Research on learning theories is central to most of the articles that have appeared in Theory Into Practice (TIP) over the past 50 years. Scholarship on this topic in many ways undergirds all articles that provide discussions of ways of moving theory into practice within the broad field of education. Indeed, one could easily argue that all research focusing on improving the education of learners at some level encompasses assumptions based on learning theory.

Learning theory has been covered in TIP throughout the journal’s history. As we review in this article, coverage within TIP has varied, and has included a wide array of perspectives on human learning within diverse educational contexts. Although learning theories often are taught and discussed along a historical continuum (e.g., behavioral theories lead to more cognitive theories), coverage in TIP has been broad. Indeed, scholarship from diverse theoretical perspectives has been published throughout the journal’s history.

A Brief Overview of Approaches to Learning

Because learning is a complex cognitive process, there is no single best explanation of learning. Different theories of learning
Fifty Years of Theory Into Practice

offer more or less useful explanations depending on what is to be explained. Drawing upon summaries from Woolfolk Hoy and Hoy (2013), the general categories of learning theories examined in this article are behavioral, cognitive, constructivist, and sociocultural.

Behavioral theories of learning stress observable changes in behaviors, skills, and habits. Attention is clearly on behavior. Learning is seen as a change in behavior brought about by experience, with virtually no concern for the mental or internal processes of thinking. Behavior is what people do. The intellectual underpinnings of behavioral theory rest with Skinner’s (1950) operant conditioning. Functional behavioral assessment, positive behavior supports (Soodak, 2003), and, to a certain extent, deliberate practice in developing expertise (Ericsson, 2006) are current applications of this perspective. When specific skills and behaviors need to be learned, teaching approaches consistent with behavioral learning theory are quite effective. These approaches have been particularly useful in the development of interventions for learners with special needs.

Cognitive theories of learning deal with thinking, decision making, remembering, creating, and problem-solving. How information is remembered and processed, as well as how individuals use their knowledge to regulate their thinking, are critical in this perspective. Some of the most important applications of cognitive theories are teaching students how to learn and remember by using learning tactics such as note-taking, mnemonics, and visual organizers. Teaching strategies based on cognitive views of learning, particularly on information processing, highlight the importance of attention, organization, practice, and elaboration in learning. These strategies also provide ways to give students more control over their own learning by developing and improving their metacognitive skills and self-regulated learning strategies. The emphasis of the cognitive approach is on what is happening inside the head of the learner.

Constructivist theories of learning are concerned with how individuals make meaning of events and activities; hence, learning is seen as the construction of knowledge. In general, constructivism assumes that people create and construct knowledge, rather than internalize it from the external environment; additionally, it is important to note that there are different approaches to constructivism. Some constructivist views emphasize the shared and social construction of knowledge, whereas others do not emphasize social forces. Constructivist perspectives on learning and teaching, which are increasingly influential today, are grounded in the research of Piaget, Bruner, Dewey, and Vygotsky. Inquiry and problem-based learning, cognitive apprenticeships, and cooperative learning are typical teaching strategies that are consistent with constructivist approaches. The essence of the constructivist approach is that it places the students’ own efforts at the center of the educational process, thus the notion of student-centered teaching (Bruning, Schraw, & Norby, 2011).

Sociocultural theories of learning acknowledge the centrality of social and cultural contexts in learning. These perspectives often are called social constructivist theories. In the past 25 years, these theories of learning have become more prominent as concerns about diversity, multicultural education, and social justice increase. Concepts of culturally relevant pedagogy and racial identity emphasize the need to consider social and cultural factors in theories of learning.

