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A Brief History and a Framework for Understanding Commonalities and Differences of Community College Student Success Programs

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Abstract

This chapter reviews ways that researchers have presented variously narrow and broad groupings of special student success programs over the course of decades. Cultural Historical Activity Theory (CHAT) is proposed as a way to conceptualize various kinds of community college student success programs as instances of a more general type of program.

There is today broad consensus among policy makers and higher education stakeholders that community colleges are key to achieving goals to increase the portion of adults with postsecondary credentials. In turn, community colleges educators look to new or innovative pedagogical and institutional structures to realize these goals. Key among efforts to enhance student success are a select few policies and practices singled out as holding particular promise to move the needle on community college persistence and completion. Such *promising* and *high-impact practices* (HIPs) include first-year seminars, student skills courses, college success strategies courses, extended orientation programs, and many others described throughout this issue. Though long used and studied, they have received renewed attention (see recent literature reviews by Bailey & Alfonso, 2005; Brownell & Swaner, 2009a; Crisp & Taggart, 2013; Swaner & Brownell, 2009).

A substantial challenge to this renewed effort to identify high-impact practices is in fact the perennial quandary of how to define them and circumscribe a set of them. Arguably, good practices for undergraduate education are not novel (Chickering & Gamson, 1987), only underused. But is there more to what conceptually defines and links them beyond their purported benefits? If we are to seek better evidence of their effectiveness and ways to scale them up, it follows that a first step is to establish what “they” are in the first place. My purpose in this chapter is,

first, to explore the history of how authors have identified and grouped special student success programs for the community college setting and, second, to propose the use of cultural historical activity theory (CHAT; Engeström, 1993; Leont'ev, 1978; Vygotsky, 1987) as a way to conceptualize certain related types of student success programs as instances of a more general type of intervention in a way that can inform the work of researchers and practitioners.

A History of Ad Hoc Groupings of Special and High-Impact Practices

Certain college student success courses, programs, and interventions have long received attention as exemplary or distinctive practices for promoting students' successful transition to college and their acquisition of college knowledge, skills, and support networks. What has varied is which practices have been called out as special. Kulik, Kulik, and Shwalb (1983) reviewed the evidence in the literature from the 1930s to the 1970s regarding the effectiveness of what they termed *special programs for high-risk students* on outcomes of achievement (grades) and persistence. They characterized certain programs according to the decades in which they appeared and, in their view, as a function of the broadening inclusion of historically underrepresented and underserved¹ groups in higher education through the emergence of the civil rights movements. These special programs were *reading and learning skills courses* (1930s and 1940s); *group-oriented guidance sessions* (1950s and 1960s); and *comprehensive support programs* (late 1960s) that combined tutoring, advising, learning centers, skills courses, and other services.

In the mid-1990s, the National Resource Center for The First-Year Experience and Students in Transition published a volume of essays (Hankin, 1996) regarding a broad range of programs, practices, and some policy issues related to "opportunity and access" for first-year students in the community college sector. In the first chapter, Hankin and Gardner (1996) recommended the implementation of multiple "mechanisms" (p. 10) from *mentoring* and *advising*, to *freshman seminars* (what they would today call first-year seminars), to *tutoring*, to *early-warning procedures*, among many other programmatic and institutional structures, all of which are understood as responding to the heterogeneity of students and their needs. Thus, in their view, no list per se of impactful practices exists. Instead, they present the notion of The First-Year Experience as an expansive, comprehensive philosophy that engenders a "deliberately designed attempt to provide a rite of passage in which the students are supported, welcomed, celebrated, and ultimately assimilated" (p. 10).

Ten years later, Bailey and Alfonso (2005) presented a review of evidence regarding the effectiveness of practices to increase persistence and completion specific to the community college sector. They included three groupings for various practices: (a) *advising, counseling, mentoring*, and

orientation programs; (b) *learning communities*; and (c) *developmental education*. They also included the general idea of college-wide *institutional reform* as an effective practice for community colleges.

Also in the 2000s, Swaner and Brownell (2009; see also Brownell & Swaner, 2009a, 2009b) reviewed the literature regarding evidence for the effectiveness of HIPs for traditionally underserved student populations by considering dozens of outcomes. They limited their review to *learning communities*, *service learning*, *undergraduate research*, *first-year seminars*, and *capstone courses and projects*, which are only 5 of 10 HIPs identified by the Association of American Colleges and Universities (AAC&U, 2007), which commissioned the study (see also Finley & McNair, 2013; Kuh, 2008; Kuh & O'Donnell, 2013).

