

A Draft Conceptual Framework of Relevant Theories to Inform Future Rigorous Research on Student Service-Learning Outcomes

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While the quality and quantity of research on service-learning has increased considerably over the past 20 years, researchers as well as governmental and funding agencies have called for more rigor in service-learning research. One key variable in improving rigor is using relevant existing theories to improve the research. The purpose of this article is to present a draft conceptual framework of relevant theories that can inform the study of service-learning effects on students. This proposed conceptual framework draws from theories, theory-based models and frameworks, and theory-based research. Practitioners and researchers are encouraged to review, test, and critique this proposed conceptual framework so as to advance the discussion regarding the use of relevant existing theories on service-learning research as well as practice.

While service-learning pedagogy and practice have expanded and improved over the past two decades, the research on service-learning is still relatively underdeveloped (Eyler, 2011; Giles & Eyler, 2013; Holsapple, 2012). Extant research on service-learning is largely comprised of case studies of single courses or programs that are largely descriptive in nature and rarely based on relevant existing theories that would provide a framework for studying service-learning (Bringle & Steinberg, 2010; Eyler, Giles, Stenson, & Gray, 2001; Steinberg, Bringle, & McGuire, 2013). These studies utilize a range of methods and study designs to investigate service-learning in a variety of disciplines (Eyler et al., 2001), resulting in a diverse literature without much clarity or cohesion (Holsapple; Steinberg et al., 2013). Additionally, these small, isolated research studies attempt to fill large gaps in knowledge about the impact, implementation, and institutionalization of service-learning (Furco & Billig, 2003). There have been some stronger evaluations of service-learning, such as those by Bringle, Philips, and Hudson (2004), Eyler and Giles (1999), and Simons and Cleary (2006), along with reviews/summaries of studies (e.g., Bringle & Steinberg, 2010; Eyler et al., 2001; Holsapple), meta-analyses of studies (e.g., Conway, Amel, & Gerwien, 2009; Novak, Markey, & Allen, 2007; Warren, 2012), and volumes of collected research (e.g., Clayton, Bringle, & Hatcher, 2013; Furco & Billig, 2003). Despite these many efforts to study, gather, and disseminate what we know about service-learning, there is still much to be done. As Billig (2003) summarized:

The vast majority of published studies on service-learning are of program evaluations or anecdotal descriptions, not research. Having a

body of evidence comprised primarily of evaluation studies severely limits the ability to make generalizations about service-learning impacts and restricts the ways in which the studies can be used to improve practice. Furthermore, program evaluations are less likely to be built on strong theoretical foundations. (p. vii)

These issues have led to a call for more rigor in service-learning research from both researchers (Aronson, 2006; Astin, Vogelgesang, Ikeda, & Yee, 2000; Bringle, Clayton, & Hatcher, 2013; Hecht, 2003; Warren, 2012) as well as governmental and funding agencies (Boruch et al., 2003; Myers & Dynarski, 2003). “To move beyond this model of research, studies—and service-learning programs themselves—must be designed with a foundation in theoretical models and relationships that provide a framework for understanding the outcomes from the service-learning experience” (Holsapple, 2012, p. 13). In other words, there is a need to use relevant existing theories to improve service-learning research and practice. The purpose of this article is to present a draft conceptual framework of relevant theories for the study of service-learning effects on students. Both researchers and practitioners are encouraged to review, test, and critique this proposed conceptual framework, as the aims of this article are to further the discussion regarding the use of relevant existing theories on service-learning research and practice while also enhancing the research and practice of service-learning.

This article begins with a review of existing theories and theory-based frameworks and models that have significantly impacted the field of service-learning. Following this overview, a draft conceptual

framework is presented in detail, based on influences from relevant existing theories, theory-based models and frameworks, and high quality research based on theory. To conclude the article, there is a discussion of future service-learning research and practice related to the proposed conceptual framework.

Existing Theories and Theory-Based Frameworks and Models as They Relate to the Study of Service-Learning

Service-learning has its roots in the work of educational theorists John Dewey (1910, 1938), David Kolb (1984), and Paulo Freire (1994, 1998, 2001), who believed that true, long-lasting education and learning comes when students are actively involved in their own learning and experience mutual exchange with people and the environment without traditional classroom power dynamics. Theories of experiential learning were initially articulated by Dewey and later expanded upon by Kolb. Experiential learning is seen as a cyclical process of experience and reflection, where the learner interacts with the world and then reflects on these experiences, ultimately integrating new learning into old constructs. While Dewey focused on cycles of action and reflection, where he believed the greatest learning occurs, Kolb's work explored the roles of observation, reflection, and analysis in empowering students to become responsible for and engaged in their own learning. Further advancing the field of experiential education, Freire broke down the traditional power dynamic between teacher and student, with the teacher seen as the knowledge purveyor and the student seen as the receptacle. Freire argued that learning is a consciousness-raising process through which both the student and the teacher co-create and exchange knowledge, thereby emphasizing the importance of students being actively involved and invested in their own learning. Overall, each of these three educational theorists had a tremendous influence on the practice and study of service-learning, and on the proposed conceptual framework presented in this article.

Other learning and pedagogical theories influencing the field of service-learning include Mezirow's (1978, 1991, 2000) transformational learning theory as well as feminist pedagogy. In Mezirow's conceptual model, learning is a cyclical process in which one uses newly acquired knowledge to examine previously held assumptions through critical reflection and dialogue, leading to meaning reconstruction that serves as the foundation for action. Mezirow's transformational learning theory parallels Dewey's (1938) work in the cyclical nature of action and reflection. Similar to Mezirow's work, feminist pedagogy links

critical self-reflection, analysis, and action (Maher & Thomson Tetrault, 2001). In the feminist pedagogical approach, personal experience is valued, and there is a focus on creating a sense of community in the classroom, beginning with the development of non-hierarchical relationships between students and teachers (similar to Freire's exploration of power dynamics; Crabtree, 2008; Crabtree, Sapp, & Licon, 2009). There is also an interest in feminist pedagogy in applying knowledge for social transformation, which some feminist critiques see as a counterpoint to the focus on individual student experience and transformation in experiential learning (Williams & McKenna, 2002).

Transitioning to a focus on theory-based frameworks and models within the field of service-learning, Kiely (2005) proposed the Transformative Service-Learning Model which draws from Mezirow's (2000) transformational learning theory and more recent empirical studies. In Kiely's model, there are five categories outlining students' transformational learning in service-learning. The first learning process, contextual border crossing, describes four elements of context that influence students' transformational learning before, during, and after a service-learning experience. The second learning process is dissonance, suggesting that students' experiences in service-learning can be incongruent with their current worldview. Personalizing is Kiely's third learning process, where students begin responding in emotional and visceral ways to the different forms of dissonance. The final two categories are processing and connecting, with students cognitively processing their service-learning interactions and experiences, ultimately leading to connections with community members and community issues.

Another theory-based service-learning framework is the Conceptual Framework for Typology of Academic Learning Outcomes (Jameson, Clayton, & Ash, 2013), which is based on a set of theoretical perspectives surrounding experiential learning and cognitive processes (e.g., Dewey's educational philosophy, 1933; Schön's conceptualization of reflection-in-action, 1983; Bloom's Taxonomy, 1956; Paul and Elder's standards of critical thinking, 2006). This framework has four domains of academic learning: discipline-specific knowledge and skills, discipline- and profession-transcendent competencies, thinking from disciplinary and/or interdisciplinary perspectives, and critical thinking. The conceptual framework presents these four domains of academic learning as interconnected and dynamic, with the domains surrounded by broken lines and arrows that visually represent the fluidity and interconnectivity of these domains and the ongoing learning process.