Each of these approaches to learning has much to offer; in fact, each brings with it advantages and disadvantages. We think of these main dimensions of learning theories as four pillars for teaching. Students must first understand and make sense of the material (constructivist); then they must remember what they have understood (cognitive-information processing); and then they must practice and apply their new skills and understanding to make them more fluid and automatic, and a permanent part of their repertoire (behavioral). All of these processes are embedded in social and cultural settings. Failure to attend to any part of the process may yield lower-quality learning.
Historical View of Learning Theories Through the Lens of TIP

Fifty years ago, learning was largely equated with performance. Behaviorist theories (Stephens, 1974) essentially painted teachers and children as machines (Briggs, 1962) capable of being trained or programmed toward optimal performance. Teachers were encouraged to consider the ways in which they structured the classroom and their lesson plans to shape students’ motivation to learn (Stephens, 1974). This narrow definition of learning proved disappointing for applied researchers who tried to adapt these methods to classroom learning. Bayles (1966) was among the first TIP authors to voice a strong dissent to behaviorist views of learning, arguing for the inherent value of discovery and creativity in the learning process. Bayles broadened that narrow definition of learning to include the development of insight and the detection of patterns.

Contributors to TIP in the 1970s (e.g., Minor, 1973) and 1980s (e.g., Webb, 1980) argued that learning theories should make sense of the ways in which the learner contributes to his or her own learning process. As such, they served as advocates for the new definitions of learning as processes of meaning-making and understanding. Working to understand the learning process, cognitive psychologists developed models to explain how information could be processed, how knowledge could be stored, and how individual differences and learner preferences could be manifest in the learner’s knowledge, strategies, and deployment of cognitive resources (Shuell, 1990). Both cognitive and constructivist perspectives on learning described learning as an active, ongoing process that relied on the investment of the learner in wanting to learn the task (Commeyras, 1995). Moving from the 1990s into the 21st century, sociocultural learning theories incorporated considerations of culture, race, and ethnicity (Ford & Grantham, 2003; Gay, 1994; Ogbu, 1992).

Given this very brief and general history of learning theories, it is tempting to think that, as evidenced in some other articles in this issue, there has been a distinctly dominant theory or emphasis each decade or so that gives way, in time, to a successor theory (e.g., behavioral to cognitive to constructivist to sociocultural). In truth, articles in TIP have long reflected the valid applications of all these views, as well as intelligent integrations of several theories to guide practice, as Table 1 indicates. In the next section, we explore the ways that different learning theories have been represented in TIP over the past 50 years. Note that no one decade in TIP has featured a single theory of learning.

Behavioral Approaches To Learning Across The Years In TIP

As early as the first issue of TIP in 1962, a behavioral approach to learning was the foundation for the entire issue on “Teaching Machines and Language Laboratories.” An example article in that issue by Briggs (1962) began with the assumption that teaching machines operate according to established principles of learning. Briggs outlined three distinct types of programming that served different educational purposes, and then highlighted other factors that are important for educators to consider when using teaching machines in the classroom. Briggs’ article is an early example of behaviorist theories of learning applied to classroom practice. However, Briggs’ account also suggested the very beginning of a theoretical shift. Although grounded in behaviorist theories, Briggs raised important issues, such as individual differences and student motivation, that became more prominent in later theories of learning (e.g., cognitive approaches).

A decade later, Stephens (1974) discussed the potential of behavioral approaches to accelerate students’ academic and social learning, beyond its more traditional use as a way of disciplining and controlling students. He described this sort of behavior modification as directive teaching, and systematically broke down the process of developing a directive teaching lesson plan into seven questions the teacher must consider. Besides providing a clear example of behaviorist
### Table 1
24 Most Relevant Articles on Theories of Learning
(of the 65 Identified as Related to the Topic)