In a series of three reports, the Center for Community College Student Engagement (CCCSE, 2012, 2013, 2014) investigated 13 of what they called *promising practices* (PPs) for the community college sector, spanning a wide range of interventions, including programmatic offerings, policies, and procedures. Notably, both CCCSE's and AAC&U's work in this area stems from an interrelated body of engagement research based on data from the Community College Survey of Student Engagement (CCSSE) and the National Survey of Student Engagement (NSSE); yet, CCCSE's PPs and AAC&U's HIPs overlap in just two areas: *experiential learning beyond the classroom* (including internships) and student success programs, such as *first-year seminars* and *learning communities*. This divergence may well reflect the differing values and missions of the 4-year vs. 2-year college sector, or that of the organizations that produced the reports, or both.

More recently, Crisp and Taggart (2013) in their literature review on student success programs at community colleges, selected *learning communities*, *student success courses*, and *supplemental instruction* from among "numerous programmatic efforts" based on the straightforward rationale that they are "three of the most prominent programmatic efforts currently implemented at community colleges" ... designed "to provide students with opportunities to become socially and academically integrated into the college environment, connect with faculty and staff at the college, and/or overcome a potential lack of cultural capital or academic preparedness" (pp. 115,118).

Across all of these literature reviews and reports, and reflective of many individual studies they include, authors repeatedly rely on the rationale of the preponderance of research studies to define the scope or list of which practices hold particular promise of high impact. As a result, different lists include different programs, policies, and add-on features. CCCSE's (2012, 2013, 2014) list is thus far the most expansive inventory of special community college student success practices in the literature. It is also arguably the only one to offer a conceptual categorization of practices, even if tentative: the first of the CCCSE's three reports in this series grouped practices according to their primary function

of either *planning for success*, *initiating success*, or *sustaining success*. Using this scheme, Table 1 summarizes various groupings and categories that authors have used over the years.

Limitations Due to a Lack of Conceptualizations of HIPs

Having various lists of promising practices for higher education is certainly not problematic on its own. But the use of the *high-impact* label in the absence of criterion-based or conceptual definitions may tend to give existing labels undue importance, potentially stifling innovation, and broader implementation of programs or the mechanisms that make them work (Kuh et al., 2013). For instance, it can be argued that high-impact or promising practices are ultimately manifestations of, or thoughtfully crafted vehicles for, general principles of good educational practice (Chickering & Gamson, 1987), which in turn are ultimately related to the central questions of effective learning and teaching that have been debated and researched for centuries. In this view, a list of HIPs may be unnecessarily reductive.

Indeed, Karp (Chapter 3) advocates that a principle-driven consideration of student success interventions is needed rather than the predominant program-driven view. Karp argues that there are *processes* or *mechanisms* of nonacademic student support that can be integrated within formal programmatic structures and informally or organically throughout college, especially classrooms. However, Karp encountered a fundamental challenge in undertaking her review that illustrates the need for a coherent conceptualization of the very HIPs she turned to in deriving mechanisms of student support. Namely,

the myriad approaches to providing non-academic support result in the inclusion of many different programs in this body of literature. ... Moreover, evaluations of nonacademic supports tend to group different interventions under the same category. For example, the “learning community” literature incorporates a range of programs that include multiple and widely varying components. As a result, it is not always possible to isolate the effects of a specific program element. (Karp, 2011, p. 4)

Thus, whether the task is to derive principles/processes/mechanisms of effective practice by unpacking promising interventions, or conversely to identify promising interventions based on their use of effective principles/processes/mechanisms, the challenge is conceptual and in fact twofold. To define a practice as high impact, we must measure its effectiveness, yet to measure its effectiveness, we must conceptually define *it* in the first place. I argue that in the absence of a satisfactory conceptualization of HIPs with which to bridge this circular problem, there is a limit to the ability to derive generalizable principles of program design and impact that researchers have called for (Bailey & Alfonso, 2005; Crisp & Taggart, 2013; Hatch, 2012; Swaner & Brownell, 2009).

