RESEARCH

An Examination of Student Development Theory in the Context of Writing Instruction

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ABSTRACT

The National Council of Teachers in English (2009) called for a reform of writing instruction models and theories. Addressing NCTE's challenges to develop, design, and create models that inform curricula begins with examining writing instruction in the context of student development theory. Therefore, the purpose of this study was to modify a conceptual model, grounded in Chickering and Reisser's (1993) theory of education and identity, to address NCTE's challenge of developing evidence-based, empirically sound models for writing instruction. To accomplish this purpose, we conducted a philosophical examination of Chickering and Reissers' theory in light of writing instruction. Since the 1970s, writing instruction has experienced three phases that situate the focus of instruction on specific functions of the writer and not on the holistic writer: (a) instruction for the hand (mechanics), (b) instruction for the mind (cognitive), and (c) instruction for the writer in context (social cognitive). Thus, through this examination, a fourth phase emerges—instruction of the person as a writer (holistic). Holistic developmental approaches to writing instruction focus on students' perspectives of assignments, their navigation of the writing process throughout class experiences, their feedback on course content and assignments, and their development as people, professionals, and writers. Therefore, one way to address NCTE's challenges and enhance learning outcomes is revising Leggette and Jarvis' (2015) wagon wheel model because it shifts writing instruction away from teaching individual skills, abilities, and attributes of the writer and focuses more on teaching the holistic development of the writer.

KEY WORDS

Curriculum, Student Development Theory, Writing Instruction

INTRODUCTION

In 2009, the National Council of Teachers in English called for an improvement of students' writing abilities and more rigorous research informing writing instruction. University faculty have constantly struggled with teaching writing for retention and transferability even though Strachan (2008) identified it as an essential component of college curriculum. To improve writing instruction, Hayes (2001) suggested modifying current instructional models or developing new specific models, which should be implemented into course curricula (NCTE, 2009). Planning the future of writing instruction requires reviewing key eras of writing curriculum and instructional development in addition to considering changes for adoption of effective writing course curricula. Hence, educational institutions have three challenges: "developing *new models of writing*; designing a *new curriculum* supporting those models; and creating *models for teaching* that curriculum" (NCTE, 2009, p. 1).

Writing instruction and research transitioned from grammar and mechanics in the pre-1970s era (Foster, 1983; Nystrand, 2006; Rose, 1985) to cognitive ability in the 1960s and 1970s and then to social concepts in the late 1980s and 1990s (Leggette, Rutherford, Dunsford, & Costello, 2015b; Nystrand). Early research agendas shifted the lines of inquiry from understanding writing to writing issues, evidence, audience, conclusion, principles, and discourse (Nystrand). For many years, general writing instruction lacked specificity and did not require students "to produce a wide range of texts, for a variety of purposes, across a broad class of social contexts" (Deane et al., 2008, p. 1). Yet, little research across contexts and industries has focused on writing instruction related to cognitive development and the holistic individual. Thus, addressing NCTE's (2009) challenges to develop, design, and create new models and curricula begins with reviewing writing instruction in the context of student psychosocial development.

Psychosocial development (e.g., Chickering & Reisser, 1969, 1993 Erikson, 1968) focuses on the holistic development of the individual and not specifically on the development of certain skills, abilities, or cognitive attributes. Yet, much of the college writing instruction and research of the 21st century focuses solely on the independent instruction of writing, separating it from the context of individual, community, and development. Considering this, little evidence to date has been found associating psychosocial development with writing instruction even though writing instruction and research has changed since the early inception of the Hayes and Flower (1980) model.