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Year</th>
<th>Volume (Issue)</th>
<th>Issue Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behaviorism</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guba, Egon</td>
<td>Teaching machines and language laboratories</td>
<td>1962</td>
<td>1 (1)</td>
<td>Entire issue</td>
</tr>
<tr>
<td>Mader, Cynthia</td>
<td>“I will never teach the old way again”: Classroom management and external incentives</td>
<td>2009</td>
<td>48 (2)</td>
<td>A person-centered approach to classroom</td>
</tr>
<tr>
<td><strong>Cognitive science</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bayles, Ernest</td>
<td>Theories of learning and classroom methods</td>
<td>1966</td>
<td>5 (2)</td>
<td>Methodology: Its impact on learning</td>
</tr>
<tr>
<td>Minor, Frances</td>
<td>Cognitive development: Some pervasive issues</td>
<td>1973</td>
<td>12 (2)</td>
<td>The early years of childhood</td>
</tr>
<tr>
<td>Shuell, Thomas</td>
<td>Teaching and learning as problem solving</td>
<td>1990</td>
<td>29 (2)</td>
<td>Metaphors we learn by</td>
</tr>
<tr>
<td>Marzano, Robert</td>
<td>How classroom teachers approach the teaching of thinking</td>
<td>1993</td>
<td>32 (3)</td>
<td>Teaching for higher order thinking</td>
</tr>
<tr>
<td>Pintrich, Paul</td>
<td>The role of metacognitive knowledge in learning, teaching, and assessing</td>
<td>2002</td>
<td>41 (4)</td>
<td>Revising Bloom’s taxonomy</td>
</tr>
<tr>
<td>Zimmerman, Barry</td>
<td>Becoming a self-regulated learner: An overview</td>
<td>2002</td>
<td></td>
<td>Becoming a self-regulated learner</td>
</tr>
<tr>
<td><strong>Constructivism</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torrance, E. Paul</td>
<td>Independent study as an instructional tool</td>
<td>1966</td>
<td>5 (5)</td>
<td>Independent study</td>
</tr>
<tr>
<td>Morine, Greta</td>
<td>Discovery modes: A criterion for teaching</td>
<td>1969</td>
<td>8 (1)</td>
<td>Insights—Collection of articles</td>
</tr>
<tr>
<td>Barclay Murphy, Lois &amp; Murphy, Gardner</td>
<td>A fresh look at the child (Child development)</td>
<td>1969</td>
<td>8 (3)</td>
<td></td>
</tr>
<tr>
<td>Webb, Patricia</td>
<td>Piaget: Implications for teaching</td>
<td>1980</td>
<td>19 (2)</td>
<td>Teaching methods: Learning applications</td>
</tr>
<tr>
<td>Commeyras, Michelle</td>
<td>What can we learn from students’ questions?</td>
<td>1995</td>
<td>34 (2)</td>
<td>Learning from student voices</td>
</tr>
</tbody>
</table>

(continued)

theory, this article was also interesting within the context of *TIP*. At this point in time, many of the articles being published seemed to focus, instead, on cognitive theories of learning—the transition to cognitive views of learning was well underway.

Behaviorism, however, is still a viable basis for teaching applications today. For example,
Table 1
(Continued)