In 2004, Roldan, Strage, and David proposed a ser-

vice-learning framework to allow for more clarity in the study and practice of service-learning in various disciplines. This framework draws from theories in human development, experiential learning, and Piagetian (Piaget, 1954) and Vygotskian (Vygotsky, 1930/1978) principles of constructivism, along with theories in business and management. This framework begins with a look at the context of each service-learning course, where four domains of study are defined: community characteristics, student characteristics, institutional characteristics, and faculty characteristics. Roldan et al. believed that these four domains have a significant impact on the actual service-learning experience. The next step in the framework focuses on the service-learning experience, which includes specific course variables (e.g., discipline of the course, whether the course is required or optional) and a range of service-learning activity variables (e.g., direct vs. indirect service-learning experience, quality and quantity of student reflection). These experiences then lead to a number of possible outcomes resulting from service-learning courses, which are grouped into the four domains of study described in the first part of the framework: community outcomes, student outcomes, institutional outcomes, and faculty outcomes. Roldan and colleagues believed that this theory-based framework would result in more clarity in service-learning research and course design.

Aronson and colleagues (2005) developed a process model of service-learning informed by theories in cognitive psychology and neurosciences as well as service-learning literature. Unlike the Roldan and colleagues (2004) framework, this model is less focused on the practice of service-learning and much more focused on using the model to assess the relative contributions of each part of service-learning on the outcomes of interest. In particular, the model focuses on both proximal and distal student outcomes of service-learning courses, as well as predictors of these outcomes (e.g., degree of student reflection on the experience). Moderators (e.g., student gender) and mediators (e.g., student cognitive complexity) of the hypothesized predictor-outcome relationships are also identified. The key contribution in this model is the inclusion of cognitive complexity as a mediating variable, which accounts for the relationship between the moderators and predictors of service-learning (independent variables) and the proximal and distal outcomes of service-learning (dependent variables).

Finally, the change model of service-learning is another theory-based model influencing the design of the proposed conceptual framework. While the charity model of service-learning has been criticized, with claims that this approach does not sufficiently

delve into complex issues and may reinforce power imbalances and social injustice (Brown, 2001; Catlett & Proweller, 2011; Green, 2001), the change model digs much deeper. In the change model, students critically reflect on complex issues and how they may engage in individual and social transformation in the present and the future (Bickford & Reynolds, 2002; Boyle-Baise & Lanford, 2004; Catlett & Proweller, 2011; Morton, 1995). The change model emphasizes the need for students to “examine assumptions, discourses, and practices about power and privilege, which increases the likelihood that they will become more aware of their own relative privilege, allowing full development of the possibilities that service-learning holds for building more collaborative, equitable, and invested relationships across difference” (Catlett & Proweller, pp. 35).

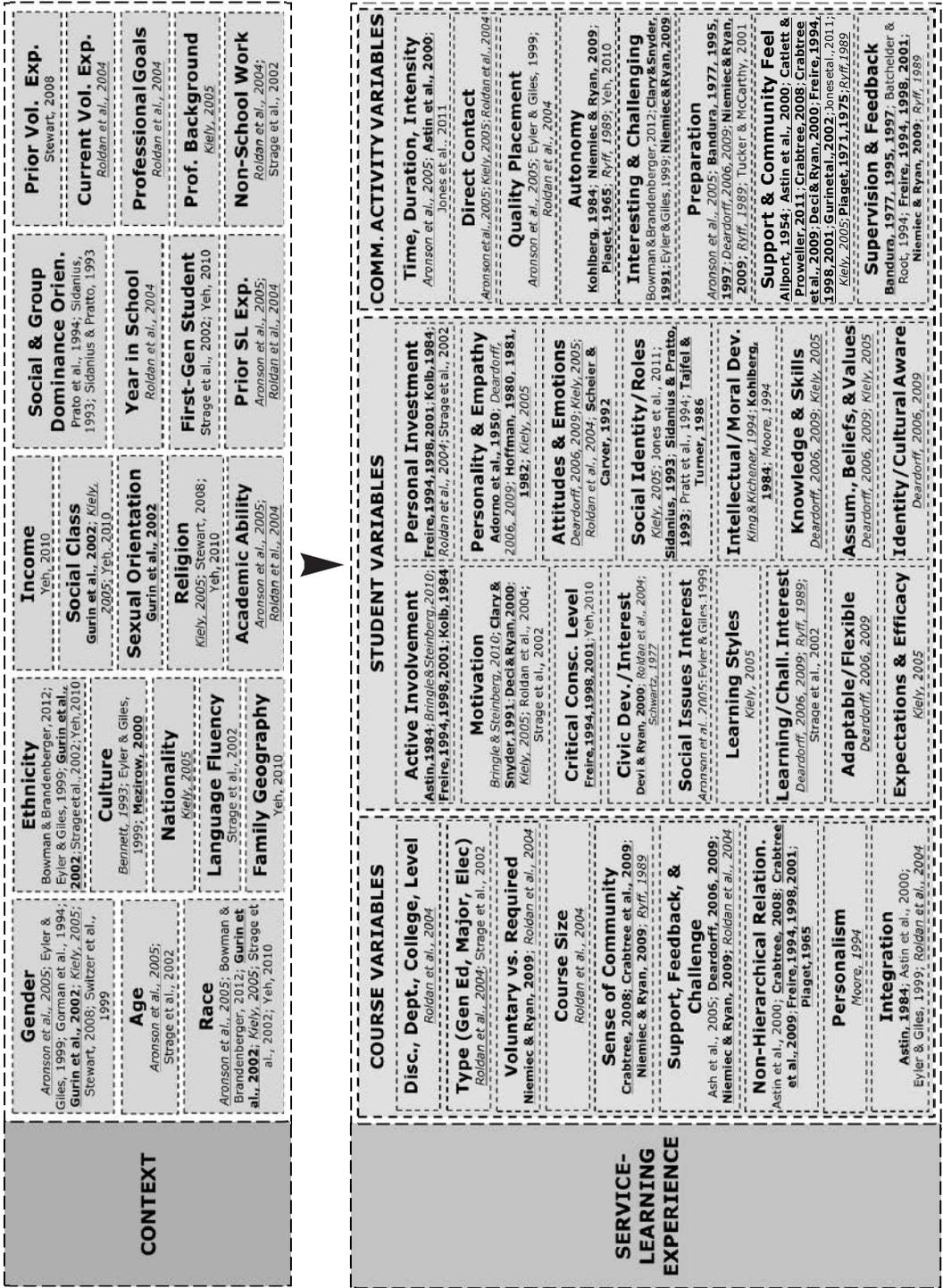
Proposed Conceptual Framework of Relevant Theories For Studying Student Service-Learning Effects

The draft conceptual framework of service-learning effects on students presented in Figure 1 incorporates the contributions of relevant theories, theory-based frameworks and models, and theory-based research in one place. It has many parts—context variables, service-learning experience variables, mediating variables, and proximal and distal outcomes—which we now review.

Context

The context of a service-learning experience can have a significant impact on student outcomes. Aronson et al. (2005) labeled these variables as moderators, given that these variables “appear to moderate the relationship between service-learning and various outcomes” (p. 150). The proposed framework in Figure 1 reflects a host of predisposing factors potentially influencing students’ experiences during the course and their learning outcomes. This conclusion was based on the theory-based service-learning frameworks and models of Kiely (2005), Roldan et al. (2004), and Aronson et al., with all including a list of student characteristics as part of the context for service-learning. The variables discussed below are also based on relevant theories that have been/can be used in service-learning, including transformational learning theory (Mezirow, 2000), social dominance theory (Sidanius, 1993; Sidanius & Pratto, 1993), and diversity theory (Gurin, Dey, Hurtado, & Gurin, 2002); theory-based frameworks and models outside of the field of service-learning (e.g., Developmental Model of Intercultural Sensitivity; Bennett, 1993); and theory-based research (Bowman & Brandenberger, 2012; Eyler & Giles, 1999; Gorman,

Figure 1
A Draft Conceptual Framework of Relevant Theories for the Study of Service-Learning Effects on Students



Duffy, & Heffernan, 1994; Stewart, 2008; Strage et al., 2002; Switzer, Switzer, Stukas, & Baker, 1999; Yeh, 2010).