College students often wander the halls of higher education institutions questioning life's purpose and their identity (Branand, Mashek, Wray-Lake, & Coffey, 2015). Identity formation is the core of college students' psychosocial development (e.g., Chickering & Reisser, 1969, 1993; Erikson, 1968), defined as the "the issues, tasks, and events that occur throughout the life span, the given pattern or resolution of these issues and tasks, and the adaptation to these events" (Brown, 2004, p. 143). Chickering and Reisser (1993), in their theory of education and identity, suggested psychosocial development occurs in vectors, not in sequential steps, and guides education. Their non-linear vectors—developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity—support fluid growth during a critical time of students' psychosocial development (Evans, Forney, Guido, Patton, & Renn, 2010).

First, the three pitchfork like tines of *developing competence*—intellectual, physical/manual, and interpersonal—develop co-incidentally as students progress through college (Chickering & Reisser, 1993) and are critical to students' purpose (Green, 1981). Competence depends on feedback (Green) and focuses on skill mastery. Second, *managing emotions* encompasses thinking about feelings and acting on emotions in a healthy, sustainable way (Chickering & Reisser, 1993; Evans et al., 2010). Becoming aware of feelings, learning flexibility in managing emotions, and finding ways to balance positive and negative emotional experiences facilitate students' fluid movement through the vector (Chickering & Reisser, 1993; Coombs, 2013). Third, students who have experienced *movement through autonomy toward interdependence* (Chickering & Reisser, 1993; Foubert, Nixon, Sission, & Barnes, 2005) are (a) emotionally independent and lack the need for continual approval from others; (b) instrumentally independent as self-directed problem solvers; and (c) interdependent as they understand their place in society, which is the last stage of the journey to developing interdependence (Evans et al.). The campus community serves as a catalyst for students to move through autonomy and gain interdependence as students "struggle to define their best selves, rather than succumbing to passivity or alienation" (Chickering & Reisser, 1993, p. 144).

Fourth, *developing mature interpersonal relationships* depends on tolerance and appreciation of differences between individuals (Chickering & Reisser, 1993; Muuss, 1996). College serves as a testing ground for managing emotions, making impressions, sharing deeply, resolving differences, and making meaningful commitments (Blimling, 2013; Chickering & Reisser, 1993; King & Baxter Magolda, 2005). Fifth, students build on vectors one through four to *establish identity*. Students establishing a solid identity will experience a "secure sense of self in light of feedback" (Evans et al., 2010, p. 68) and a sense of self-acceptance, self-esteem, and personal stability about gender roles, ethnic background, sexual orientation, physical appearance, cultural context, and lifestyle choices (Chickering & Reisser, 1993; Torres, Jones, & Renn, 2009).

Sixth, *developing purpose* is learning to be intentional, assessing the options presented, making and clarifying personal goals, and overcoming barriers to achieving goals (Chickering & Reisser, 1993; Coombs, 2013). Students cultivate purpose by developing clear vocational goals, making meaningful commitments, and establishing strong, interpersonal commitments within those goal areas (Evans et al., 2010). Seventh, students' values provide a foundation for interpreting experience, guiding behavior, and maintaining self-respect. *Integrity* develops in three "overlapping stages"—humanizing values, personalizing values, and developing congruence—that students use to move from testing values of their inner circle to aligning values with those of society (Chickering & Reisser, 1993, p. 237).