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Year</th>
<th>Volume (Issue)</th>
<th>Issue Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociocultural</strong></td>
<td></td>
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</tr>
<tr>
<td>Ogbu, John</td>
<td>Adaptation to minority status and impact on school success</td>
<td>1992</td>
<td>31 (4)</td>
<td>Literacy and the African American learner/The struggle between access and denial</td>
</tr>
<tr>
<td>Gay, Geneva</td>
<td>Coming of age ethnically: Teaching young adolescents of color</td>
<td>1994</td>
<td>33 (3)</td>
<td>Rethinking middle grades</td>
</tr>
<tr>
<td>Ladson-Billings, Gloria</td>
<td>But that’s just good teaching! The case for culturally relevant pedagogy</td>
<td>1995</td>
<td>34 (3)</td>
<td>Culturally relevant teaching</td>
</tr>
<tr>
<td>Ford, Donna &amp; Grantham, Tarek</td>
<td>Providing access to culturally diverse gifted students: From deficit to dynamic thinking</td>
<td>2003</td>
<td>42 (3)</td>
<td>Teacher reflection and race in cultural contexts</td>
</tr>
<tr>
<td><strong>Intersection of learning theories</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Marshall, Hermine</td>
<td>Beyond the workplace metaphor: The classroom as a learning setting</td>
<td>1990</td>
<td>29 (2)</td>
<td>Metaphors we learn by</td>
</tr>
<tr>
<td>Furlong, John</td>
<td>School mentors and university tutors.</td>
<td>2000</td>
<td>39 (1)</td>
<td>New visions in mentoring</td>
</tr>
<tr>
<td>King, Allison</td>
<td>Structuring peer interaction to promote high-level cognitive processing</td>
<td>2002</td>
<td>41 (1)</td>
<td>Promoting thinking through peer learning</td>
</tr>
<tr>
<td>McCombs, Barbara</td>
<td>A framework for the redesign of K–12 education in the context of current educational reform.</td>
<td>2003</td>
<td>42 (2)</td>
<td>Learner-centered principles: A framework for teaching</td>
</tr>
<tr>
<td>Bailey, Francis &amp; Pransky, Ken</td>
<td>Are ‘other people’s children’ constructivist learners too?</td>
<td>2005</td>
<td>44 (1)</td>
<td>Closing achievement gaps: What will it take?</td>
</tr>
<tr>
<td>Morrison &amp; Allen</td>
<td>Promoting student resilience in school contexts</td>
<td>2007</td>
<td>46 (2)</td>
<td>Adolescent mental health</td>
</tr>
</tbody>
</table>

Leslie Soodak’s (2003) article in *TIP* on “Classroom management in inclusive settings” was grounded in behavioral theories, but also incorporated concerns about individual differences and motivation. Soodak described the use of *functional behavioral assessment* (FBA) to determine what students are getting out of their problem behaviors—What functions do these behaviors serve? The focus of FBA is on the why of the behavior. If the reason for the behavior is known, then the teacher can devise ways of supporting positive behaviors that will serve the same *why* function. *Positive behavioral supports* are interventions designed to replace problem behaviors with new actions that serve the same purpose for the student. The Individuals with Disabilities Education Act (IDEA, 1997) requires these supports for students with disabilities and those at-risk for special education placement.

In keeping with *TIP’s* commitment to representing diverse viewpoints, some of the articles on applications of behavioral views of learning have been critical. For example, Mader (2009) discussed the downside of contingent rewards,
specifically explaining that the presence of contingent rewards, including stickers and grades, undermines intrinsic motivation, and the removal of contingent rewards in the classroom may actually enhance learning. Mader introduced a self-grading policy in a graduate course on classroom management. She found graduate students (who also were teachers) engaged in the course due to genuine interest in the subject. Mader’s article also spoke to a constructivist perspective in the sense that allowing students to self-grade (a) reduces teacher–student power inequalities, and (b) places students at the center of their own learning experience.

Cognitive Approaches to Learning Across the Years in TIP

Even though discussions of the nature of knowledge, the value of reason, and the contents of the mind date back at least to the ancient Greek philosophers (Gluck, Mercado, & Myers, 2008), from the late 1800s until several decades ago, cognitive studies fell from favor and behaviorism thrived. Then, research during World War II on the development of complex human skills, the computer revolution, and breakthroughs in understanding language development all stimulated a resurgence in cognitive research at about the time TIP was founded in 1962. Bayles’ (1966) article in TIP suggested a strong reaction against a behaviorist theory of learning, with a shift toward a theory that seemed to have aspects in common with both cognitivism and constructivism. Bayles’ description of learning as insight emphasized a cognitive process of pattern-finding, and also stressed the importance of discovery and creativity. This article was a departure from behaviorist theories of learning.

