



## Theoretical Analysis

## Identity formation in educational settings: A critical focus for education in the 21st century

Avi Kaplan<sup>a,\*</sup>, Hanoeh Flum<sup>b</sup><sup>a</sup> Temple University, United States<sup>b</sup> Ben Gurion University of the Negev, Beer Sheva, Israel

## ARTICLE INFO

## Article history:

Available online 28 February 2012

## Keywords:

Identity formation  
Students  
Context

## ABSTRACT

There is growing recognition that identity formation must become an important focus in education. Particularly in the 21st century, when modes of knowledge construction and accessibility to different types of knowledge are rapidly increasing and diversifying, academic learning cannot be divorced from students' development of values, goals, social roles, and worldviews. The articles in this special issue present a diverse collection of research on students' identity formation in educational settings. Yet, despite the diversity in perspectives, educational contexts, samples, and research and analytic methods, all of the articles highlight the role of the educational context in identity formation processes. We begin this introduction with a brief review of the increasing attention to identity formation in education. We follow with synopses of each of the articles in this special issue.

© 2012 Elsevier Inc. All rights reserved.

## 1. Introduction

Two decades ago, Perkins (1992) warned against wanting too much of education: “we know all too well what we want. It can be put in a single word: *everything*. . . not only knowledge but citizenship, moral rectitude, comfortable social relations, a more able work force, and so on” (p. 4). Lamenting that, while aiming at “everything”, education spreads too thin and ends up achieving little, Perkins argued for narrowing down the goals of education to focus on the pursuit of what he perceived as the educational project's core: “generative knowledge” (p. 5): the “Retention of knowledge; Understanding of knowledge; [and] Active use of knowledge” (p. 5). However, recent analyses of the characteristics of life and society in the 21st century suggest that knowledge—broad and deep as it may be—is not nearly enough (Partnership for 21st Century Skills, 2009). The increasingly rapid change in the content, volume, and accessibility of knowledge makes a sole emphasis on knowledge in education an almost futile endeavor. More important, perhaps, is the realization by educators, parents, employers, and students themselves, that they desire and need more from education than just knowledge—they want education to promote development of students' identities: *self*-knowledge, values, goals, and orientation and skills for personal and social transformation that would help in coping with the rapid changes that characterize life in this century (Brophy, 2009; Flum & Kaplan, 2006; Harrell-Levy & Kerpelman, 2010).

From certain perspectives, the foci on knowledge and on identity converge in education. Understanding classrooms as “communities of learners” and the process of learning as being socialized into “communities of practice” implies that learning “generative knowledge” is synonymous with developing identification with certain groups and adopting their practices—e.g., historians, mathematicians, scientists—thus rendering such knowledge the core component of students' actual or potential identities (Gee, 2000). Yet, in a telling example, studies by the Carnegie Foundation for the Advancement of Teaching on professional education in different disciplines strongly emphasized going beyond “knowledge” to focus on students' developing identities as imperative to the success of preparing professionals for jobs in the 21st century. For example, Colby, Ehrlich, Sullivan, and Dolle (2011), who reviewed the characteristics of undergraduate business education in the US, concluded that “[t]oo often undergraduate business programs fail to prepare graduates to understand deeply what their lives could be about in any full sense or what their places should be in the world around them. . . As a result, they are not adequately prepared to be leaders in business or to gain full satisfaction in their personal and civic lives.” Colby et al. called “to reconfigure business preparation overall in order to develop students' abilities to integrate business knowledge and skills with a broad understanding of the world and our times so as to be able to participate in the larger social world, as business professionals but also as citizens and as persons” (accessed on September 17, 2011). In their study on medical education in the US, Cooke, Irby, and O'Brien (2010) concluded that in order for medical education to fulfill its mission in preparing physicians for work in the 21st century, “[p]rofessional identity formation—the development of

\* Corresponding author. Address: Psychological Studies in Education, College of Education, Temple University, Philadelphia, PA 19122, United States.

E-mail address: [akaplan@temple.edu](mailto:akaplan@temple.edu) (A. Kaplan).