Furthermore, in 2015, Leggette and Jarvis applied Chickering and Reisser's (1993) theory of education and identity to writing identity development and developed the wagon wheel model to guide their qualitative data analysis of students' development of writing identity (Figure 1). Through their research, they found students experienced Chickering and Reisser's (1993) seven vectors as a result of a writing-intensive course.
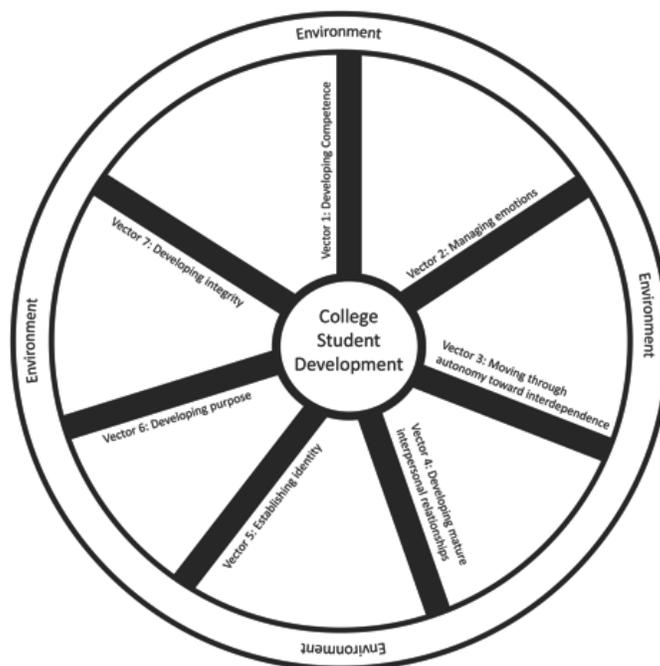

Figure 1. Leggette and Jarvis' (2015) wagon wheel model of Chickering and Reisser's (1993) seven vectors of education and identity development

THE PROBLEM

Theories lack empirical evidence to guide writing instruction, and writing instructors and researchers lack the understanding of how to effectively teach writing although the writing process movement initiated the development of multiple writing theories (Wallace, Jackson, & Wallace, 2000). Thus, instead of developing new models to inform writing instruction, we propose modifying current developmental models and theories to empirically investigate their application to writing instruction as recommended by Hayes (2001) and NCTE (2009). Therefore, the purpose of this study was to modify a conceptual model, grounded in Chickering and Reisser's (1993) theory of education and identity, to address NCTE's challenge of developing evidence-based, empirically sound models for teaching writing. The following questions guided the study:

1. What instructional techniques enhance holistic development of undergraduate student writers?
2. How do these findings augment Leggette and Jarvis' (2015) model?
3. Are these findings consistent across multiple content fields?

METHOD AND PROCEDURE

We used a philosophical approach to examine Chickering and Reissers' (1993) theory of education and identity in light of writing instruction. In doing so, we designed the study using the method and structure of a philosophical examination, which is different from a traditional research study and applies atypical headings and organization (Roberts, 2006). Philosophical studies serve a discipline by presenting data in light of evidence and by proposing a shift in thinking based on the current and relevant literature in the field (Burbles & Warnick, 2006). Such philosophical examinations are without traditional research design and serve as an established foundation for enhancing understanding of practices within a profession.

Burbles and Warnick (2006) argued well-designed philosophical examinations include a thoroughgoing focus, a rigorous literature review, and a synthesis of varying perspectives. For example, Roberts (2006) conducted a philosophical examination of experiential learning theory to "synthesize and summarize" theory in an effort to "guide practice and inquiry" (p. 18) and to develop a contextual model for agricultural education. To achieve the philosophical research methods set forth by Burbles and Warnick, we focused our examination on Chickering and Reisser's (1993) theory of education and identity in light of writing instruction, we conducted a rigorous literature review to search for relevant literature that cited the use of Chickering and Reisser in varying science-based contexts and situations, and we synthesized writing instruction research from various fields demonstrating personal growth and development, skill achievement, and professional identity.

Thus, to begin reviewing and synthesizing the literature that would serve as our philosophical discussion, we searched Google Scholar, Texas A&M University library, WorldCat.org, Education Resource Information Center (ERIC), and Journal Storage (JSTOR). We focused our search on literature related to Chickering and Reisser's (1993) vectors and writing instruction. Literature citing the use of Chickering and Reisser in writing instruction was minimal, so we searched Google Scholar using the name of each vector combined with writing instruction and following the same process for each vector. For example, we searched "developing purpose in writing instruction." It is important to note not all articles linked Chickering and Reisser to writing instruction, but all articles discussed writing instruction and/or components of each of Chickering and Reisser's seven vectors. Therefore, to be included in the study, an article had to discuss writing instruction and include components of one of the seven vectors even if writing instruction was not directly linked to Chickering and Reisser.