These predisposing factors begin with basic demographics, including gender (Aronson et al., 2005; Eyler & Giles, 1999; Gorman et al., 1994; Gurin et al., 2002; Kiely, 2005; Stewart, 2008; Switzer et al., 1999); age (Aronson; Strage et al., 2002); race (Aronson et al.; Bowman & Brandenberger, 2012; Gurin; Kiely; Strage et al.; Yeh, 2010); ethnicity (Bowman & Brandenberger; Eyler & Giles; Gurin et al.; Strage et al.; Yeh); culture (Bennett, 1993; Eyler & Giles; Mezirow, 2000); nationality (Kiely); language fluency (Strage et al.); family geographical context (Yeh); income (Yeh); social class (Gurin et al.; Kiely; Yeh); sexual orientation (Gurin et al.); and religion (Kiely; Stewart; Yeh). Social dominance theory also suggests that the following characteristics are correlated with one's social dominance orientation and group dominance orientation, which conversely may impact one's service-learning experiences and outcomes: gender, political-economic conservatism, and family income level (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius, 1993; Sidanius & Pratto, 1993).

Along with basic demographics, researchers have found that students experience greater benefits from service-learning when they have strong academic abilities (e.g., higher grade point averages; Aronson et al., 2005; Roldan et al., 2004). Students' year in school is also important, as students in their freshman or sophomore year may experience greater learning and development from service-learning courses when compared with more advanced students (Roldan et al.). First-generation students may also benefit more significantly from service-learning participation, and may benefit in ways different from other students, such as gains in social and cultural capital, progressing further in the process of conscientization, belief in ability to succeed in the academic environment, and college retention and persistence (Strage et al., 2002; Yeh, 2010).

Students' prior experiences also serve as predisposing factors in service-learning. Those with previous service-learning experiences tend to have very different outcomes when compared with students who have not had similar experiences (Aronson et al., 2005; Roldan et al., 2004). This could also be expected from students who have had prior volunteer or service experiences, regardless of the number of hours (Stewart, 2008). Also, students currently volunteering or engaged in service in the community may have difference experiences when compared with those not currently engaged in such activity (Roldan et al.). Finally, students' non-school workload has an impact on their experiences in and outcomes of service-

learning (Roldan et al.; Strage et al., 2002), along with their professional background (Kiely, 2005) and their professional and career goals (Roldan et al.).

Service-Learning Experience

The characteristics of the service-learning experience can affect student outcomes. In essence, not every service experience is alike. For example, one service-learning course might have students involved in the daily operations of a homeless shelter while another course may ask students to serve as tutors at a local elementary school. Given the wide range of disciplines and types of service-learning courses as well as the range in quality within each, there is substantial variance between each course's characteristics and student outcomes (Moely, Furco, & Reed, 2008). The characteristics of the service-learning experience include course variables, student variables, and community activity variables.

Course variables. Course variables characterize a complete service-learning course, including the discipline, department, college, and/or level of the course. To accurately interpret the outcomes of a specific service-learning course, it is important to understand the discipline and/or department where this course is situated (Roldan et al., 2004). The service-learning experience can be heavily impacted by the type of course (e.g., part of the general education curriculum, a requirement for a specific major, or an elective); the type of course could be associated with different levels of intrinsic motivation, enthusiasm, and interest in the service-learning experience (Roldan et al.; Strage et al., 2002). A significant variable is also whether students are required to take part in a service-learning experience or if it is optional (Roldan et al.). The need for autonomy in self-determination theory suggests that behavior that is voluntary and thoughtfully chosen is much more likely to lead to self-determined behavior, such as in a service-learning course (Niemic & Ryan, 2009).

As for variables within the classroom, the size of a course could have an impact, as a smaller class may lead to greater opportunities for discussion, reflection, and individual attention (Roldan et al., 2004). This may also help with the creation of a feeling of community within the classroom, which relates to the feminist pedagogical approach (Crabtree, 2008; Crabtree et al., 2009), the need for relatedness with peers and the teacher in self-determination theory (Niemic & Ryan, 2009), and the importance of maintaining positive relations with others in the Model of Psychological Well-Being (Ryff, 1989). Within the classroom community, a high level of support and consistent quality feedback throughout the service-learning experience will enhance the experience, critical reflection, and, ultimately, the learning

(Ash, Clayton, & Atkinson, 2005; Roldan et al.). This matches the role of feedback in self-determination theory, with feedback from instructors emphasizing students' success and providing information on how students can improve, ultimately leading to enhanced feelings of efficacy and competence (Niemic & Ryan). It may also be important for faculty to facilitate the creation of environments that break down traditional power dynamics within the classroom, leading to non-hierarchical relationships between students and teachers where they co-create and exchange knowledge (Crabtree; Crabtree et al.; Freire, 1994, 1998, 2001). These non-hierarchical relationships encourage students to be actively involved and invested in their own learning, and result in more interaction with faculty and peers within the classroom, outside of the classroom, and at the service site (Astin et al., 2000). Additionally, Piaget's (1965) theory of intellectual and moral development calls for non-hierarchical environments where students interact with peers and teachers with different points of view, leading to cognitive and emotional processes that promote moral and intellectual development. This may challenge students' assumptions, perspectives, and worldviews, which the Process Model of Intercultural Competence suggests is necessary for change (Deardorff, 2006, 2009). All in all, an environment with a high level of interaction, frequent quality feedback, and optimal challenge from the instructor and peers enables a student to have a personal experience in the service-learning course, matching the call for personalism in Kniefelkamp and Widick's Model of Development Instruction (Moore, 1994).

The final course variable is the degree the service-learning experience is integrated into the course learning objectives (Eyler & Giles, 1999; Roldan et al., 2004). Student involvement theory (Astin, 1984) supports the importance of integration of academics with students' service experiences (Astin et al., 2000).

Student variables. Most service-learning research and discussion emphasizes the influence of students' predisposing factors (*student context*) on their experience in the service-learning course and their outcomes upon completion, but once the service-learning course is under way, the focus shifts to the role of the course instructor, the design of the service-learning course, and the implementation of the community activity. However, students also play an active role in shaping their experience in the service-learning course and the community activity, along with their outcomes upon completion. While some of the predisposing factors in the category outlined below may also be construed as part of the *student context*, the factors in the *student context* are considered to be largely static in nature, with these predisposing factors unlikely to change during the service-learning

experience. However, in the *student variables* category, these variables are more dynamic and fluid and therefore likely to change during the service-learning course and community activity, based on the students' experiences, critical reflection, and critical thinking throughout the experience. In this section, Kiely's (2005) Transformative Service-Learning Model serves as a guide for many of the domains, along with some of the earlier-cited theories and theory-based frameworks and models as well as relevant theory-based research.

Freire (1994, 1998, 2001) emphasized the importance of students being actively involved and invested in their own learning, as he believed that students would learn much more than if they were passive receptacles of knowledge (with the teacher as the "knower"). In this approach, students are asked to take more responsibility by becoming more involved and invested in the community activity and the service-learning course, with those students who expend more effort more likely to have better experiences and outcomes in service-learning (Roldan et al., 2004; Strage et al., 2002). This matches Kolb's (1984) interest in students becoming more responsible for and engaged in their own learning, and Kniefelkamp and Widick's Model of Development Instruction which highlights active learning as a key to student development (Moore, 1994). The importance of student involvement is also represented in the student involvement theory (Astin, 1984) and the Conceptual Framework for the Civic-Minded Graduate (Bringle & Steinberg, 2010).