URL: <http://www.bgu.ac.il> (A. Kaplan).

professional values, actions, and aspirations—should be the backbone of medical education” (accessed on Sept. 17, 2011). Similarly, after reviewing the field of engineering education in the US, Sheppard, Macatangay, Colby, and Sullivan (2009) argued that “[i]f students are to be prepared to enter new-century engineering, the center of engineering education should be professional practice, integrating technical knowledge and skills of practice through a consistent focus on *developing the identity and commitment of the professional engineer*” (p. xxii, emphasis added). Unfortunately, Sheppard et al.’s extensive review of engineering education programs also indicated that the focus on students’ formation of professional identities is the “least realized, most outsourced, and least connected component in the linear components model so prevalent in US. undergraduate engineering education” (p. 136). Similar views have been expressed in relation to other professional education domains—including teacher education (Fairbanks et al., 2011).

The notion that education and identity are linked has been long recognized by scholars from various disciplines (Davidson, 1996; Delpit, 1995; Erikson, 1968; Gee, 2000; Kaplan & Flum, 2009; McCaslin, 2004; Ogbu, 1987). Some scholars emphasized how group identity may shape quality of academic engagement (e.g., Ogbu, 1987; Oyserman, Bybee, & Terry, 2003; Steele, 1997). Other scholars pointed to the ways by which school-life and quality of engagement may affect students’ identity (e.g., Davidson, 1996; Delpit, 1995). Yet others described the co-construction of students’ engagement and identities (e.g., McCaslin, 2004). Indeed, school contexts and school-work constitute central domains in students’ life experiences and sense of who they are and who they want to become. With the onset of the adolescence stage increasingly occurring in earlier ages, the concept of identity and processes of identity formation seem to have potential to provide fruitful insights into the educational processes of a growing number of school-goers. Currently, for example, it is an accepted assumption that school experiences are fundamental building blocks in the development of contemporary youth’s identity components such as self-concept, personal values, interests, and career goals (Kaplan & Flum, 2009; Roeser, Peck, & Nasir, 2006; Super, 1980; Wigfield & Wagner, 2005). However, whereas theory and research have been looking at the relations of academic engagement and *identity components*, it is only recently that researchers have started to look more systematically at the role of educational contexts in the processes of *identity formation*—the different ways by which adolescents approach the task of identity (Lannegrand-Willems & Bosma, 2006). The literature on identity formation is vast and has contributed to some very important insights concerning psychological processes that contribute to positive coping, adjustment, and well-being (Waterman, 1999). Moreover, recently scholars have argued that life in the 21st century will require the orientation and skills to repeatedly explore and reconstruct identity in order to cope with continuous change and uncertainty (Flum & Kaplan, 2006). Together with others, we believe that the goals of education go beyond the objectives of a high GPA, conceptual change, critical thinking, or the acquisition of self-regulation skills, and should be conceptualized in terms of broad developmental goals such as adaptive construction of identity (Kaplan & Flum, 2009). Thus, together with others, we hold that in addition to the focus on generative knowledge, and on participation in current communities of practice, education must focus on the adaptive formation of students’ identities—promoting students’ confidence, agency, and skills in questioning and revising current self-aspects and identifications (Flum & Kaplan, 2006).

Clearly, students form identities regardless of educators’ explicit attention or schools’ intentional efforts (Meeus, 2011), and do it in increasingly diverse ways that may be unrelated to school (Greenhow, Robelia, & Hughes, 2009). However, it is also the case

that identity formation is variable—sometimes more and sometimes less adaptive (Marcia, 1993)—and is strongly intertwined with and shaped by the contexts within which it takes place, such as educational settings (Lannegrand-Willems & Bosma, 2006). Schools could and should provide contexts that promote more adaptive developmental identity formation trajectories (Eccles & Roeser, 2011). Moreover, the close link between identity and learning highlights the potential for harnessing the psychological energy of identity formation to promote adaptive learning as well as developmental goals (Flum & Kaplan, 2006). Therefore, we believe that research that investigates the nature of identity formation processes in educational settings, and in particular research that highlights the role of educational environments in promoting adaptive engagement in identity formation, is of great interest and importance to the educational psychology community.

The past decade has seen an increased interest in identity processes in education (Beijaard, Meijer & Verloop, 2004; Gee, 2000; Kaplan & Flum, 2009; Lannegrand-Willems & Bosma, 2006; Nolen, Ward, & Horn, 2011). However, with the increased attention also come complications. The term “identity” has been used in many different ways, and from multiple perspectives, to refer to quite varying processes (Brubaker & Cooper, 2000; Gee, 2000). It was with this background in mind that we engaged in recruiting the authors of the studies in the current special issue.