Philosophical examinations can be approached using various qualitative lenses. We examined Chickering and Reisser (1993) in light of writing instruction through Lincoln and Guba's (2005) constructivist epistemological lens, which is "sensitive to the special qualities of people and their social institutions" (Bryman, 2012, p. 6). Such inquiry recognizes knowledge is "produced through social interaction" of human beings and is "in a constant state of revision" (p. 33). Thus, knowledge cannot be separated from experience or reality. Similar to Kitchel and Ball's (2014) study that "creat[ed] a narrative to expand the professional discourse" (p. 188) related to the use of theoretical and conceptual frameworks in agricultural education, we sought to expand writing instruction discourse with the goal of addressing NCTE's challenges.

Vector 1: Developing Competence

Proper development of Chickering and Reisser's (1993) first vector necessitates writing experiences need to be designed and developed with the three-part model of intellectual, physical and interpersonal competencies in mind. Writing, including content comprehension, reflection, collaboration, interviewing, and team participation, is an important intellectual and interpersonal competency to master (Evans et al., 2010). As beginning writers develop content mastery, they may mimic perceived rules of writing while masking true opinions and content comprehension (Lea & Street, 1998). More advanced writers, however, should be guided to develop a deeper interpretation of professional writing within their fields rather than limiting their learning to superficial functional writing skills (Lea & Street). Leggette, Jarvis, and Walther (2015a) identified particular teaching techniques that support increased student learning of writing skills and their development of deep interpretation: assorted writing assignments, lecture, style quizzes, editing, and peer and instructor feedback. Intellectual and interpersonal competencies are cultivated through critical thinking and the application of

writing skills, but physical and manual competence is achieved using the body or hands for self-expression and creativity during the physical act of communicating (Evans et al., 2010).

Critical thinking skills, developed through feedback (Grise-Owens & Crum, 2012), are key to students developing original thinking and authorship (Moffet, 1979). Riddell (2015) noted "increasing the frequency of writing opportunities and feedback [led] to higher learning outcomes" (p. 79). Instructor feedback is a crucial part of how writing courses need to be redesigned to properly maximize this vector. One-on-one feedback sessions with an instructor facilitated students' development of writing skill and interpersonal communication skill in a Leggette et al. (2015a) study as instructor and peer feedback helped students see their mistakes from another point of view leading to improved writing skill (Lea & Street, 1998). Rather than outlining specific communication skills, as others (e.g., Irlbeck & Akers, 2009; Morgan, 2010) have done, the broader points of skills education are a means for students to "learn to view their writing as someone else's reading" (Zamel, 1982, p. ab) and to develop authorial identity by learning to use language to communicate effectively (Hyland, 2002).

Vector 2: Managing Emotions

As developing writers, students need to develop the ability to manage emotions and overcome frustrations and satisfactions by recognizing their feelings toward writing and while learning to recognize and implement components of the writing process. When emotions get in the way of work performance, or student learning, perception of trustworthiness and reliability can be confounded. In writing courses, students often struggle with self-confidence and managing emotions related to feedback and constructive criticism. Evans et al. (2010) noted students need to learn to act responsibly on their feelings, not allowing emotional baggage from past writing experiences derail current progress. Building a narrative can help students express and understand their progress as they implement components of the writing process (Grise-Owens & Crum, 2012, Lengelle & Meijers, 2014).

The first step in this process is identifying the emotional stigma they carry related to the writing process (Leggette et al., 2015a), which is easily accomplished through periodic reflective writing exercises. Students in counseling (Murdock, Stipanovick, & Lucas, 2013) nursing (Levett-Jones, 2006), social work (Grise-Owens & Crum, 2012), business (Boyd, 2013), biology (Otfinkowski & Silva-Opps, 2015), chemistry (Klein & Carney, 2014), and physics (Larkin, 2015) demonstrated increased awareness of their role as communicators and increased connection to professional community after the incorporation of such exercises. Reflective writing helps students develop a sense of voice (progressing in their writing skill from compliance-type writing to non-formulaic, creative well-thought-out prose; Ryan, 2014), become aware of their emotions, and put themselves in their readers' shoes.