Table 1. Special, Promising, and High-Impact Practices Named in Selected Literature Reviews and Institutional Reports

	Categories and Principal Timing of Interventions as Proposed by CCCSE (2012)										
	Planning for Success			Initiating Success				Sustaining Success			
Assessment and Placement	Timely Registration	Academic Advising	Orientation, First-Year Seminars, College Success Courses	Learning Communities	Accelerated Developmental Education	Early Warning Programs	Experiential Learning, Internships	Tutoring	Supplemental Instruction	Class Attendance (and Policies)	Collaborative Learning Practices
Kulik, Kulik, & Shwalb (1983)		X	X		X						
Hankin (1996)*	X	X	X	X	X	X		X	X		X
Bailey & Alfonso (2005)		X	X	X	X						
AAC&U (2007; cf. Swamer & Brownell, 2009)*			X								X
Karp (2011)		X	X	X							
CCCSE (2012, 2013, 2014)	X	X	X	X	X	X	X	X	X	X	
Crisp & Taggart (2013)			X						X		

* Hankin (1996) includes programs noted in this table plus policy considerations that are understood as forming a comprehensive "First-Year Experience" philosophy.

Conceptualizing Structured Student Success Programs as Activity Systems

Despite the lack of conceptual definitions for HIPs, some programs seem to fit together intuitively. CCCSE's (2012) tentative framework identifies five programs in particular that are more frequently studied among other high-impact practices and often grouped together (see Table 2.1): first-year seminars, college success courses, learning communities, orientation programs, and accelerated developmental education. CCCSE referred to these interventions as "structured group learning experiences" (SGLEs) and noted that they "reflect the goal of ensuring that students are successful in the early weeks and then through the first year of college [though] they can occur at different points in students' entering experiences and extend over differing time periods" (CCCSE, 2012, p. 16). Evidence shows that indeed they often have as much in common as what differentiates them in curricular features (Hatch & Bohlig, 2016).

I propose that cultural historical activity theory (CHAT) offers a compelling framework for explaining why these programs resemble one another and form a common group, not just in a general conceptual way but in terms that provide specific ways for researchers and practitioners to understand and unpack their complex structures. The key is in how CHAT views human interactions as driven by goals within a culturally bound system of individuals who, collectively, use tools and artifacts to accomplish those goals in light of rules and cultural norms. This is what is called sociocultural activity, and it can be effective and harmonious or inefficient and riddled with inherent tensions. The goal of CHAT is largely to uncover inherent tensions to improve practice.

CHAT, sometimes termed just activity theory, traces its history to the work of Russian educational psychologist Lev Vygotsky and colleagues (Roth & Lee, 2007; Vygotsky, 1987). Vygotsky proposed that classical ideas suggesting that human behavior is a function of stimulus and response were too simplistic to explain real-world, complicated human interactions. His innovation was to propose that tools, both concrete and abstract, mediate the relationship between individuals and their actions. Accordingly, humans continually forge new tools and social artifacts to navigate their collective and individual goals. This three-way relationship forms the basic structure of an activity system (Engeström, 2000, 2010). An activity system consists of its *participants*, the *object* or motive of the activity, its mediating *artifacts* (instruments, tools, symbols, and prior knowledge), the *rules* generally followed in carrying out the activity, the *community* of peers or colleagues involved in the activity, and the *division of labor* within the activity.

The outcome of an activity system—that is, the work produced or, in this case, desired student outcomes of persistence, graduation, transfer, among others—is external to the system itself. But the object (also called the purpose, motive, the immediate task) that people work on together to

ultimately achieve that outcome is a defining aspect of the system. This distinction between goals and outcomes has parallels in the field of program evaluation (see McComb and Lyddon, Chapter 7). In my reading of the research literature, and reflected in the literature reviews (Bailey & Alfonso, 2005; CCCSE, 2012; Crisp & Taggart, 2013; Hankin & Gardner, 1996; Kulik et al., 1983; Swaner & Brownell, 2009), I find that authors consistently characterize student success programs and interventions—despite their particulars—as ultimately designed around a common set of purposes: to socialize entering students to college life and equip them with the self-regulatory skills, knowledge, and social and academic networks that are associated with later positive outcomes.