## 2. The current special issue

Attention to identity and identity formation in educational settings can be, and has been, directed at any of the various actors in the educational project (e.g., students, teachers, principles, parents) and at different units of analysis (e.g., individuals, teams, classrooms, educational organizations). In the current special issue we chose to focus on students’ identity formation, leaving the focus on the identity of other agents and roles in education to future endeavors. Furthermore, for purposes of conceptual clarity, and with the desire to form relations to the large body of identity formation literature in developmental psychology, as well as to pay homage to Erikson (1968), who has done, perhaps, more than anyone else to promote the psychological concept of identity, we asked the authors to make explicit connections between their research and the Eriksonian conception of identity formation (Erikson, 1968; Marcia, 1993; Waterman, 1999). Admittedly, there are other important and influential theoretical perspectives on identity and identity formation in educational settings (see Gee, 2000; Holland, Lachicotte, Skinner, & Cain, 1998; Sfard & Prusak, 2005; Wenger, 1998), many of which are compatible with and complement the Eriksonian perspective (e.g., McCaslin, 2009; Penuel & Wertsch, 1995). These receive only little attention in the current issue. However, despite these focusing parameters, the articles in the current issue are quite diverse on many dimensions, including participants’ age and educational setting which range from early adolescence in middle school and Junior High school in various locations in the US and in Israel, to middle adolescent students in high-schools in the US and Israel, to late adolescent high school and college students in Belgium. The studies also vary in methodology, including an experimental design, longitudinal survey studies, mixed-methods research, and collaborative interventions. In the following we provide a synopsis of each article.

## 3. Elmore and Oyserman: if ‘we’ can succeed, ‘I’ can too: identity-based motivation and gender in the classroom

Kristen Elmore and Daphna Oyserman employed a between-participants experimental design to investigate identity processes among 8th-grade students in a math class. The study took place

in a Detroit-area middle school that serves relatively low-income families. The study investigated the hypothesis, based on Oyserman's Identity-Based Motivation (IBM) model, that boys and girls are sensitive to cues in the school environment that signal whether schooling is congruent with their gender. When success in school is perceived to be congruent with their gender, students would be more likely to imagine themselves as successful and exert effort in their schoolwork. Elmore and Oyserman randomly assigned students to experimental or control conditions in their math classes. In the experimental conditions, students were presented with data implying identity-congruence of success—girls were presented with graphs depicting the State of Michigan high-school graduation rates split by gender, which favor girls, and boys were presented with graphs depicting the State of Michigan income levels split by gender, which favor boys. In the control conditions, the same data were presented to students without breakdown by gender. Students were asked comprehension questions about the graphs, responded to measures of future possible selves and educational and income aspirations, and also engaged in math problems that required effort. The findings indicated that relative to the control conditions, in the gender identity-congruent conditions, students' possible selves were more school-focused, students imagined earning more and going farther in school, and boys exerted more effort in the math problems. Elmore and Oyserman highlight how contextual cues can imbue social identity categories such as gender with different content that has implications to students' motivation and imagined future. The authors call on educators to become sensitive to the identity-congruent and incongruent messages that the school environment sends to boys and girls regarding their school success.

#### **4. Faircloth: “Wearing a Mask” vs. connecting identity to learning**

Beverly Faircloth's article presents two collaborative interventions of a researcher and a teacher that were conducted in 9th-grade English classes in a low-income school in the Southeast of the US. Both interventions were informed by Eriksonian as well as socio-cultural perspectives on identity formation (e.g., Holland et al., 1998; Lave & Wenger, 1991; McCaslin, 2004) and aimed to promote connections between students' lives and perspectives and the academic content. In the first intervention, the teacher and researcher relied on two models—Lee's (2007) “cultural modeling” and Gutiérrez's (2008) “third space”—which highlight the need to blend the school's formal content and expectations with students' informal, personal, communal and cultural lived experience, to design various classroom activities that encouraged students to connect the pre-assigned literature to their own experiences and that responded to students' concerns and interests in selecting further literature. In the second intervention, the teacher and researcher designed an individual inquiry project based on Fairbanks' (2000) “kids' business,” in which students could choose an issue to research, write about, and present in their preferred format. The mixed-methods data collected in both interventions included lesson observations, qualitative surveys, and interviews. Data for the first study also included students' products. Analysis of data from both interventions highlighted how the interventions were able to integrate students' perspectives and interests with the 9th-grade English content. Faircloth describes the students' resistance and identity negotiation, as well as the change in their academic engagement and in their participation choices—their “identity-in-practice” as students—that took place once they were given voice and were able to relate their lived experiences to the academic content. Faircloth also emphasizes how the activities led the students—many of who were disaffected from school—to clarify, explore, and reconstruct their own self-sto-