Practicing reflective writing allows students to see how far they have come and potentially commit more energy to increasing their learning and development as they move forward in their program (Primeau et al., 2013). For example, Lengelle and Meijers (2014) found students who participated in reflective writing were more engaged and self-directed because self-assessment increased one's ability to learn from mistakes (Levett-Jones, 2006). Furthermore, Larkin (2015) found students who self-assessed could identify what was wrong with their thinking and why their thinking was flawed.

Vector 3: Moving Through Autonomy toward Interdependence

Students experience a movement away from parents, parental values, and the influence of accepted authorities (Garrett & Moltzen, 2011), allowing themselves to work toward their ultimate goal of investing in themselves as professionals (Addams & Allred, 2015). Improving writing competence and skill is a visible part of university-level assessment. In the sciences, Klein and Carney (2014), Larkin (2015), and Otfinowski and Silva-Opps (2015) identified writing as a major program outcome and noted improving skills through curriculum writing exercises. In the social/service professions, social workers (Grise-Owens & Crum, 2012), nurses (Levette-Jones, 2006), counselors (Blimling, 2013), and educators (Hutchinson & Tracey, 2015) developed similar skill development, especially through the reflective writing process. When students seek to create something original (Moffett, 1979), they develop their authorial voice (Hyland, 2002). "Original writing" requires a constant "revision of inner speech," which is indicative of original thinking (Moffett). To promote original writing, curriculum should include a balance between student-directed and teacher-directed assignments (Garrett & Moltzen, 2011).

This need for professional writers who are "awar[e] of their connectedness with others" (Evans et al., 2010, p. 68), extends into the need of fostering writers who can self-assess, are self-directed, can work in teams, and can perform specific writing tasks (e.g., interviews, peer review). Leggette et al. (2015a) noted students relied on student-faculty relationships to facilitate movement from autonomy to interdependence. Movement toward interdependence was not an enjoyable experience for some students (Leggette & Jarvis, 2015), but the writing process taught the students to be interdependent and write without continuous instruction and guidance (Leggette et al., 2015a). Creative writing opportunities helped students establish their "writing style and voice and moved them to become story tellers and not just writers" (p. 76), reinforcing the movement from autonomous writers to interdependent story tellers.

Vector 4: Mature Interpersonal Relationships

Watson and Robertson (2011) indicated first-year communication students sought to learn interpersonal skills as many of them saw resolving conflicts and managing barriers as important components of undergraduate curriculum. Teachers and peers can cultivate students' development of interpersonal relationships through the writing and feedback process (Larkin, 2015). Interpersonal relationships mediated by writing can assist with professional identity development (Murdock et al., 2013) because they promote a connection among students, their cohort, and their profession (Boyd, 2013). Characteristics of effective employees, such as trustworthiness and reliability (Irlbeck & Akers, 2009), can be enhanced through interactions with instructors, writing staff/mentors, and peers even though the relationship between students and teachers/peers can, at times, be detrimental to fostering strong interpersonal relationships that are often authoritative (Lea & Street, 1998).

Conflicts, hesitation, and fear can arise during the feedback process because of emotions involved in giving and receiving constructive criticism and the uncertainty of the process. Therefore, it is important for students to learn how to give and receive critique during peer reviews as doing so creates opportunities for students to broaden their interpersonal communication and writing skills while allowing for effective communication and clarity of thought. One-on-one experiences, such as peer review sessions, allow the reviewer a glimpse into the writers' thoughts, feelings, and personality (Leggette et al., 2015a). Implementing the feedback and revision process at multiple points during a semester creates opportunities for students to master the skill set through practice and usage (Leggette et al.).