Students' motivational profiles are also quite influential (Kiely, 2005), as students who are more motivated to participate and complete the service-learning project are likely to give more effort during the service experience, have more positive experiences, and experience greater benefits upon completion (Roldan et al., 2004). Self-determination theory suggests that students may be on different points of the continuum of motivation at the beginning of service-learning courses (amotivation, external regulation, introjected regulation, identification, integrated regulation, and intrinsic motivation), and their motivation may change based on their experiences in the course and the community activity (Deci & Ryan, 2000). Where students fall on the continuum will impact their approach to, experiences in, and outcomes from service-learning. The Conceptual Framework for the Civic-Minded Graduate pinpoints the role of intrinsic motivation toward educational experiences like service-learning (Bringle & Steinberg, 2010), while the functional approach theory highlights the importance of student motivation to initially engage in service-learning and how these motives may change over the course of a service-learning experience (Clary &

Snyder, 1991). According to the functional approach theory, students with a balanced motive base may be more likely to persist in service-learning activities when compared with students who have an imbalanced motive base. Motivation can also be tied to perseverance and resilience, with students who are able to stay focused and persist despite challenges considered to be mastery-oriented students; these mastery-oriented students are likely to approach and experience the community activity in ways different from their peers (Strage et al., 2002).

Students' personality traits also have a role (Kiely, 2005), with the authoritarian personality theory suggesting that people with authoritarian personalities are more likely to be conservative, racist, ethnocentric, and prejudiced, with less empathy for those of lower status (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). This focus on empathy is further supported by the Process Model of Intercultural Competence (Deardorff, 2006, 2009) and the theory of empathy, where Hoffman (1980, 1981, 1982) suggests that empathic development is a foundation for prosocial behavior and moral development. Continuing to focus on personality traits, students' attitudes, emotions, desires, and fears also serve as student variables in service-learning (Kiely, 2005). The Process Model of Intercultural Competence identifies attitudes that influence personal growth and development, such as respect for others; openness to other people, settings, and cultures; curiosity; and interest in the process of discovery (Deardorff, 2006, 2009). These attitudes are likely to affect students' experiences in the community activity, their depth of critical reflection and critical thinking in the service-learning course, and their outcomes upon completion. Additionally, students who are enthusiastic about and interested in the service-learning course are likely to have better experiences and outcomes (Roldan et al., 2004), while students who are seeking opportunities for personal growth (one of the six dimensions in the Model of Psychological Well-Being; Ryff, 1989) and are interested in being challenged by their instructor, the course, and the community activity are more likely to succeed in service-learning courses (Strage et al., 2002). This is supported by the Model of Altruistic Helping Behavior, which suggests that students' experiences and outcomes will differ based on their desire to engage in service, attitudes about whether it is important for people to help in the community, and attitudes about the serious needs of the community (Schwartz, 1977). The theory of optimism supports the notion that optimism (e.g., positive attitude about one's self, one's outcomes, and one's life) may impact students' approach to service-learning, interaction with those at the community activity site, and outcomes from the service-learning experi-

ence (Scheier & Carver, 1992).

Students' social roles are important in their approach to and experiences in service-learning (Kiely, 2005), with the social dominance theory suggesting that societies try to minimize group conflict through ideologies that promote one dominant group over others (Sidanius, 1993; Sidanius & Pratto, 1993). Research based on this theory has found correlations between the individual-difference variable of social dominance orientation and both racism and sexism (Pratto et al., 1994). Based on the critical developmental framework, students' social identity has an impact on their service-learning experience, as students with dominant social identities experience decentralizing in ways different from those with marginalized social identities (Jones, Robbins, & LePeau, 2011). Social identity theory supports these findings, with emotional affiliation with one's in-group influencing one's prejudice and discrimination towards out-groups (Tajfel & Turner, 1986).

Student knowledge and intellectual development prior to and during service-learning can also impact their experiences (Kiely, 2005), including culture-specific knowledge and deep cultural knowledge (Process Model of Intercultural Competence, Deardorff, 2006, 2009). Kniefelkamp and Widick's Model of Development Instruction suggests that students at different levels of intellectual development will have different experiences in the community activity and need different levels of support and challenge throughout the service-learning course (Moore, 1994). Students' stage of reflective judgment also impacts their epistemological outlook, which will be an influential factor during service-learning (based on King and Kitchener's Reflective Judgment Model; 1994).

Students' assumptions, beliefs, and values (Kiely, 2005) are other critical variables, with the Model of Altruistic Behavior suggesting that students who believe they are part of their community and see the importance of helping others are likely to experience different outcomes upon completion of the service-learning course (Schwartz, 1977). Whether or not students believe the social issues being addressed in their community are interesting and important are other variables which can impact students' approach to the community activity and outcomes upon completion (Aronson et al., 2005; Eycler & Giles, 1999), along with their civic development (based on the self-determination theory; Deci & Ryan, 2000) and moral development (based on the theory of moral development; Kohlberg, 1984). The Process Model of Intercultural Competence (Deardorff, 2006, 2009) suggests that if and how students value other cultures and value diversity may also have an influence, while students' level of critical consciousness, which

comes from Freire's (1994, 1998, 2001) discussion of conscientization, may also impact students' service-learning experiences and outcomes (Yeh, 2010).

A few final variables that are included in the student variables domain are the expectations that students have prior to and during their community activity as well as their learning styles (Kiely, 2005), with the Process Model of Intercultural Competence (Deardorff, 2006, 2009) suggesting that students who are open to learning and open to people from other cultures are likely to have different experiences in the community activity. This openness to learning is connected with students' ability to be adaptable and flexible, which was highlighted in the Process Model of Intercultural Competence (Deardorff, 2006, 2009). Finally, students' awareness of their own identity and culture are critical variables as students engage in a community activity and then reflect on these experiences (Process Model of Intercultural Competence; Deardorff, 2006, 2009), along with students' skills and their sense of efficacy (Kiely).

Community activity variables. As for the community activity variables, these begin with the amount of direct community experience that students have (Aronson et al., 2005), with student involvement theory identifying the need for more time at the service site (Astin et al., 2000). This includes time spent in service activities, the duration of this experience (e.g., one semester, one year), and the intensity of the service-learning experience (Jones et al., 2011). Another component of the community experience is whether the students are working directly or indirectly with the clients and community members (Aronson et al.; Kiely, 2005; Roldan et al., 2004).

Both Roldan and colleagues (2004) and Aronson and colleagues (2005) included the importance of selecting strong service placements in their frameworks/models, as this can have a significant impact on the quality of the community activity (Eyler & Giles, 1999). In a quality placement, students will feel autonomous in parts of their community activity so that students' intrinsic motivation is not undermined, as suggested by self-determination theory (Niemic & Ryan, 2009; Yeh, 2010) and cognitive developmental theories of morality (Piaget, 1965; Kohlberg, 1984). Autonomy is maximized when student voice is valued and students are also given choices within the community activity, such as taking part in self-defined and self-directed activities (Niemic & Ryan). This is similar to the focus on students' autonomous functioning and decision-making in the Model of Psychological Well-Being (Ryff, 1989). Additionally, a quality placement is associated with service-learning activities that the students perceive as interesting and important (Eyler & Giles). In other words, students need to be engaged in the ser-

vice-learning experience, believe in the work they are doing, and feel as if their voice matters. The functional approach theory suggests that a good match occurs when a student's needs and motives for service are served by the community activity and the site supervisors, with students being more committed if they feel their psychological functions are being met (Clary & Snyder, 1991). Students also need to feel as if they are challenged by the community activity (Bowman & Brandenberger, 2012; Eyler & Giles), as students who feel optimally challenged are testing and developing their knowledge and skills, resulting in enhanced feelings of competence (based on self-determination theory; Niemic & Ryan).

Another key community activity variable is the preparation of students prior to the service-learning experience, as students with more preparation have a better chance of experiencing positive outcomes (Aronson et al., 2005). Student preparation before the community activity increases the likelihood that students will feel competent in their behavior at the service site, which is highlighted as a key factor in self-determination theory (Niemic & Ryan, 2009). This initial success also strengthens students' feelings of self-efficacy at the service site, with Bandura's (1977, 1995, 1997) self-efficacy theory and theory-based research by Tucker and McCarthy (2001) supporting the importance of these initial mastery experiences. Ryff's (1989) Model of Psychological Well-Being also supports the need for preparation before students begin their community activity, as does the Process Model of Intercultural Competence (Deardorff, 2006, 2009).