As the dominant learning theories turned toward cognitive perspectives, educational psychologists became interested in how people think, learn concepts, and solve problems (e.g., Ausubel, 1963; Bruner, Goodnow, & Austin, 1956). An example of this emphasis in TIP was “Actualizing concept learning: The challenge to curriculum planning” (Toepfer, 1971). Toepfer explored both the potential of, and the problems with, concept learning, focusing on its implementation in the context of curriculum planning. The article framed concept learning as a recent innovation, based on the stages of human development and concerned with helping students enact “intelligent behavior in a specific instance” (p. 135). He concluded the article with a number of recommendations for putting concept learning into practice. This discussion of concept learning is interesting for a few reasons. First, based on the way Toepfer discussed it, concept learning seemed to be a new and developing technique when this article was published. Second, Toepfer’s discussion of the strategy’s limitations also suggested that a shift or reconceptualization, either of the strategy itself or the content being taught, may be necessary if concept learning is to be appropriate and effective.

In the 1970s, this focus on concept learning in cognitive approaches gave way to the study of how knowledge is represented in the mind and particularly how it is remembered. Remembering and forgetting became major topics for investigation in cognitive psychology in the 1970s and 1980s, and the information processing model of memory dominated research. One application of this model in TIP was “Teaching students how to learn” (Letteri, 1985). Letteri framed learning as information processing and argued that improving students’ cognitive processes, or controls, was the best way to help them learn how to learn. His article typified a cognitivist approach to learning, emphasizing information processing, cognitive structure, and specific strategies to increase cognitive control. However, Letteri also highlighted the importance of individual differences in his discussion of profiles. Although still grounded in cognitivist theory, acknowledging individual differences beyond those that are purely developmental seems to move in the direction of constructivism. Thus, Letteri’s article represents a refinement of more general cognitivist theory.

In the 1990s and on to today, cognitive theories have again added concerns about thinking, decision making, problem solving, knowledge acquisition, and metacognition to the information processing focus on memory. For example,
Shuell (1990) discussed why problem solving is a good metaphor for teaching and learning. Problem solving as a metaphor suggests that both teaching and learning are complex processes that involve: (a) identifying a problem and setting a goal, (b) actively searching for possible alternatives to solve the problem, (c) evaluating those alternatives, and (d) making a decision as to which course of action to follow. Factors affecting the teaching and learning as problem solving metaphor include mental representations of the problem, prior knowledge (both propositional and procedural), mental strategies, and time constraints, all of which can lead to differential learning outcomes. Shuell’s article also noted that problem-solving is domain-specific, and it also includes an element of self-management or metacognition on behalf of the student, which foreshadowed constructivist concerns with students taking responsibility for their own learning.

In a second example, Marzano (1993) discussed how teachers use a number of powerful cognitive strategies to teach thinking, such as questioning techniques, writing techniques, and basic information-processing strategies. However, Marzano also asserted that teachers fail to teach other, even more powerful, cognitive strategies to students, such as self-regulation and critical/creative thinking. Marzano’s commentary served as a strong precursor to the increased emphasis on the teaching of cognitive strategies that merged over the next decade (Pressley & Harris, 2006). Incorporating these cognitive strategies, in addition to the ones already utilized by teachers, would enhance the higher-order thinking of students.

In the 2000s, cognitive theories of learning focused increasingly on metacognition and self-regulation of learning. Pintrich’s (2002) “The role of metacognitive knowledge in learning, teaching, and assessing” discussed the revision of Bloom’s taxonomy, which had historically emphasized factual, conceptual, and procedural knowledge. The revised taxonomy added metacognitive knowledge, or the understanding of our own thought patterns, as a fourth dimension. Pintrich outlined three types of metacognitive knowledge: (a) strategic knowledge of broad learning, thinking, and problem solving strategies applicable to many academic subjects; (b) knowledge about specific cognitive tasks to apply in particular situations and why (and when) these tasks should be employed; and (c) self-knowledge about how the individual’s own strengths may be accentuated in order to optimize performance. This article represented an advance in cognitive perspectives on classroom instruction because it encouraged educators to teach students to think about their own thinking. Specifically, Pintrich advocated for the explicit instruction of metacognitive knowledge as an integral aspect of effective of classroom instruction. Kuhn and Dean (2004), in their TIP article “Metacognition: A bridge between cognitive psychology and educational practice,” also emphasized the importance of metacognition and added considerations of epistemology in understanding when and why students use critical thinking.