Vector 5: Establishing Identity

Academic writers experience three components of writing identity: autobiographical, discoursal, and authoritative (Bird, 2013). Autobiographical writers interweave themselves into the academic community by contributing their ideas despite discrepancies. For example, "first person pronouns are a powerful way of projecting a strong writer identity" (Hyland, 2002, p. 354). Furthermore, a discoursal writer transforms knowledge by "connecting evidence and quotes to claims" (Bird, 2013, p. 86-87) and providing a new way of understanding old knowledge. Forming facts into a readable story allows students a degree of creativity in their writing and makes the writing process more enjoyable as creativity has the "potential to confirm and develop identity" (Leggette et al., 2015a, p. 76). As described by Bird, authoritative writers understand the characteristics of autobiographical and discoursal writers, work to build on those characteristics, and "perform their own intellectual work by adding depth and development of ideas" (p. 87).

Central to establishing identity and boundaries is feedback (Leggette & Jarvis, 2015), encouragement (Garrett & Moltzen, 2011; Murdock et al., 2013), and working through emotional and relational reflective writing prompts (Primeau et al., 2013). Leggette and Jarvis found feedback was connected to developing writing identity and "developing a clear sense of purpose" (p. 47). For example, peer-to-peer feedback and thinking through the feedback process increased student buy-in (Grise-Ownes & Crum, 2012) while students in a sports management program indicated feedback and self-assessment were essential to choosing career options (Lumpkin, 2015). Thus "writing teachers should intervene throughout the process" (Zamel, 1982, p. 195) because receiving feedback at the end of an assignment does not help students (Lea & Street, 1998) develop writing identity.

Vector 6: Developing Purpose

Honing in on career aspirations through coursework, internships, externships, and other real-world experiences is central to students' ability to develop purpose (Addams & Allred, 2015) as "effective curriculums are achieved when a balance is found between the student interest, faculty vision[,] and industry need" (Watson & Robertson, 2011, p. 16). Within the last two decades, discipline-specific, writing-intensive courses have forced students to grapple with the complexities of learning to apply writing to their disciplines. Through such requirements, some students have gained an intrinsic motivation to write and interpret the world around them while others realize their career aspirations differ (Leggette & Jarvis, 2015). But, one must question if assessment threatens students' intrinsic motivation to write causing students to become discouraged in developing purpose (Garrett & Moltzen, 2011). In their work, Murdock et al. (2013) suggested developing a co-mentor training program to enhance "students['] self-awareness and growth in an experiential and meaningful manner, as well as provid[e] additional opportunities for students to develop their professional identity" (p. 487). Learning about career options, experiencing real-world activities, and exploring intrinsic motivation impacts students' ability and desire to develop career aspirations and purpose (Lumpkin, 2015).

Investigating purpose through students' lenses, Leggette et al. (2015a) indicated students appreciated learning how to become effective writers even if they did not decide to pursue a writing career. Students "identif[ied] their goals and move[d] toward them …, recognizing they were not fully there yet when it came to being a professional writer" (Leggette & Jarvis, 2015, p. 49). Feedback, fostered through instruction and writing prompts, enhanced students' growth as professionals, and students interested in their topics had more creative writing experiences. Although some students would not become writers, they became more aware of their purpose and their ability to communicate effectively (Leggette & Jarvis).

Writing includes goals—from genre-specific to writing process to daily writing. To be effective writers, students must set, work toward, and achieve their writing goals. Sanders-Reio, Alexander, Reio Jr., and Newman (2014) noted knowledge transformers continuously work to balance "goals for their papers and their mental representations of the content" (p. 3). If students can create and attain writing goals in their personal and professional lives, they will be more capable of generating publishable content. Thus, students who choose topics that interest them may be more likely to give their full energy and motivation to the process.