CHAT posits that “the main thing that distinguishes one activity from another . . . is the difference between their objects [which] gives [them] a determined direction . . . the object of the activity is its true motive” (Leont’ev, 1978, p. 62). The object is “the reason why individuals and groups choose to participate in an activity . . . and what holds together the elements of an activity . . . [and] may lead them to create or gain new artifacts or cultural tools intended to make the activity robust” (Yamagata-Lynch, 2010, p. 17). In this view, CHAT suggests that student success courses and programs, in all their variations, may be instances of a broader kind of activity and explains why they are intuitively connected. I call this concept a structured group socialization experience (SGSE), a term adapted from CCCSE’s label, structured group learning experiences (SGLEs; CCCSE, 2012), in recognition of their sociocultural nature that links them.

Using Activity Theory in Research and Practice of Student Success Programs

CHAT as applied to student success programs is as relevant to practice as to research. The implications of this framework for both are presented below. For a more in-depth treatment of CHAT in educational research and practice, I refer readers to Roth and Lee’s (2007) article in *Review of Educational Research* and to Yamagata-Lynch’s (2010) book, which describes in practical terms how to undertake activity system analysis, one of the methodological approaches to CHAT research.

Implications for Practice. CHAT is not just a useful theoretical notion. Just as important, CHAT provides a framework for practitioners to understand and improve their practice. In fact, CHAT was originally created not necessarily for scholarly investigation, but as a way for practitioners themselves to reflect on their own day-to-day work and improve systems to better achieve desired outcomes (Engeström, 1993). CHAT takes a systemic view of daily work to unpack how individuals work together toward goals and to find ways to improve that collaboration. CHAT recognizes that human systems of work are inherently characterized by inner contradictions, and so the goal of applying CHAT to understand work

processes is to uncover those contradictions and find resolutions to them (through the clarification of goals, the creation of new tools, new rules, or the involvement of people in new ways, among other ways). This process, like any institutional improvement or change, can be haphazard or it can be purposeful. CHAT provides practitioners with a way to understand their work and a process to make it better. That is to say, CHAT is much more than a way understand *practice* in abstract terms. Rather, it calls for engaging in what some refer to as *praxis*, which is applying and enacting an ongoing process of learning and growing (Grundy, 1987). In short, this is a type of institutional reform that Bailey and Alfonso (2005) called for to improve community college persistence.

Roth and Lee (2007) reviewed some of the most prominent examples of how CHAT has been used in this practical manner. Primary among them are the *change laboratory* (Engeström, Virkkunen, Helle, Pihlaja, & Poikela, 1996) and *boundary-crossing laboratory* (Engeström, 2010). In a change laboratory, a work group is convened that involves all stakeholders in the program, from administrators to faculty to students. The work group uses a rich set of tools (video recordings, databases, editing software, etc.) for collectively identifying tensions that occur in a system in order to develop new work processes that overcome these tensions. A boundary-crossing laboratory extends this idea to work accomplished by multiple groups or across systems, such as academic divisions or between, say, academic affairs and student services. These laboratories share similarities with systems theory (Senge, 2006) and other popular quality improvement processes (Dew & Nearing, 2004) but go beyond the goal of *managing* institutional function to being the purview of workers *conducting* the work themselves.

Possibilities for these laboratories as applied to community college student success programs are illustrated in two studies (Engeström, Engeström, & Suntio, 2002a, 2002b) that describe change laboratories convened by middle-school faculty members to establish a new vision for the school and devise practices to achieve the vision. The goal to align practice with vision is common to nearly all educational settings, including community colleges. Similar to many community colleges and the students they serve, the case described by Engeström and colleagues was of an institution situated in an economically disadvantaged area with a large population of recent immigrants and refugees. To accomplish their task of aligning practice with their vision, faculty members and researchers came together in weekly 2-hour sessions over the course of 11 weeks to analyze their daily work, unpack assumptions of their actions, and devise new curricular and pedagogical goals. Researchers tracked the implementation of their proposed innovations over the subsequent 18 months to observe what practitioners did to improve their own work.

During the change laboratories, faculty members used the dimensions of activity systems to describe how things currently operate and how things would best operate. In this way, they tracked the roots of

classroom tensions, which at first instructors characterized as problems arising from student poverty, apathy, and lack of preparation. But by considering a systemic understanding of the individual, social, and institutional settings of their practice, faculty members converged on the concept of a capstone project that was personally meaningful to students and represented something more than just a final report card—something the students could take pride in and show to family and school officials. In the course of devising this new curricular goal, the researchers observed that instructors' manner of speaking about their students turned from predominantly negative attributes of apathy and incompetence (clearly deficit-oriented perspectives) to predominantly positive attributes of their energy and competency. The change was gradual and came about only in relation to how they themselves understood the entire system collectively.