**Constructivism Approaches to Learning Across the Years in TIP**

Constructivist scholars, meanwhile, were scrutinizing the extent to which the pedagogies advocated by learning theorists fit the developmental needs of children (see stage-environment fit arguments by Eccles & Midgley, 1989). As constructivist scholars interrogated the qualitatively different ways in which children understood tasks and made meaning, they came to realize that the one-size-fits-all methods of instruction oft advocated were minimizing the critical need for teachers to listen to and observe children in their classrooms and tailor and differentiate instructional methods. Constructivist scholars were among the first to call for teachers and scholars to redefine learning as a purposeful, developmental process that would look different depending on the evolution and prior experiences of the individual learner. It was during this time that learning theory became child-centered, acknowledging that children might approach tasks and make meaning in systematically different ways than adults (Barclay Murphy & Murphy, 1969; Webb, 1980). Constructivists argued that
learning needed to be understood from the child’s perspective.

Articles in *TIP* have been concerned with child-centered learning over the entire 50 years of publication. In 1966, Paul Torrence’s article, “Independent study as an instructional tool,” claimed that independent study, in combination with more structured teaching, could alleviate problem behavior in children, as well as challenge and motivate children of all ability levels to learn. This is one of the earlier articles to discuss motivational factors such as enthusiasm and enjoyment of the work, and it also regarded the social relationships between teachers and students as more important than previous work. The emphasis on independent study stemmed from a realization that not all learners are the same, nor do all learners benefit from the same type of instruction—early constructivist ideas.

Concern with student-centered learning reverberated through the decades. For example, the article “Discovery modes: A criterion for teaching” (Morine, 1969) acknowledged and addressed the controversy surrounding discovery learning, ultimately offering readers a more nuanced understanding of the method(s) and highlighting the implications for practice. “A fresh look at the child” (Barclay Murphy & Murphy, 1969) portrayed low academic achievement as the likely result of schoolwork that seemed irrelevant and meaningless (foreshadowing a future emphasis on motivation research), rather than as the result of cognitive deficiencies in the child. The emphasis on individualized, self-directed learning and meaningful schoolwork suggests a transition to more constructivist views of teaching and learning. “Freedom, the child, the teacher: The gap between ideas and action” (Roberts, 1976) illustrated a theme within *TIP* that seemed to become more established in the 1970s: that of the social context of classrooms and the importance of relationships in learning and teaching. Here, students were addressed as individuals within a group—recognizing both the individuality of learners and also their social ties. These social ties were seen as crucial to learning outcomes.

In a final example, “What can we learn from students’ questions?”, Commeyras (1995) contended that, although cognitivism contributed to the understanding of learning, this psychology of instruction needed to be further developed into a constructivist psychology of inquiry that incorporated students’ interests. To this end, Commeyras argued that letting students, rather than the teacher, guide the class questioning and discussion would not only result in more meaningful learning for the students, but also in opportunities for the teachers to learn. Commeyras’s article represented a clear example of constructivist learning theory applied to practice, and also directly addressed the alternative theory of cognitivism. In addition, Commeyras extended the implications of constructivism beyond a change in content that simply integrated children’s own interests into the curriculum, to a reframing of the entire process of teaching.

### Sociocultural Approaches to Learning Across the Years in *TIP*

In the 1990s, a major shift was brewing as scholars began to realize the systematic ways in which children’s investment in school varied as a function of societal influences. For example, Ogbu (1992) outlined four reasons for academic underperformance of students of color: cultural models (worldview), culture and language frames of reference (students’ perceptions of whether their home and school identities are in co-existence or conflict), the degree of institutional trust (mistrust of the majority culture that also controls the school system), and students’ resultant educational strategy use. Ogbu explained that an understanding of how to address these issues—which he discussed as particularly relevant to the experiences of involuntary minorities (e.g., African Americans)—begins with an understanding of the historical and structural contexts in which these events occur.

