particularly with regard to an increase in white matter, which facilitates synaptic connections and transmissions and the development of the prefrontal cortex, which supports executive functions, social cognitions, and self-regulation. Executive functions refer to the capacities involved in the control and



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coordination of thoughts and behaviors, including selective attention, decision making, working memory, and voluntary response inhibition. Social cognition includes both selfawareness and perspective taking—that is, the ability to understand others' minds and infer mental states such as inten-

tions, beliefs, and desires. Self-regulation is an adaptive system that includes both cognitive and affective components and the ability to control ones' attention, emotions, and behavior. Given that the undergraduate experience typically occurs during this period of developmental reorganization and integration, the major implication is that students' cognitive and personal development not only affects the outcome of educational practices, but that it is worth the effort to formulate educational practices that have the potential to promote students' cognitive and personal development.

Developmental tasks. Emerging adulthood is also characterized by changing societal expectations. The biologically based drive toward growth combined with the expectations, constraints, and opportunities provided by the social environment give rise to the concept of developmental tasks that need to be mastered throughout the life course. The foremost task is identity formation, which is essentially a process of self-authorship. One must come to terms with new potentialities for thinking, feeling, and acting and rearrange one's self-image accordingly. A second task is developing cognitive and interpersonal competencies, including the capacity for independent thought. A third task is to develop autonomy, not just in terms of independence, but also the capacities for openness to change and selfmotivation, self-regulation, and the ability to commit to a point of view. A fourth task is to develop the capacity for intimacy—that is, mutual openness, responsiveness, and a sense of closeness in friendships and other relationships. Beyond promoting cognitive and personal development, colleges and universities have the opportunity to foster the accomplishment of these essential developmental tasks.

Learning. There also have been advances in our understanding of learning, from response acquisition to knowledge acquisition to knowledge construction. By the beginning of the twenty-first century, Richard Mayer explains,

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learning was viewed as involving the processes of "selecting relevant information and interpreting it though one's existing knowledge."14 The focus of instructional practices changed from the curriculum to developing the learner's metacognitive skills, such as monitoring and evaluating

one's comprehension and learning strategies, and elaborating and integrating new with prior information. Learning was understood as best accomplished through discovery guided by mentoring rather than passive receipt of transmitted knowledge, and instruction was increasingly characterized by an emphasis on active, student-centered, experiential learning.

Evaluativist thinking. A personal epistemology that reflects a sophisticated understanding of knowledge is necessary to make meaning of complex information and discern among competing claims. There is a developmental progression in the sophistication of thinking about knowledge, from absolute facts to multiple and relative opinions to evaluative judgments in which knowledge is regarded as continuously evolving and coordinated with justification. Higher education aims to transform students' ways of thinking, knowing, and understanding in order to assure that students function at the evaluative level. "At the heart of the evaluativist epistemological position," Deanna Kuhn and Michael Weinstock explain, "is the view that reasoned argument is worthwhile and the most productive path to knowledge and informed understanding, as well as to resolution of human conflict."15 However, the evidence indicates that the majority of undergraduates predominately function as "multiplists" in that knowledge is equated with personal opinion, and the commitment to tolerance is equated with nondiscrimination among competing claims. To foster the development of evaluativist thinking, colleges and universities must provide the types of educational experiences that enable students to engage in the processes of inquiry and reasoned argument and to discover for themselves that these processes are empowering and useful for problem solving, discerning among competing claims, and resolving conflicts.

The understanding of emerging adulthood as an active period of reshaping of the brain.

A developmental model

also makes clear that the goal of higher education is to transform students' ways of thinking, knowing, and understanding

the accomplishment of essential developmental tasks, and the development of evaluativist thinking serve to enhance the motivation to determine ways in which undergraduate educational experiences can make a difference in the formative development of our students.

To be responsive to this opportunity, colleges and universities must recommit to providing a formative education that is both liberal and practical, and adopt a developmental model to guide, integrate, and evaluate practices.

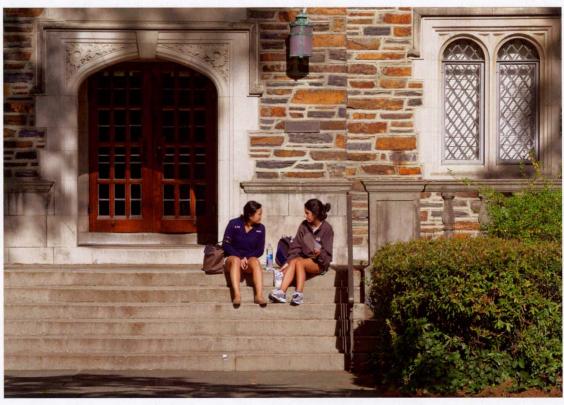
## A developmental model of education

There is no single developmental model, but rather a way of thinking about education that draws on various theories and empirical evidence regarding progressive changes in biopsychosocial development that characterize the late-adolescent and emerging-adulthood periods in our culture. More specifically, a developmental model views undergraduate education as a process of cognitive and personal growth that involves empathy as well as reasoning, values as well as knowledge, and identity as well as competencies. Adopting a developmental model not only focuses attention on the role of

particular educational practices in fostering the development of specific skills and dispositions, but it also provides a basis for integrating academic units, student affairs, and athletics around the common task of promoting development of the whole person. A developmental model makes clear that the task

of promoting personal development as well as learning is the common task that unites faculty and staff as *educators*.

A developmental model also makes clear that the goal of higher education is to transform students' ways of thinking, knowing, and understanding. Often, these changes in understanding involve issues of identity regarding ethnicity, religion, social class, gender, sexuality, values, and commitments. This transformation in the understanding of oneself links the development of the necessary higher-order mental capabilities with the developmental task of identity formation and integration that is central to emerging adulthood. As Jay Brandenberger explains, experiential pedagogies in particular, such as forms of service learning that combine community service with classroom experience, "have strong potentials to unite elements too long



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separated in the academy: thinking and feeling, reflection and action, theory and practice." <sup>16</sup>

A developmental model also makes clear the importance of academic advising and support services in the common mission of promoting the development of the whole person. Framed through the perspective of a developmental model, advising and academic support services are teaching processes that are accomplished in the context of a caring, affirming relationship. The aim is to help students feel valued and connected to the institution as well as both empowered and responsible for engaging the resources of the college or university for their own education and growth. The specific objectives include the development of students as self-regulated, lifelong learners who have both the ability to make accurate self-appraisals of their strengths and weaknesses and openness to acquiring the new skills they need to be successful.

Finally, a developmental model provides a basis for an integrated and holistic assessment plan to evaluate the effects of pedagogical, curricular, and student-life initiatives that are aimed at multiple dimensions of student development and student learning. Once gathered, the assessment information needs to be analyzed through a collective process of *meaning making* by faculty and staff in order to identify opportunities and approaches to improve educational practices.

### Conclusion

Adopting a developmental model as the new paradigm for liberal education provides a much-needed integrating framework for colleges and universities that unites all components of the academic community in the common mission of empowering students for a life of meaning and purpose. This makes it intentional that the aim is for students to discover that they have developed their own unique personal style; that they have something to say in their own way; that they are responsible for what they say and do; that they are worthy of self-respect and the respect of others; and, ultimately, that they can realize their own humanity as creative, empathetic, and committed people.

To respond to this article, e-mail liberaled@aacu.org, with the author's name on the subject line.

### NOTES

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