Rather than just a curricular innovation, the change laboratories spurred an institutional innovation by working through everyday tasks that needed to be accomplished. This is an example of organically developing and implementing one kind of high-impact practice—in this case, a capstone project—through critical self-examination of practices by practitioners, rather than as a token practice implemented in a silo or by an independent group. The researchers attributed the faculty members' success in improving their work to their being attentive to the *multiple voices* of many participants who collectively constitute the activity system of diverse classrooms where the school was situated.

This last idea relates to other applications that Roth and Lee (2007) recommend to practitioners of a *coteaching/cogenerative dialoguing* model wherein coteaching by all stakeholders informs curriculum redesign. Cogenerative dialoguing occurs as “all participants contribute to the emerging understanding and theories of practice, and a checklist is elaborated to monitor these sessions so that individual voices are not silenced” (Roth & Lee, 2007, p. 212), including the voices of the students themselves (Bondi, 2013). This approach has the potential to accomplish fundamental changes in how we collectively make sense of how students, especially the most vulnerable cultural communities in the United States, engage in college-going (Gildersleeve, 2010). This approach to improving educational practices more readily leads educators to using an asset-based approach that creates spaces for the critical voices of students and puts the burden on the system and institution broadly, instead of common deficit-based approaches that put the burden on marginalized students to make improvements (see Acevedo-Gil & Zerquera, Chapter 6).

Implications for Research. CHAT is traditionally used in qualitative studies and readily lends itself to methodically documenting and analyzing complex human interactions as they develop over time (Roth & Lee, 2007). The added value that CHAT and related analyses bring to qualitative research includes its ability to simultaneously account for multiple layers of real-world human experiences while contextualizing them within

the whole. The unit of analysis is human activity itself, embedded within its social context. The result is the ability to unpack both instances and patterns of why and how systems work, not just the themes or principles that characterize them. The level of analysis is scalable from particular episodes of interactions to programs to whole institutions.

Though rare, quantitative analyses using CHAT as a framework have proven useful where the object is to understand differences in outcomes resulting from program heterogeneity, rather than differences attributable merely to the dichotomous measure of participation or nonparticipation (Atteberry & Bryk, 2011; Plewis & Mason, 2005). In a quantitative study, this means operationalizing multiple levels of variables within a single analytical model and then interpreting the findings in light of the whole, preferably using a longitudinal research design to account for how the influence of system elements may change over time.

CHAT can be used to address many of the shortcomings of the research literature on HIPs. Some instances follow. Kulik and colleagues (1983) found that newly implemented special programs are more effective than institutionalized programs. They hypothesized that this was related mostly to a drop-off in institutional energy, enthusiasm, and possibly funding for older programs, rather than inherent differences between program designs. CHAT is ideally suited to explore this hypothesis—not just whether such a drop-off occurs but if so how and why. According to Bailey and Alfonso (2005), an important limitation is that most studies on program effectiveness are based on single-institution samples, limiting the generalizability of findings. But by conceptualizing multiple programs across institutions as parallel types of activity systems, which necessarily account for local circumstances, CHAT helps address this problem. In another example, Crisp and Taggart (2013) “challenge researchers to be mindful of designing interventions that expose the participants to more than one treatment (e.g., simultaneous participation in a learning community and mentoring program) . . . [so as to] avoid the threat of multiple treatment interference” (p. 126). Fidelity of program implementation is indeed too often a weak point in program effectiveness research, and there are techniques to limiting and therefore accounting for sources of variation in program effects (Weiss, Bloom, & Brock, 2013). But ultimately, extending the scope of program effectiveness research not just across multiple institutions but across related strands of literature requires us to flip the common and costly method of controlling implementation details to that of measuring the effects of a program in terms of variations in their implementation details. CHAT provides a framework to understand variations in programs designed for similar purposes, across research sites, and even across particular analytical methods.