It is helpful for there to be strong support and a sense of community at the service-learning site, where students connect with supervisors, colleagues, and those they are serving (matching the feminist pedagogical approach with the creation of a strong community feeling within the classroom; Catlett & Proweller, 2011; Crabtree, 2008; Crabtree et al., 2009; Jones et al., 2011). This matches Kiely's (2005) Transformative Service-Learning Model, which calls for students to connect with diverse people at the service site. Both the student involvement theory (Astin et al., 2000) and diversity theory (Gurin et al., 2002) promote these interactions, with diversity theory prioritizing novel interactions across different types of diversity (e.g., race, sexual orientation, social class) that cause students to engage in the Piagetian concept of disequilibrium (1971, 1975/1985). Contact hypothesis theory is similar to diversity theory in the need for face-to-face contact between members of different ethnic, racial, and cultural groups, although there is also the need for equal status between the students and the individuals at the service site (Allport, 1954). This need for equal status is similar to the

need for a non-hierarchical environment that enables the co-construction of knowledge (Freire, 1994, 1998, 2001) and, following Piaget's (1965) theory of intellectual and moral development, the ability for students to engage in perspective-taking, ultimately leading to intellectual and moral development. These interactions result in enhanced feelings of relatedness in self-determination theory (Deci & Ryan, 2000) and the focus on maintaining positive relationships in the Model of Psychological Well-Being (Ryff, 1989).

Finally, it is helpful to have strong on-site supervision throughout the experience, which will increase the likelihood of a high-quality experience for the students and enhance general thought complexity (Batchelder & Root, 1994). This includes the opportunity for students to be observed and receive quality feedback from supervisors and colleagues at the service-learning site, along with feedback from those who are being served, ideally without any inherent power dynamics present (Freire, 1994, 1998, 2001). This level of support and feedback will enable students to acknowledge what they are doing well and understand how to improve in areas of concern, thereby helping students experience enhanced self-efficacy (based on self-efficacy theory, Bandura, 1977, 1995, 1997) and feel competent in their actions at the service site (again helping meet the needs of self-determination theory; Niemiec & Ryan, 2009). This type of mastery of one's environment is another dimension of the Model of Psychological Well-being (Ryff, 1989).

All of these characteristics of service-learning practice (course variables, student variables, and community activity variables) must be addressed by service-learning practitioners and evaluated by service-learning researchers, as these characteristics can have a significant impact on the outcomes of service-learning.

Mediating Variables

Mediating variables can help to explain how or why effects may occur through service-learning experiences. Both critical reflection and critical thinking are significant mediating variables determining the ultimate impact of service-learning.

Critical reflection. The student outcomes resulting from service-learning are not determined purely from the service-learning characteristics described in the previous sections; in fact, reflection may be the most important part of the service-learning experience (Ash & Clayton, 2009; Eyler & Giles, 1999). However, reflection must be critical in nature, with Dewey (1910) being the first to highlight the need for "active, persistent, and careful" (p. 6) reflection. This matches the pedagogical and learning theories presented earlier, with Freire (1994) describing experiential education as a recursive cycle of action and critical reflection, with both of these serving as content and method

for feminist pedagogy (Crabtree, 2008). Mezirow's transformational learning theory (1978, 1991, 2000) presents critical reflection as the lynchpin for transformational learning, as individuals acknowledge, evaluate, and revise their assumptions through critical reflection. Kolb's (1984) cyclical model for experiential education presents the learner engaging in an iterative process of experience and reflection, empowering students to take part in their own learning.

Along with these experiential, pedagogical, and learning theories, there were several theory-based models of reflection influencing the design of the draft conceptual framework proposed in this article. Bradley (1995) proposed a model for reflection based on Ross' (1989) adapted model of the development of reflective judgment. In Bradley's model, students progress through three reflective levels: (a) egocentric reflection, (b) ability to identify perspectives other than their own, and (c) ability to examine a range of perspectives, along with connecting their service experience with the course concepts and relevant social issues. As students move toward the final level of reflection, they develop a more profound and holistic understanding of the connection between the course and their service experience. Another model for designing reflection within service-learning is the ABC Model (Welch, 1999), where reflection is structured so that students explore and integrate all three elements of Bloom's (1956) domains of learning into their reflection: (a) affective, where students identify their thoughts, feelings, and emotions within the service experience; (b) behavioral, where students consider their actions during the service experience, why they may have acted in these ways, and how they may behave in a more effective manner in the future; and (c) cognitive, where students connect their service experience to the course concepts and skills (Welch, 1999). The DEAL Model for Critical Reflection (Ash & Clayton, 2009) reinforces the role of critical reflection in service-learning. This model begins with thoughtful Description of experiences, which then leads to critical Examination of these experiences, resulting in Articulation of Learning. The tools and rubrics associated with each of these three stages are based on Paul and Elder's (2001) standards of critical thinking and Bloom's Taxonomy. These tools and rubrics are designed to integrate "critical thinking and assessment into the service-learning course design [in a way] that encourages and enables learning how to learn through service learning" (Bringle & Clayton, 2012, p. 111).

Theory-based frameworks and models within the field of service-learning (presented earlier in this article) also highlight the role of critical reflection, including the change model's focus on the significant role of critical reflection in service-learning (Catlett &

Proweller, 2011; Morton, 1995) and the focus on reflection in Aronson et al.'s (2005) framework. In Kiely's (2005) Transformative Service-Learning Model, reflection is part of the processing category, where students engage in reflection and dialogue to cognitively process their service-learning experiences and their interactions at the community activity site.

While the above theories and theory-based models and frameworks provide an overview of critical reflection, this section will highlight the key features leading to quality critical reflection, drawing from the information cited above as well as additional theories, theory-based models and frameworks, and theory-based research. First, it is important for reflection to be intentional in nature, with Ash and Clayton's DEAL Model for Reflection highlighting this most basic feature. This begins with reflection being structured and focused, as supported by the ABC Model of reflection (Welch, 1999), the DEAL Model for Reflection (Ash & Clayton, 2009), and Knefelkamp and Widick's Model of Developmental Instruction (Moore, 1994). Theory-based research by Pinzón and Arceo (2005) and Eyler and Giles (1999) highlight the need for reflection to be contextualized, with the type of reflective activities matching the context and setting of the community activity, the community, and the student. Pinzón and Arceo and Eyler and Giles also draw attention to the need for critical reflection to connect the course content and the community activity. This need for connection is also supported by Ash and Clayton's DEAL Model for Reflection, the cognitive domain of learning in the ABC Model (Welch), the final reflective level proposed in Bradley's (1995) model for reflection, and theory-based research by Ash et al. (2005).

Educational theorists Dewey (1910, 1938), Kolb (1984), and Freire (1994, 1998, 2001) point out that critical reflection must be a cyclical, iterative process that deepens over the course of a service-learning experience, with theory-based research by Pinzón and Arceo (2005) providing further support. The need for reflection to be continuous in nature is one of the five principles of reflective practice outlined by Eyler and Giles (1999), while Deardorff's (2006, 2009) Process Model of Intercultural Competence identifies interspersed reflection as critical throughout intercultural community engagement. It is also advantageous when reflection is varied, as highlighted by Ash and Clayton's (2009) DEAL Model for Reflection. Critical reflection is enhanced when students can take part in a variety of reflective activities, such as faculty-led discussions, student discussions, one-on-one discussions with site supervisors, online chat sessions, presentations, drawings, and formal and informal written assignments (e.g., journals, essays, papers) in order to integrate and make meaning of

their service-learning experiences (Ash et al., 2005).