During the 1990s, *TIP* contributors began calling for theories of learning to formally address the role of parents, teachers, school, and society in mediating the learning process. Sociocultural/social-constructivist researchers pushed learning theories to articulate
the ways in which specific teaching practices were participating in the continued marginalization of underrepresented students. Geneva Gay (1994) described how the learning of adolescents of color could be enhanced through exploratory learning (i.e., including allowing students to explore their ethnic identity directly), caring and supportive learning environments, facilitating the personal development of students, and implementing developmentally appropriate instructional strategies. Gloria Ladson-Billings (1995) discussed culturally relevant pedagogy as an approach to educating students from ethnic minority backgrounds. Culturally relevant pedagogy emphasizes academic success, cultural competence, and critical consciousness. Ladson-Billings explained that academic success from a culturally relevant pedagogy perspective means directing students’ natural skills and abilities in ways that are academically relevant. These emphases continued in the 2000s with articles in TIP such as Epstein’s (2001) article on “Racial identity and young people’s perspectives on social education” and Ford and Grantham’s (2003) “Providing access to culturally diverse gifted students: from deficit to dynamic thinking.”

From the sociocultural perspective, learning is a situated activity that happens not only inside, but also outside school, with knowledge from across contexts and cultures informing—and sometimes competing with—each other. Sociocultural/social-constructivist researchers offer reminders that all learners need a voice in their education and that the country has a history of denying voice.

Multiple and Integrated Perspectives on Learning in TIP

In 2006, Robert Calfee called for scholars to deal with the “really important problems that are confronting today’s public schools” (p. 35). Nuthall (2004) also called for research on teaching that had pragmatic validity, that is “research that actually answers the question of how teaching is related to learning in a way that is comprehensible and practically useful for teachers” (p. 1). For 50 years, contributors to TIP have attempted to use theory to address these important problems and questions. Whereas scholars often have the luxury of thinking from a single world-view, teachers need to be more pragmatic; they need to be able to work across theories and real-world experiences in a way that allows them to best serve all of the students in their classes. Even though different theories of learning have moved in and out of favor and new findings lead to new perspectives on learning, articles in TIP have over the last 50 years reflected applications and interpretations for practice that draw from all the different perspectives. In doing so, many of them have drawn from across theories to understand how to promote a learning/mastery orientation in classrooms (Marshall, 1987, 1990; McCombs, 2003), how to get peers to learn together (Johnson & Johnson, 1999; King, 2002), and how to best meet the needs of a diverse student body (Bailey & Pransky, 2005; Morrison & Allen, 2007).

Thus, TIP authors have always represented a range of useful learning theories, because the mission of TIP is to bring theory into practice. But there is a second element of that mission, to use practice to inform theory. Many theorists of learning in educational psychology have come to understand what contributors to TIP have always valued: “Theory building in situ, in the real world, constitutes our greatest scientific challenge and the most exciting opportunity to affect practice” (Berliner, 2006, p. 22). Berliner argued that the early ‘80s presented a critical time for learning theorists, who began to understand that if learning theory did not begin to address the real-world problems of the classroom, their work would continue to be viewed as irrelevant and obsolete. Similar observations have been made more recently about the overall field of educational psychology (Patrick, Anderman, Breuning, & Duffin, 2011). Contributors to TIP have been, and are, leaders in this movement to increase the relevance of learning theories. Subsequently, the last 30 years of research on learning theory has been devoted to developing increasingly complex and contextualized mod-
els to address the needs of specific students and different learning contexts. Contemporary theories spend a great deal of time elaborating on the importance of classroom contexts (Perry, Turner, & Meyer, 2006), relationships between students and teachers (Davis, 2003, 2004, 2006; Wentzel, 2009), among peers (Juvonen, 2006; Ladd, Herald-Brown, & Kochel, 2009), and in the community (Greenfield et al., 2006; Okagaki, 2006). In the following sections, we re-view how learning has been redefined and the role TIP scholars played in pushing the field to innovate.