Student Success Programs Among Many HIPs. Last, and in broad terms, CHAT can inform the practice of SGSEs within a broader First-Year Experience (FYE), as envisioned by Hankin and Gardner (1996), who affirm that the FYE philosophy involves a notion of “intentionality” and

“includes making a systematic study and effort to identify the variables that interfere with freshman success and then designing programs to address these variables” (p. 10). These ideas are reminiscent of the object-oriented nature of activity systems and the process of uncovering tensions and contradictions within them. Thus, an FYE can be thought of as a broad-reaching activity system made of multiple subsystems. The closer they are aligned around a common and central goal to ensure student success, with tools and rules and regulations and the division of labor aligned around that purpose, ostensibly the more likely tensions will be minimized or manageable. But systems outside of college—such as work, family, and transportation systems—often work at odds with the object of successful college-going. This suggests at least one possible reason for findings that programmatic impacts are limited or fade over time (Rutschow, Cullinan, & Welbeck, 2012). As students exit an SGSE, their integration in a larger community of practice that collectively pursues a common object may weaken as these other systems overwhelm their college success. If so, this would underscore the potential impact of both programmatic and diffused student success strategies that many have called for (CCCSE, 2012; Karp, Chapter 3) and that extend well beyond the first year (Nora, Barlow, & Crisp, 2005).

Whether student success programs and other high-impact practices are conceptualized in the terms I have proposed here or in other ways useful for their design, evaluation, and broader implementation (where the evidence actually turns out to be favorable), it is clear from current research and practice that a more coherent framework is needed than the current state of the art provides. Activity theory shows one way forward in conceptualizing, enacting, and evaluating a FYE philosophy of interlocking systems of activity of distributed promising practices.

Note

1. The terms Kulik, Kulik, and Shwalb (1983) used were “socially, economically, and educationally deprived groups ... disadvantaged students” (p. 398). I opt to use the converse of these deficit-oriented terms.

References

- Association of American Colleges & Universities. (2007). *College learning for the new global century: A report from the National Leadership Council for Liberal Education & America's Promise*. Washington, DC: Author.
- Atteberry, A., & Bryk, A. S. (2011). Analyzing teacher participation in literacy coaching activities. *Elementary School Journal, 112*(2), 356–382.
- Bailey, T., & Alfonso, M. (2005). *Paths to persistence: An analysis of research on program effectiveness at community colleges*. Indianapolis, IN: Lumina Foundation.
- Bondi, S. (2013). Using cogenerative dialogues to improve teaching and learning. *About Campus, 18*(3), 2–8.
- Brownell, J. E., & Swaner, L. E. (2009a). High-impact practices: Applying the learning outcomes literature to the development of successful campus programs. *Peer Review, 11*(2), 26–30.

- Brownell, J. E., & Swaner, L. E. (2009b). Outcomes of high impact educational practices: A review of the literature. *Diversity & Democracy*, 12(2), 4–6.
- Center for Community College Student Engagement. (2012). *A matter of degrees: Promising practices for community college student success (a first look)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Center for Community College Student Engagement. (2013). *A matter of degrees: Engaging practices, engaging students (high-impact practices for community college student engagement)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Center for Community College Student Engagement. (2014). *A matter of degrees: Practices to pathways (high-impact practices for community college student success)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Chickering, A.W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3–7.
- Crisp, G., & Taggart, A. (2013). Community college student success programs: A synthesis, critique, and research agenda. *Community College Journal of Research and Practice*, 37(2), 114–130.
- Dew, J. R., & Nearing, M. M. (2004). *Continuous quality improvement in higher education*. Westport, CT: Rowman & Littlefield.
- Engeström, Y. (1993). Developmental studies of work as a test-bench of activity theory: The case of primary care medical practice. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 64–103). Cambridge, United Kingdom: Cambridge University Press.
- Engeström, Y. (2000). Activity theory as a framework for analyzing and redesigning work. *Ergonomics*, 43(7), 960–974.
- Engeström, Y. (2010). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133–156.
- Engeström, Y., Engeström, R., & Suntio, A. (2002a). Can a school community learn to master its own future? An activity-theoretical study of expansive learning among middle school teachers. In G. Stahl (Ed.), *Computer support for collaborative learning: Foundations* (pp. 318–324). Mahwah, NJ: Lawrence Erlbaum.
- Engeström, Y., Engeström, R., & Suntio, A. (2002b). Can a school community learn to master its own future? An activity-theoretical study of expansive learning among middle school teachers. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: Sociocultural perspectives on the future of education* (pp. 211–224). Oxford, United Kingdom: Blackwell.
- Engeström, Y., Virkkunen, J., Helle, M., Pihlaja, J., & Poikela, R. (1996). The Change Laboratory as a tool for transforming work. *Lifelong Learning in Europe*, 1(2), 10–17.
- Finley, A., & McNair, T. B. (2013). *Assessing underserved students' engagement in high-impact practices*. Washington, DC: Association of American Colleges & Universities.
- Gildersleeve, R. E. (2010). *Fracturing opportunity: Mexican migrant students and college-going literacy* (2nd ed.). New York, NY: Peter Lang.
- Grundy, S. (1987). *Curriculum: Product or praxis*. New York, NY: Routledge.
- Hankin, J. N. (1996). *The community college: Opportunity and access for America's first-year students* (Monograph No. 19). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Hankin, J. N., & Gardner, J. N. (1996). The freshman year experience: A philosophy for higher education in the new millennium. In J. N. Hankin (Ed.), *The community college: Opportunity and access for America's first-year students* (Monograph