ries and sense of identity, both out and in school. She further highlights the dynamic and reciprocal processes relating students' emerging identities, learning experiences, and sense of belonging to school. Finally, Faircloth points to the potential contribution of instructional strategies such as those enacted in the two interventions to the co-construction of identity and academic engagement.

#### **5. Sinai, Kaplan, and Flum: promoting identity exploration within the school curriculum: a design-based study in a junior high literature lesson in Israel**

Mirit Sinai, Avi Kaplan and Hanoch Flum describe a different collaborative intervention between a researcher and a 9th-grade junior-high literature teacher, which took place in a very different cultural context from the one described by Faircloth—a large school within an agricultural youth village in Israel. Sinai et al.'s collaborative research was based on Flum and Kaplan's (2006) notion of exploratory orientation as an important educational goal and aimed to incorporate identity exploration into the 9th-grade literature lesson. In this study, the researcher and the teacher engaged in a collaborative design of a literature lesson about a poem from the Israeli literature national curriculum. The design included activities aiming to trigger students' identity exploration, support their sense of safety, and provide scaffolding to their exploratory actions. The researchers collected mixed-methods data, including lesson-observation, students' products and reflective journals, and student focus groups, and analyzed them for indicators of identity exploration, exploration triggers, sense of safety, and exploration scaffolds. The findings indicated how different aspects of the lesson were effective in creating exploration triggers among many, albeit not all, students. The findings also pointed to the contribution of the identity exploration-promoting practices to students' motivation and engagement in the subject-domain of literature. Finally, the findings highlighted the non-deterministic and contextual nature of identity exploration, and the need for adopting a dynamic and cyclical approach when designing educational interventions that aim to promote identity exploration within educational contexts (Kaplan, Katz, & Flum, 2012).

#### **6. Yeager, Bundick, and Johnson: the role of future work goal motives in adolescent identity development: a longitudinal mixed-methods investigation**

David Yeager, Matthew Bundick, and Rebecca Johnson's research focused on identity in terms of adolescents' career development, and more specifically, high-school students' thoughts about their future work goals. Occupation and vocational pursuits have been considered a central domain in adolescents' identity formation (Erikson, 1968; Jordaan, 1963) and, traditionally, have been central foci in high-schools. In their study, Yeager et al. emphasized Damon's (2008; Damon, Menon, & Bronk, 2003) notion of “purpose,” and in particular, the sense of purpose that goes beyond self-interest and involves concern for the promotion of welfare of others and of the world. Damon (2008) argued that the pursuit of beyond-the-self purposes is related to eudemonic well-being: having a sense of meaning and purpose in life. In their study, Yeager et al. distinguished between adolescents' vocational goals that involved different types of purposes. The researchers collected survey and open-ended interview data from 8th, 11th, and college sophomore students. These students were a sub-sample of a slightly larger diverse group of students from middle and high schools in the San Francisco Bay Area who provided data on their work goals two years earlier (Yeager & Bundick, 2009). Analyzing adolescents' description of and rationale for their work goals, Yeager et al. categorized the participants into three vocational

identity types: those who pursue self-oriented purposes (desire to match work to skills and interests), those who pursue beyond-the-self purposes (desire to improve the world and the welfare of others), and those who pursue both self-oriented and beyond-the-self purposes for their work goals. The researchers also sought explanation for change in work goals that occurred during the two years, between the first and second data collections. In addition, Yeager et al. used the surveys to assess the adolescents' perceptions of the support they receive from friends and the school in reflecting and learning about their interests, actions, and goals. Overall, the findings indicated that pursuing a combination of self-oriented and beyond-the-self purposes in work was associated both with greater eudemonic well-being, positive change in this well-being, and finding schoolwork meaningful. The findings also indicated interesting differences between middle school and high school students, suggesting that, friends' influence on students' purpose increases whereas teachers' influence decreases with age. Yeager et al. recommend that educators, particularly in high-school, employ adolescents' reliance on friends for promoting collaborative exploration of purposes and work goals.