The Future of Learning Theory Into Practice

Nuthall (2004) wrote eloquently about the need for researchers to:

produce the kind of evidence-based explanatory theory that has the potential to guide teachers’ moment-by-moment decision making and provide a valid basis that enables them to learn from their daily experiences. Only when teachers understand the principles by which their actions shape the learning process going on in the minds of their students will they be able to ensure effective learning. (p. 20)

For over 50 years, contributors to TIP have shed light on the limitations of efforts to prepare teachers to use theory in classroom settings. Educators need to be more thoughtful about the pedagogy they use to teach learning theory to future teachers (see Anderman, 2011; Woolfolk Hoy & Murphy, 2001), as well as the timing of courses in learning theory. Whereas traditional learning theory/educational psychology courses in colleges of education tend to cover each of the four grand paradigms (see Table 1), graduate instructors often teach them chronologically with equal representation of these theories across the course. In many ways, this strategy may reflect their own emerging understanding of the field of learning theory. However, this approach does not reflect the type of pragmatic validity and problem inspired research on learning described by Calfee (2006) and Nuthall (2004).

Moreover, in teacher education instructors often front-load theory early in initial teacher training programs when students may not have the tacit knowledge and practical experiences to really internalize and integrate each framework. There are few resources that compare theories in a concise way that practicing teachers can use as a refresher tool. The challenge faced by future contributors to TIP is that constructs from learning theories don’t look the same in classrooms as they do in textbooks. Removed from the artificial isolation of the way one discusses them in research reports, constructs can become difficult to see; it is complicated for practicing teachers to classify why students are, or are not, learning to their potential. It is even more difficult for educators to identify the factors that fall within the teachers’ control to change, and those that fall outside their responsibility and reach. For example, Mader (2009, p. 153) found that

The more teachers can experience what motivates their students—or what fails to—the more they may recognize the negative constraints of traditional accountability and incentive systems. The more that teacher education programs can promote good teaching, the less we may all rely on pizza parties, bumper stickers, behavior points, or grade point averages as incentives.

Practicing teachers need go-to resources for how to evaluate classroom problems in light of contemporary learning theories. This probably will require a pragmatic integration of useful theories of learning with research on teaching, motivation, deliberate practice, cognitive neuroscience, emotions, and a range of learning environments including online and hybrid technologies.

Conclusion

In this article, we have acknowledged that theories of learning emanate from different historical perspectives, and have influenced different areas of research and practice in education.
The treatment of theories of learning throughout the past 50 decades has not been entirely chronological in TIP. Whereas there is some evidence of a shift from behavioral to cognitive to social/constructivist theories, a deeper examination of the scholarship in TIP indicates that researchers have been thinking and writing about diverse perspectives on learning throughout the past half century. As the importance of interdisciplinary work continues to rise in the academic world, an appreciation of both the individual and synergistic contributions of these theories to professional practice will continue to enhance teaching and learning.

In the forthcoming years, there undoubtedly will be new developments in theories of learning. In particular, the geometric rise in hybrid and online learning environments, and more recently in massive open online courses, suggests that learning theories may need to be reconceptualized to explain learning in virtual environments. In addition, rapid developments in neuroscience also will quite likely yield new insights into how learning occurs, and undoubtedly will affect learning theories. Articles in TIP throughout the past 50 years have made important contributions toward moving theories of learning into practical applications for educators; we sincerely hope that this trend continues, as the understanding of human learning becomes more complex and exciting.

References


Woolfolk Hoy, Davis, Anderman

Theories of Learning and Teaching

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