Vector 7: Developing Integrity

Students approach writing with a set of values but often those values are tested against the values of the assignment or content. Freshmen students in a Watson and Robertson (2011) study placed an intrinsic and extrinsic value on writing and ranked it fifth in level of importance. Yet, "write with proper grammar and punctuation" was the only writing component mentioned in the study, contrary to NCTE's (2009) note that writing is more than mechanics. Additionally, Leggette et al. (2015a) claimed students moved past humanizing values and began personalizing writing values in an advanced media writing course, which helped students see the value of writing and the ability to "paint beautiful pictures" with sensory language (p. 73). Through the process of personalizing values, students continuously ask themselves if they have the ability to be a writer. For example, an important point of student growth was developing the ability to receive criticism without being offended (Leggette et al.).

A noted component of academic integrity related to writing is understanding plagiarism and its consequences. Park (2003) summarized students' reasons for plagiarizing: personal values, lack of understanding, time management, enhanced course performance, efficiency, and defiance of authority. First-year science and engineering students' "understandings of action that constitute plagiarism were varied" (p. 212) and they "did not favour [sic] penalties for plagiarism" (Yeo, 2007, p. 213). This could be explained by Chickering and Reisser (1993) when they identified congruency as the last step to developing integrity because freshmen would not have moved along the continuum of developing integrity.

DISCUSSION AND RECOMMENDATIONS

Writing instruction has experienced three phases since the 1970s: (a) instruction for the hand (mechanics), (b) instruction for the mind (cognitive), and (c) instruction for the writer in context (social cognitive). Yet, all three phases situate the focus of instruction on specific functions of the writer and not on the holistic writer. Thus, based on a thorough review of writing instruction in the light of psychosocial development, we propose a fourth phase of writing instruction—instruction of the person as a writer (holistic). Holistic developmental approaches to writing instruction focus on students' perspectives of assignments, their navigation of the writing process throughout class experiences, their feedback on course content and assignments, and their development as people, professionals, and writers.

Reviewing psychosocial development in light of writing instruction, we found (a) *developing competence* focuses on students' development of intellectual and interpersonal skill competencies related to writing (e.g., interviewing, style, voice, and critical thinking) as well as the physical act of writing; (b) *managing emotions* emphasizes the emotional side of writing as it relates to overcoming frustrations while learning to appreciate feedback; (c) *moving through autonomy toward interdependence* fosters students' development of authorial voice and enhances their ability to become knowledge transformers; (d) *establishing mature interpersonal relationships* assists students with becoming trustworthy, reliable team members; (e) *establishing identity* moves students from knowledge tellers to authoritative knowledge transformers who understand themselves and their role in society; (f) *developing purpose* encourages students to consider their career goals and desires related to writing and act on those goals as they seek to become professional writers; and (g) *developing integrity* forces students to grapple with the complexities of writing and the values associated with the writing process. Furthermore, instruction for the hand and instruction for the mind are included in vector one, and instruction for the writer in context is included in vectors five, six, and seven. Therefore, any holistic approaches based on Chickering and Reisser's (1993) framework would subsume previous theories with a sole focus on instruction for the hand and mind while superseding them, and social cognitive theories would also subsume any holistic model based on this framework.

Therefore, we propose a revision of Leggette and Jarvis' (2015; Figure 2) model as one way to address NCTE's (2009) challenges and enhance learning outcomes because it shifts writing instruction away from teaching individual skills, abilities, and attributes of the writer and focuses more on teaching the holistic development of the writer. When we applied Chickering and Reisser's (1993) theory of education and identity to writing instruction, specific writing strategies, components, practices, and techniques that fostered holistic development emerged within each of the seven vectors.

Figure 2. Revision of Leggette and Jarvis' (2015) wagon wheel depiction of Chickering and Reisser's (1993) seven vectors of education and identity development that includes specific writing strategies, components, practices, and techniques that foster holistic development.