### **7. Rich and Schachter: high school identity climate and student identity development**

Yisrael Rich and Elli Schachter's article extends the extensive literature on the school social climate to its role in promoting high-school students' identity development. Focusing particularly on middle adolescents and on the context of public religious high schools in Israel, Rich and Schachter drew on the school social climate, academic motivation, and neo-Eriksonian literatures and identified several contextual characteristics hypothesized to constitute identity-promoting features: the teachers are caring and supportive, the teachers provide positive role models, and the school is cultivating the whole student. The researchers hypothesized that students' perceptions of these identity promoting contextual features would be related to students' perceptions that learning in school is meaningful, that teachers affirmed students' agency, and that the school was a safe social environment. In turn, these perceptions were hypothesized to relate to students' confidence in coping with future identity challenges and to their engagement in identity exploration. Rich and Schachter used structural equation modeling on survey data from a large number of high school students to test the hypothesized relations. The findings highlighted the role of students' perceptions of the teachers as worthy role models, and of the school as concerned with their development as whole persons and not just with their academic achievement, as positively related to their identity development. The findings also suggested, however, that these relations were apparent mostly among 9th–11th grade students, with somewhat different patterns emerging among 12th-grade students. The researchers interpreted these findings in relation to the educational context of the study—public religious education in Israel—and the developmental tasks of the younger high-school students relative to those of 12th-graders who are facing graduation and post-graduation decision-making.

### **8. Germeijs, Luyckx, Notelaers, Goossens, and Verschueren: choosing a major in higher education: profiles of students' decision-making process**

In the final empirical study in the special issue, Veerle Germeijs, Koen Luyckx, Guy Notelaers, Luc Goossens and Karine Verschueren relied on neo-Eriksonian theoretical perspectives in identity formation and career development to investigate 12th grade Belgian high-school students' decision of a major in higher education. In

Belgium, students are required to choose their higher education major in 12th grade. No doubt, this feature of the Belgian high-school context requires students to make identity-relevant decisions. Counselors, teachers, parents, and students themselves may be concerned about how to advise students in this important decision-making process. Whereas the final decisions have identity implications, the process of decision-making may reflect different identity formation styles and strategies that can have implications on later adjustment. Germeijs et al. investigated how different styles or approaches to the decision-making related to students' adjustment in college. The researchers collected survey data about students' approach to decision-making about the major at the end of high-school and survey data about students' adjustment to college two years later. Using a person-centered Latent Class Cluster Analysis, the researchers characterized four decision-making profiles along six dimensions that have been identified in the identity formation and career development literatures as relevant to adaptive decision-making: an orientation towards making an identity-relevant decision, exploration of self-aspects, broad exploration of a diversity of career alternatives, in-depth exploration of a few selected alternatives, advanced processing in making a decision, and a commitment to a certain alternative. The authors used Marcia's (1993) identity status paradigm as a guide in characterizing the profiles and in formulating hypotheses about the adaptive nature of various decision-making profiles. The analysis pointed to four decision-making profiles that corresponded with characteristics associated with Marcia's four identity formation statuses: identity achievement, foreclosure, moratorium, and diffusion. Students who engaged in all forms of exploration of alternatives and also reported having firm commitments to their selected major at 12th grade were labeled as holding the "achievement" profile. As hypothesized, these students reported engaging in a thoughtful decision-making process, had low anxiety and high-perceived ability of making identity-relevant decisions, and manifested the most adaptive academic and social adjustment in their second year in college. Students who were firmly committed to their major but engaged only in moderate exploration and were not so keen on engaging in a decision-making process were labeled as holding the "foreclosure" profile. These students displayed an adaptive profile of low anxiety, high self-efficacy, and a relatively adaptive adjustment in college. Students who reported high exploration but moderately-low or low commitment to a major were labeled as holding the "moratorium" profile. These students reported engaging in a thoughtful decision-making, but also had high anxiety and low self-efficacy, and their adjustment to college was not as high as that of the students in the two committed profiles. Finally, students who were moderately low or very low on all exploration variables and on commitment to the major were labeled as holding the "diffusion" profile. These students reported relatively high anxiety and relatively low self-efficacy in making the decision about their major, and also had relatively low adjustment to college. The authors note that the contextual emphasis on such an important decision in a relatively early age may contribute to stress and lower adjustment among students who have not yet made a commitment to a major. The authors also note that among those who made such a commitment, students who engaged in more exploration manifested a better profile of adjustment. They recommend that educators and counselors promote self as well as environment exploration about possible majors, also among students who have made a commitment to the major but engaged only in little exploration.