- No. 19, pp. 1–10). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Hatch, D. K. (2012). Unpacking the black box of student engagement: The need for programmatic investigation of high-impact practices. *Community College Journal of Research and Practice*, 36(11), 903–915.
- Hatch, D. K., & Bohlig, E. M. (2016). An empirical typology of the latent programmatic structure of promising practices at community colleges. *Research in Higher Education*, 57(1), 72–98. doi:10.1007/s11162-015-9379-6
- Karp, M. M. (2011). *Toward a new understanding of non-academic student support: Four mechanisms encouraging positive student outcomes in the community college* (CCRC Working Paper No. 28). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges & Universities.
- Kuh, G. D., Hatch, D. K., Seifert, T. A., Finley, A., McNair, T. B., & Mayhew, M. J. (2013, November). *Data, methods, and evidence to identify high-impact practices*. Symposium presented at the annual meeting of the Association for the Study of Higher Education (ASHE), St. Louis, MO.
- Kuh, G. D., & O'Donnell, K. (2013). *Ensuring quality & taking high-impact practices to scale*. Washington, DC: Association of American Colleges & Universities.
- Kulik, C.-L. C., Kulik, J. A., & Shwalb, B. J. (1983). College programs for high-risk and disadvantaged students: A meta-analysis of findings. *Review of Educational Research*, 53(3), 397–414.
- Leont'ev, A. N. (1978). *Activity, consciousness, and personality*. Englewood Cliffs, NJ: Prentice Hall.
- Nora, A., Barlow, E., & Crisp, G. (2005). Student persistence and degree attainment beyond the first year in college. In A. Seidman (Ed.), *College retention: Formula for student success* (pp. 129–153). Westport, CT: ACE/Praeger.
- Plewis, I., & Mason, P. (2005). What works and why: Combining quantitative and qualitative approaches in large-scale evaluations. *International Journal of Social Research Methodology*, 8(3), 185–194.
- Roth, W.-M., & Lee, Y.-J. (2007). "Vygotsky's neglected legacy": Cultural-historical activity theory. *Review of Educational Research*, 77(2), 186–232.
- Rutschow, E. Z., Cullinan, D., & Welbeck, R. (2012). *Keeping students on course: An impact study of a student success course at Guilford Technical Community College*. New York, NY: MDRC.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. Westminster, MD: Random House.
- Swaner, L. E., & Brownell, J. E. (2009). *Outcomes of high impact practices for underserved students: A review of the literature*. Prepared for the Association of American Colleges and Universities Project USA. http://www.heritage.edu/Portals/0/pdfs/Faculty_and_Staff/CILT/Outcomes_of_High_Impact_Practices.pdf
- Vygotsky, L. S. (1987). *The collected works of L. S. Vygotsky* (R.W. Rieber & A. S. Carton, Eds.). New York, NY: Plenum.
- Weiss, M. J., Bloom, H. S., & Brock, T. (2013). *A conceptual framework for studying the sources of variation in program effects*. New York, NY: MDRC.
- Yamagata-Lynch, L. C. (2010). *Activity systems analysis methods: Understanding complex learning environments*. New York, NY: Springer.