The effectiveness of reflective activities can be improved through timely, comprehensive feedback and guidance from faculty members. Instructor feedback is included in the Model of Developmental Instruction by Knefelkamp and Widick (Moore, 1994) and Ash and Clayton's (2009) DEAL Model for Reflection, while Eyler and Giles (1999) presented this as "coaching," where students are given feedback and guidance on their reflection practice with appropriate emotional support. Theory-based research by Ash et al. (2005) also identified the importance of guidance and feedback from instructors, although it can also be helpful to take part in reflective activities and receive feedback on one's critical reflection and critical thinking from classmates as well as site supervisors and community members (Eyler & Giles; Kiely, 2005). The Model of Developmental Instruction by Knefelkamp and Widick (Moore) and Ash and Clayton's DEAL Model for Reflection both highlight the need for non-instructor feedback on one's critical reflection. After receiving feedback on one's reflection, it may be advantageous to revise one's reflection so that students can practice critical reflection and critical thinking, thereby maximizing the learning that is taking place. The DEAL Model for Reflection identifies the importance of students practicing their critical reflection and critical thinking after receiving feedback from their instructors and others (Ash & Clayton).

Students need to feel support as they engage in critical reflection, as this may be an uncomfortable and disorienting process. Theory-based research by Ash et al. (2005) and the Model of Developmental Instruction by Knefelkamp and Widick (Moore, 1994) both highlight the importance of support. If support is provided, it will enable students to be challenged in their reflection, with Eyler and Giles (1999) calling for students to be pushed to engage in critical reflection in a safe, supportive environment. The Model of Developmental Instruction by Knefelkamp and Widick also suggests that students need to be challenged in their reflection (Moore), with theory-based research by Pinzón and Arceo (2005) also finding that challenge is important. Piaget's (1965) theory of intellectual and moral development supports the idea that young people must be challenged to examine and confront their worldview in a non-hierarchical environment, where they can reflect and dialogue with people with different perspectives. Along with challenging students to engage in critical reflection, the DEAL Model for Reflection also calls for reflection to be assessed (Ash & Clayton, 2009). Both formative and summative assessment is recommended, with theory-based research from Ash et al. providing additional support

for this component of critical reflection.

The final factor of high quality critical reflection is that it must be personalized. The Model of Developmental Instruction by Knefelkamp and Widick suggests that students will be at different levels of intellectual development, and so instructors must evaluate each student to determine what degree of structure, support, and challenge are required for each student (Moore, 1994). Along with intellectual development, the draft conceptual model presented in this article highlights numerous contextual factors and student variables that call for instructors to consider a developmental course design, where the developmental principle of scaffolding may be used to maximize each student's engagement in critical reflection throughout the service-learning course.

Despite the importance of critical reflection, it is sometimes seen as the most difficult component of service-learning, as the development and implementation of reflection activities and the strategies to evaluate these reflective processes can be quite challenging for faculty teaching service-learning courses (Ash et al., 2005). However, if rigorous reflection is promoted throughout a service-learning course, this can result in enhanced critical thinking. According to Ash and Clayton (2009):

[Critical reflection] generates learning (articulating questions, confronting bias, examining causality, contrasting theory with practice, pointing to systemic issues), deepens learning (challenging simplistic conclusions, inviting alternative perspectives, asking "why" iteratively), and documents learning (producing tangible expressions of new understandings for evaluation.) (p. 27)

Therefore, without careful, cognitively challenging reflection that is intentional, structured, focused, contextualized, connected, continuous, varied, supported, challenged, assessed, and personalized, with feedback and guidance from instructors, peers, site supervisors, and community members, critical thinking may not be enhanced, meaningful learning may not occur, and student outcomes may be drastically affected (Eyler & Giles, 1999).

Critical thinking. The case for critical thinking actually draws from the work of Dewey (1938), Kolb (1984), and Boyer (1990), who believed that real-world experiences and active learning environments enhanced students' critical thinking skills. Similarly, Mezirow's (2000) transformational learning theory suggests that meaning reconstruction is a critical component of the learning cycle, serving as the link between critical reflection and action. Service-learning reflection models described in the previous section also highlight the link between critical reflection

and critical thinking, with critical thinking often presented as an integral part and outcome of critical reflection (Ash & Clayton, 2009; Bradley, 1995; Welch, 1999). To that end, if service-learning experiences are well-designed (e.g., significant direct contact with the client, integration of course content with service-learning experience) and support and promote critical reflection throughout the entire service-learning course, students can cultivate their critical thinking skills (Aronson et al., 2005; Ash et al., 2005; Jameson, Clayton, & Bringle, 2008).

Fitch, Steinke, and Hudson (2013) present a broad conceptual model of critical thinking, defined as "attainment of higher levels of intellectual development and the use of cognitive processes such as metacognition, transfer, and problem solving" (p. 58). This model is based on Perry's (1968/1970/1999, 1981) scheme of intellectual and ethical development, Paul's (1993) critical thinking dimensions, and Paul and Elder's (2008) Critical Thinking Model. Metacognition is defined as knowing and regulating one's cognitive activities during learning processes, such that one sees oneself as a meaning-maker instead of a receiver of knowledge from others (Fitch et al.). This is similar to Freire's (1994, 1998, 2001) concern with breaking down traditional power dynamics within the classroom, with the student realizing that they are not simply a receptacle for knowledge that is to be filled by the teacher; instead, the student can co-create and exchange knowledge with the teacher. The development of metacognitive skills enhances intellectual development, as does transfer, which is the ability to apply knowledge and skills in a range of settings for different purposes (Fitch et al.). The final cognitive process identified in the broad conceptual model of critical thinking is problem solving, which includes finding solutions to current problems as well as recognizing new problems. Problem solving involves metacognition (by monitoring one's approach to problem-solving) and transfer (by adapting cognitive skills to new situations; Fitch et al.). As students' metacognitive, transfer, and problem solving skills develop and they progress in their intellectual development from dualism to multiplicity to contextual relativism, ultimately arriving at commitment within relativism, students become critical thinkers who are self-regulated learners (Perry, 1968/1970/1999; 1981).

Theory-based service-learning research has found improvements in students' critical thinking (Ash et al., 2005; Eyler & Giles, 1999; Jameson et al., 2008; Li & Lal, 2005; Pinzón & Arceo, 2005; Sedlak, Doheny, Panthofer, & Anaya, 2003; Wang & Rodgers, 2006; Yeh, 2010) and intellectual development (Eyler & Giles; Fitch, 2004; Li & Lal; Wang & Rodgers) after completing a service-learning course.

As for the cognitive processes underlying student learning, research on service-learning demonstrates improved transfer (Batchelder & Root, 1994) and problem solving (Yeh). These cognitive processes also advance students' intellectual development, resulting in enhanced critical thinking that leads to positive proximal and distal outcomes from service-learning experiences (Aronson et al., 2005; Fitch et al., 2013). However, if service-learning experiences are not well-designed and do not optimize each of the course and community activity variables addressed in the previous section, it is probable that critical thinking may not change; thus, the outcomes from service-learning will be diminished (Ash et al.).

Outcomes

A pattern has emerged in the literature demonstrating a small but significant impact on students (Eyler, 2011), ranging from proximal outcomes, which are measured immediately following service-learning experiences (e.g., leadership development, social self-confidence), to distal outcomes, which are long-term changes in attitudes, behaviors, or cognitions (e.g., long-term intellectual impact, long-term civic behavior) (Aronson et al., 2005). While it is ideal to separate the proximal and distal outcomes, the majority of studies have focused on short-term impact (proximal outcomes), with less known about how service-learning can influence long-term attitudes, behaviors, or cognitions (Eyler). For this reason, the proximal and distal outcomes are combined in the draft conceptual framework in Figure 1. The findings are grouped into four areas: (a) personal outcomes, (b) academic and career outcomes, (c) social and civic outcomes, and (d) diversity, multicultural, and intercultural outcomes.