We close the special issue with an analytical article in which we provide a critical perspective on the topic of identity formation in educational settings, drawing on examples from the collection of the articles in this Issue. We begin by noting the complexity, multidimensionality, and, indeed, ambiguity, of the concept of

Identity, and yet also its indispensable contribution to capturing central cultural, social, and psychological phenomena. We make a special emphasis on the contextualized nature of identity and identity formation processes, noting, in particular, Erikson's (1968) view of these processes as inextricably interrelating the individual and the social-cultural context. We follow to highlight several central themes in understanding identity formation processes in educational settings: the roles of cues in the immediate context; the role of the teacher in students' identity formation processes and in the interplay among identity formation, motivation, and learning; and the role of the broader contexts within which teachers, students, and academic content interact.

The articles in this special issue represent diversity of theoretical and methodological approaches to the domain of identity formation in educational settings. Yet, work in this domain is only emerging. We sincerely hope that this collection will spur interest and promote future theoretical and empirical work as well as guide educational practice in what we consider a critical focus for education in the 21st century.

## References

- Brophy, J. (2009). Connecting with the big picture. *Educational Psychologist*, 44, 147–157.
- Brubaker, R., & Cooper, F. (2000). Beyond "identity". *Theory and Society*, 29, 1–47.
- Colby, A., Ehrlich, T., Sullivan, W. M., & Dolle, J. R. (2011). *Rethinking undergraduate business education: Liberal learning for the profession*. San Francisco: Jossey-Bass. <<http://www.carnegiefoundation.org/newsroom/press-releases/carnegie-study-calls-rethinking-undergraduate-business-education>>. Accessed 17.09.2011.
- Cooke, M., Irby, D. M., & O'Brien, B. C. (2010). *Educating physicians. A call for reform of medical school and residency*. San Francisco: Jossey-Bass.
- Damon, W. (2008). *The path to purpose: helping our children find their calling in life*. New York: Simon & Schuster.
- Damon, W., Menon, J., & Bronk, K. C. (2003). The development of purpose during adolescence. *Applied Developmental Science*, 7, 119–128.
- Davidson, A. L. (1996). *Making and molding identity in schools: student narratives on race, gender, and academic achievement*. New York: SUNY Press.
- Delpit, L. (1995). *Other people's children: cultural conflict in the classroom*. New York: The New Press.
- Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence*, 21, 225–241.
- Erikson, E. H. (1968). *Identity: youth and crisis*. New York: Norton.
- Fairbanks, C. M. (2000). Fostering adolescents' literacy engagements: "Kids' business" and critical inquiry. *Reading Research and Instruction*, 40, 35–50.
- Fairbanks, C. M., Duffy, G. G., Faircloth, B. S., He, Y., Levin, B., Rohr, J., et al. (2011). Beyond knowledge: exploring why some teachers are more thoughtfully adaptive than others. *Journal of Teacher Education*, 61, 161–171.
- Flum, H., & Kaplan, A. (2006). Exploratory orientation as an educational goal. *Educational Psychologist*, 41, 99–110.
- Gee, J. P. (2000). Identity as an analytic lens for research in education. *Review of Research in Education*, 25, 99–125.
- Greenhow, C., Robelia, B., & Hughes, J. E. (2009). Learning, teaching, and scholarship in a digital age: Web 2.0 and classroom research: What path should we take now? *Educational Researcher*, 38, 246–259.
- Gutiérrez, K. D. (2008). Developing a sociocritical literacy in the third space. *Reading Research Quarterly*, 43, 148–164.
- Harrell-Levy, M. K., & Kerpelman, J. L. (2010). Identity process and transformative pedagogy: teachers as agents of identity formation. *Identity*, 10, 76–91.
- Holland, D., Lachicotte, W., Jr., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Jordaan, J. P. (1963). Exploratory behavior: the formation of self and occupational concepts. In *Career development: self-concept theory: essays in vocational development* (pp. 42–78). Princeton, NJ: College Entrance Examination Board.