We argue the revised model serves as a starting point for designing new curriculum and conducting empirical research related to the holistic development of college-level writers (NCTE, 2009). Because communicators and journalists are the catalysts for driving conversation, new writing curriculum should center on helping students develop their holistic selves, confidence in their writing, critical thinking skills, skills for giving and receiving feedback, and an understanding of their writing values along the way. Structured writing prompts and reflective writing assignments help students develop confidence in their writing skills, create personal meaning, develop a sense of self-assessment, become independent problem solvers, learn from mistakes, develop an authorial voice, and produce original work.

Additionally, students can use periodic and structured peer, mentor, and instructor feedback to increase their understanding of writing and to develop as individuals. Incorporating individual, face-to-face instructor/student feedback sessions into the curriculum facilitates discussion between the student and the instructor and makes feedback a two-way process of communication. Writers subjected to constant feedback develop self-confidence and a strong sense of self as students who are comfortable with their personal and writing identity can also comfortably express their voice in their writing and bring their integrated selves to the writing process. The sense of self and identity developed during the writing process will help students attain their ultimate goals as a writer and as an individual.

Another instrumental component of writing curriculum is integrity because students grapple with personalizing values in different contexts. Some students may intrinsically value writing components but may not extrinsically value the same components. Therefore, to holistically develop as a writer, they must begin to congruently develop those values. For example, freshmen may begin humanizing values related to plagiarism but those values should become congruent with societal values as they become upperclassmen. Helping students understand the integrity as it relates to writing will

facilitate their personal growth and understanding of such components. To help students understand integrity and its relationship to writing, instructors should incorporate a discussion about integrity into each major writing assignment.

As for conducting empirical research related to the holistic development of college-level writers, we suggest beginning with testing the effectiveness of the writing strategies, components, practices, and techniques linked to each of Chickering and Reisser's (1993) vectors. For example, do the strategies, components, practices, and techniques indeed enhance students' development in each of vectors and move students toward becoming holistic writers? Testing the combination of strategies, components, practices, and techniques as well as the necessity of each one and how it fits into the paradigm of psychosocial development will enhance the curriculum and its role in writing instruction. Such tests will help writing instructors and researchers refine writing curriculum and design course lectures, labs, and major assignments that develop writers who are prepared to meet the needs of the 21st century global workforce.

Additionally, as writing instructors, we must ask ourselves if our expectations of young writers are beyond their cognitive, physical, emotional, professional, social, and educational development. We expect them to enter communication and journalism programs with an understanding of critical thinking and knowledge transformation, but perhaps, they have not been taught how to think critically, how to transform knowledge, or how to transfer knowledge from one course to the next. Furthermore, instructors may not have a balanced understanding of how six components—cognitive, physical, emotional, professional, social, and educational—of development work to transform a student with an interest in writing into a professional writer. Empirically investigating this transformation will help instructors design curriculum that moves students from knowledge tellers to knowledge transformers, from surface-level writers to deep writers, and basic thinkers to critical thinkers.

Last, we must question how writing identity is situated within vector five, establishing identity. For example, does vector five make a valid framework for conceptualizing writing identity, or should an eighth vector be added that specifically addresses the development of a professional writing voice in a variety of contexts? As noted, writing identity and education emerges within each vector, but perhaps, it should have its own vector describing writing identity and education because of its importance in the 21st century and its relevance across contexts.

Writing has emerged as an essential, but missing, piece of an undergraduate education across contexts. In fact, it seems we are moving farther away from understanding effective writing instruction instead of moving toward an understanding of developing effective writers. We could argue technology and the need for instantaneous communication has caused this divide. Yet, as writing instructors and students of writing instruction ourselves, we believe it is the lack of focusing on the psychosocial development of the inner writer. For too long, writing instruction has focused on teaching the skill and the attributes of writing instead of on teaching the holistic writer. Thus, to address NCTE's (2009) challenges, we must shift focus to instructing the person as a writer (holistic)—the fourth phase of writing instruction.

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