Personal outcomes. Seeking and experiencing personal growth through service-learning is one of the six dimensions of the Model of Psychological Well-Being (Ryff, 1989), with the functional approach theory suggesting that participation in activities like service-learning can result in significant personal growth and development (Clary & Snyder, 1991). This matches theory-based research that has found self-development following service-learning experiences (Batchelder & Root, 1994). Identity development has also been consistently linked with service-learning, with the conceptualization of one's identity seen as a major developmental task in the theory of psychosocial development (Erickson, 1946, 1956) and Chickering's (1969) theory of student psychosocial development. As for identity formation, students in service-learning courses have experienced construction or reconstruction of identity (Jones et al., 2011; Kiely, 2004; Yeh, 2010), including positive changes in self-understanding (Kiely; Yeh), self-esteem (Sedlak

et al., 2003), self-efficacy (Yeh), and self-confidence (Sedlak et al.; Yeh). The theory of self-esteem also supports enhanced self-esteem (Rosenberg, 1965), while the theory of self-efficacy suggests enhanced general self-efficacy and personal efficacy (Bandura, 1977, 1995, 1997), matching students' increased belief in self-efficacy and personal efficacy after service-learning experiences (Stewart, 2008; Yeh) and students' increased hope about themselves (Yeh).

Theory-based service-learning studies have also reported students' moral development (Boss, 1994; Gorman, 1994), including an increase in moral reasoning (Gorman et al., 1994), with Kohlberg's (1984) theory of moral development supporting this finding. Service-learning can also result in leadership development (Yeh, 2010) and students becoming personally responsible citizens (based on the framework of Three Kinds of Citizens; Westheimer & Kahne, 2004). Service-learning experiences have also led to spiritual transformation and renewed faith (Kiely, 2004).

The Model of Psychological Well-Being suggests that a person's psychological well-being can be improved through service-learning (Ryff, 1989), including both hedonic or subjective well-being, which is based on pleasure and happiness, and eudaimonic well-being, where life has meaning and purpose (Waterman, 1993). Thinking positively about oneself was one of the six dimensions of the Model of Psychological Well-Being, with some of the constructs listed above suggesting that this may develop through service-learning (e.g., self-esteem, self-confidence; Ryff). Another dimension of the model was the need for people to have a sense of purpose in their lives, with these people more likely to experience psychological well-being because they are likely to have life goals, a sense of direction, and the belief that they lead meaningful lives (Ryff). Brandenberger (2013) suggested that service-learning may foster eudaimonic well-being, given the critical reflection and critical thinking in which students engage. Further support for the development of eudaimonic well-being is found with Yeh's (2010) theory-based research, who found that service-learning students try to make meaning of their lives by reflecting on their values and purpose in life. Finally, this matches the sixth vector in Chickering's (1969) theory of student psychosocial development, where students begin developing a sense of purpose as they engage in psychosocial development.

Academic and career outcomes. Academic outcomes are the most widely measured of service-learning experiences, with researchers linking service-learning to the achievement of curricular goals (Eyler & Giles, 1999) and a deeper understanding of theoretical concepts and course material (Yeh, 2010). This may be because students are able to apply these con-

cepts and theories at the service site, which helps bring their academic studies to life and personalize them. The Conceptual Framework for the Civic Minded Graduate suggests that students should gain academic knowledge and technical skills, along with understanding how the knowledge and skills enable the students to address societal issues (Steinberg, Hatcher, & Bringle, 2011). Bloom's (1956) cognitive domain of learning supports this theory-based research, suggesting that students connect their service experience with theoretical concepts, course material, and academic skills (Welch, 1999). Perry's (1968/1970/1999) scheme of intellectual and ethical development suggests that as critical thinking evolves, students apply their learning from the service-learning course into the community activity and they also begin to consider how this may apply in other areas of their lives (Fitch et al., 2013). Theory-based research from Sedlak et al. (2003) and the stage theory of engagement also support this application of classroom learning in the community activity, with the "engagement" stage suggesting that students begin making this connection between their learning in class and their service in the community (Rockquomore & Schaffer, 2000). Students have also reported the ability to apply the learned course concepts and theoretical concepts to new situations (Yeh).

Generic academic skills, such as oral and written communication and research skills (Yeh, 2010), analytical skills (Yeh), and presentation efficacy skills (Tucker & McCarthy, 2001) also have been found to improve following service-learning courses, with the diversity theory supporting the higher levels of self-assessed academic skills (Gurin et al., 2002). Self-determination theory suggests that intrinsic motivation is enhanced in service-learning courses when students feel autonomous, competent, and related to others, resulting in higher quality learning outcomes, greater value for the academic activities themselves, and greater value for the school and their education (Niemic & Ryan, 2009). Theory-based research from Yeh has also found service-learning courses can lead to students' excitement about learning in new ways, greater motivation and commitment to their education, enhanced retention and persistence in college, greater academic success, the development of an academic identity, and enhanced academic self-confidence, agency, and efficacy.

As for career outcomes following service-learning courses, students have reported opportunities for vocational development, including the exploration of their occupational identity (Batchelder & Root, 1993; Yeh, 2010) and clarification and renewal of career plans (Jones et al., 2011; Yeh). Students have even portrayed service-learning as one of the "catalysts" for discovering their career path (Jones et al.),

with some students changing their majors because of their service-learning experience (Yeh). The functional approach theory (Clary & Snyder, 1991) and the vocational development theory (Super et al., 1957) also suggest that academic experiences like service-learning can help students clarify their career goals, as interactions with professionals in the community activity lead to a more realistic understanding of different professions (Super & Overstreet, 1960). Students have also been more likely to find employment in service-oriented fields (Warchal & Ruiz, 2004) and more committed to working in a service-oriented profession (Yeh). This matches the theoretical dimensions of public service motivation, which suggests that students would be more motivated to find a service-oriented career if they have higher public service motivation, which could be developed through service-learning courses (Perry, 1996).

Social and civic outcomes. Social and civic outcomes are the third category that has been shown to be related to participation in service-learning. With respect to social outcomes, students have shown improvement in communication and interpersonal skills (Sedlak et al., 2003), including verbal and non-verbal interactions (Sedlak et al.) and written and oral communication (based on the Conceptual Framework for the Civic Minded Graduate; Steinberg et al., 2011). Additional interpersonal skills include consensus-building, which the Conceptual Framework for the Civic-Minded Graduate defined as being able to work with others and come to consensus, regardless of differences and varied opinions (Steinberg et al.). Theory-based research has also found enhanced prosocial reasoning skills (Batchelder & Root, 1994), matching the Eisenberg-Berg stages of moral development (based on Kohlberg, 1984; Eisenberg-Berg, 1979). Students have also demonstrated enhanced prosocial decision making skills (Batchelder & Root), social self-efficacy (based on the theory of self-efficacy; Bandura, 1977, 1995, 1997), and social self-confidence (Batchelder & Root).

As for civic outcomes, which aligns with the feminist pedagogical approach of applying knowledge for social transformation (Williams & McKenna, 2002), researchers have found that service-learning can result in a shift from thinking about one's self to thinking about others (Sedlak et al., 2003) and the belief that serving others is important (based on the Conceptual Framework for the Civic-Minded Graduate, Steinberg et al., 2011). This is similar to the behavior described in the Model of Altruistic Helping Behavior, in which people develop beliefs that they are part of their community and with this comes the development of attitudes that they can and should help their community (Schwartz, 1977; Shiarella et al., 2000). Service-learning can lead to an

increase in feelings of and commitment to social responsibility (Kiely, 2004), civic engagement (Jones et al., 2011; Yeh, 2010), and citizenship engagement, based on the Conceptual Framework for the Civic-Minded Graduate (Steinberg et al.) and the diversity theory (Gurin et al., 2002).