- Kaplan, A., & Flum, H. (Guest Eds.) (2009). Special issue: Motivation and identity. *Educational Psychologist*, 44(2).
- Kaplan, A., Katz, I., & Flum, H. (2012). Motivation theory in educational practice. Knowledge claims, challenges, and future directions. In *APA Educational Psychology Handbook*. In T. Urdan (Ed.), *Individual differences, cultural considerations, and contextual factors in educational psychology* (Vol. 2, pp. 165–194). Washington, DC: American Psychological Association. Ch. 7.
- Lannegrund-Willems, L., & Bosma, H. A. (2006). Identity development in-context. The school as an important context for identity development. *Identity*, 6, 85–113.
- Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge, MA: Cambridge University Press.
- Lee, C. (2007). *Culture, literacy, and learning*. New York: Teachers College Press.
- Marcia, J. E. (1993). The ego identity status approach to ego identity. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), *Ego identity: a handbook for psychosocial research* (pp. 3–21). New York: Springer-Verlag.
- McCaslin, M. (2009). Co-regulation of student motivation and emergent identity. *Educational Psychologist*, 44, 137–146.
- McCaslin, M. (2004). Coregulation of opportunity, activity, and identity in student motivation: elaborations on Vygotskian themes. In D. M. McInerney & S. Van Etten (Eds.), *Research on sociocultural influences on motivation and learning. Big theories revisited* (Vol. 4, pp. 249–274). Greenwich, CT: Information Age.
- Meeus, W. (2011). The study of adolescent identity formation 2000–2010: a review of longitudinal research. *Journal of Research on Adolescence*, 21, 75–94.
- Nolen, S. B., Ward, C. J., & Horn, I. S. (2011). Motivation, engagement, and identity: opening a conversation. In D. McInerney, R. Walker, & G. A. D. Liem (Eds.), *Sociocultural theories of learning and motivation: Looking back, looking forward* (pp. 109–135). Greenwich, CT: Information Age Press.
- Ogbu, J. U. (1987). Variability in minority school performance. A problem in search of an explanation. *Anthropology & Education Quarterly*, 18, 312–334.
- Oyserman, D., Bybee, D., & Terry, K. (2003). Gendered racial identity and involvement with school. *Self and Identity*, 2, 307–324.
- Partnership for 21st Century Skills (2009). P21 framework definitions. (Retrieved 10.11.2011 from: <[http://www.p21.org/documents/P21\\_Framework\\_Definitions.pdf](http://www.p21.org/documents/P21_Framework_Definitions.pdf)>.)
- Penuel, W. R., & Wertsch, J. V. (1995). Vygotsky and identity formation: a sociocultural approach. *Educational Psychologist*, 30, 83–92.
- Perkins, D. (1992). *Smart schools: from training memories to educating minds*. New York: Free Press.
- Roeser, R. W., Peck, S. C., & Nasir, N. S. (2006). Self and identity processes in school motivation, learning and achievement. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (pp. 391–424). Mahwah, NJ: Lawrence Erlbaum.
- Sfard, A., & Prusak, A. (2005). Telling identities: in search of an analytic tool for investigating learning as a culturally shaped activity. *Educational Researcher*, 34, 14–22.
- Sheppard, S., Macatangay, K., Colby, A., & Sullivan, W. (2009). *Educating engineers: designing for the future of the field*. San Francisco: Jossey-Bass.
- Steele, C. M. (1997). A threat in the air: how stereotypes shape intellectual identity and performance. *American Psychologist*, 52, 613–629.
- Super, D. E. (1980). A life-span life-space approach to career development. *Journal of Vocational Behavior*, 16, 282–298.
- Waterman, A. S. (1999). Identity, the identity statuses, and identity status development: a contemporary statement. *Developmental Review*, 19, 591–621.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Wigfield, A., & Wagner, A. L. (2005). Competence, motivation, and identity development during adolescence. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 222–239). New York: Guilford Press.
- Yeager, D. S., & Bundick, M. J. (2009). The role of purposeful work goals in promoting meaning in life and in schoolwork during adolescence. *Journal of Adolescent Research*, 24, 423–452.