Some studies have shown increased awareness of, interest in, and commitment to social justice (Eyler & Giles, 1999; Jones et al., 2011; Kiely, 2004; Yeh, 2010). Students may experience changes in their equality and social responsibility orientation (from the diversity theory), which are attitudes and values that lead students to value helping others while also recognizing and condemning social inequality (Gurin et al., 2002). Similar to Friere's (1994, 1998, 2001) conscientization, Mezirow's (1978, 1991, 2000) transformational learning theory suggests that students may develop critical consciousness through service-learning experiences. This development of critical consciousness is supported by theory-based research (Catlett & Proweller, 2011; Kiely; Yeh), with Yeh and Eyler and Giles' findings that students are more likely to develop an awareness of societal inequalities, question and critique societal and institutional structures, and develop a more nuanced understanding of oppression and injustice. In response to this critical consciousness, students become more interested in and committed to seek out and act on solutions to societal inequalities (Batchelder & Root, 1994; Catlett & Proweller; Eyler & Giles; Yeh). Students are also more actively engaged in solving community social issues (based on the Conceptual Framework for the Civic-Minded Graduate; Steinberg et al., 2011) and have an increased commitment to the public interest, even if they must sacrifice tangible personal rewards to help others (based on the theoretical dimensions of public service motivation; Perry, 1996). This matches the justice-oriented citizen in the Three Kinds of Citizens framework, where people examine and critique social, political, and economic structures; are capable of finding and addressing injustice; and understand how to affect change (Westheimer & Kahne, 2004). Students have also expressed the belief that they can help others in need and can make a difference in the community (e.g. efficacy within civic settings; Stewart, 2008; based on the Conceptual Framework for the Civic-Minded Graduate, Steinberg et al.). In the Conceptual Framework for the Civic-Minded Graduate, Steinberg et al. see behavioral intentions as one critical element, with the civic-minded graduate stating an intention to engage in community service in the future. Desire to participate in community service is also an outcome of service-learning, in line with the Model of Altruistic Helping Behavior (Schwartz, 1999; Shiarella et al., 2000), and a longi-

tudinal theory-based study demonstrating that alumni of service-learning courses do take part in more volunteer service, with this number increasing as they age (Warchal & Ruiz, 2004).

As for political outcomes, the theoretical dimensions of public service motivation suggest that service-learning students may be more attracted to public policy making (Kelman, 1987; Perry, 1996). Four interrelated components are identified by the Theoretical Framework for K-12 Civics Education which can be developed through service-learning: (a) civic knowledge; (b) cognitive civic skills, including reflection about political and civic life; (c) participatory civic skills, such as acting to enhance political and civic life within a democracy; and (d) civic dispositions, which ranges from promoting the common good to respecting and protecting the equal rights of all people (Patrick, 2000).

Diversity, multicultural, and intercultural outcomes. The final set of outcomes are diversity, multicultural, and intercultural outcomes, beginning with service-learning students becoming more aware of their race and class privilege (Catlett & Proweller, 2011; Jones et al., 2011). Students have demonstrated enhanced awareness and knowledge about the served population following service-learning courses (Jones et al.). Stereotypes are confronted (Jones et al.), with contact hypothesis theory supporting a reduction of stereotypes (Allport, 1954) and theory-based research by Eyler and Giles (1999) finding reduced stereotypes and increased tolerance for diversity. Perspective-taking is another important diversity outcome, defined as being open to, appreciating, and understanding new and/or different perspectives, supported by theory-based research (Jones et al.; Sedlak et al., 2003), the Conceptual Framework for the Civic-Minded Graduate (Steinberg et al., 2011), the contact hypothesis theory (Allport), Piaget's (1965) theory of intellectual and moral development, and the diversity theory (Gurin et al., 2002). This perspective-taking is similar to the acceptance stage of ethno relativism in the Developmental Model of Intercultural Sensitivity (Bennett, 1993). Additionally, theory-based studies have shown that students become more sensitive to and aware of diversity following their service-learning experiences (Sedlak et al.), along with an enhanced belief in and appreciation for the value of diversity (Sedlak et al.). The Conceptual Framework for the Civic-Minded Graduate supports this appreciation of and sensitivity to diversity, along with being able to work with diverse individuals (Steinberg et al.). The diversity theory has shown that informal interactional diversity (which is a part of many service-learning courses) can promote student belief that difference is a part of democracy (Gurin et al.). Consistent with the theory of nonprejudice, students

may develop a universality orientation in interpersonal relations where they focus on similarities instead of differences between self and others (Phillips & Ziller, 1997), which is similar to the minimization stage of ethnocentrism in the Developmental Model of Intercultural Sensitivity (Bennett).

Focusing on culture, service-learning researchers have found students to be more aware of their own cultures (Crabtree, 1998; Kiely, 2005; Yeh, 2010), which is also supported by the Process Model of Intercultural Competence (Deardorff, 2006, 2009) and stage three of Banks' (2001) Six-Stage Typology of Cultural Identity. As for other cultures, service-learning students transition from an ethnocentric to an ethnorelative perspective (Bennett, 1993; Deardorff, 2006, 2009), ultimately progressing through three progressive levels: (a) multicultural and intercultural awareness (Crabtree; Sedlak et al., 2003); (b) multicultural and intercultural sensitivity, based on theory-based research from Fitch (2004) and Perry's scheme of intellectual and ethical development (Perry, 1968/1970/1999, 1981); and (c) multicultural and intercultural competence (Crabtree; Sedlak et al.). Multicultural and intercultural competence includes culture-specific and deep cultural knowledge (based on the Process Model of Intercultural Competence; Deardorff, 2006, 2009) and gaining such multicultural and intercultural skills as caring (Kiely, 2004), compassion (based on the theoretical dimensions of public service motivation; Frederickson & Hart, 1985; Perry, 1996), empathy (Kiely, 2004, 2005), and humility (Sedlak et al.). The Process Model of Intercultural Competence also suggests that empathy is an internal outcome critical to intercultural competence (Deardorff, 2006, 2009), with empathy also highlighted as the hallmark of the adaptation stage of ethnorelativism in the Developmental Model of Intercultural Sensitivity (Bennett). Other multicultural and intercultural skills outlined in the Process Model of Intercultural Competence include flexibility, where students can identify and use communication styles and behaviors based on the cultural environment, and adaptability, where students are able to adjust to different cultural environments and the respective communication styles and behaviors (Deardorff, 2006, 2009). This ability to communicate across cultural boundaries is similar to Perry's (1968/1999) contextual relativism, the adaptation stage of ethnorelativism in the Developmental Model of Intercultural Sensitivity (Bennett), and stage four of Banks' (2001) Six-Stage Typology of Cultural Identity. The Process Model of Intercultural Competence identifies attitudes that may be important for facilitating this transition from an ethnocentric to an ethnorelative perspective, but they are also outcomes on their own: (a) openness to

intercultural learning and people from different cultures; (b) a sense of curiosity and discovery, with students able to tolerate uncertainty; and (c) having respect for other cultures, which is also supported by theory-based research findings from Kiely (2004).

Service-learning research has also shown an increase in students' global awareness and knowledge (e.g., global consciousness; Crabtree, 1998; Kiely, 2004; Yeh, 2010), as well as an expanded sense of global citizenship (Kiely, 2004) and a global identity, based on stage six of Banks' (2001) Six-Stage Typology of Cultural Identity. Students have shared how they learned to value community knowledge and experience through international service-learning programs, while also realizing just how important context is in understanding complex social issues within community settings (Crabtree; Kiely, 2004). The Conceptual Framework for the Civic-Minded Graduate suggests that service-learning also enhances student understanding of current events, complex issues, and policies that are local, national, and global in nature, with theory-based research from Yeh and Kiely (2005) providing additional support for this outcome. The final stage of Banks' Six-Stage Typology of Cultural Identity suggests that students can develop the knowledge, skills, attitudes, and abilities necessary to be effective in cultures around the world. Following international service-learning experiences, students have also expressed the belief that they can be effective in participatory and collaborative development projects around the world (Crabtree). This matches Yeh's findings that students realize they have the knowledge and abilities to help others in meaningful ways.

Interconnected, Dynamic, Iterative Nature of the Conceptual Framework

There are arrows between each level of the conceptual framework, as it is not assumed that students will progress through this framework in a linear manner. Instead, it is thought that students may engage in critical reflection and critical thinking throughout the service-learning experience, which may lead to proximal outcomes but this may also change the students' experiences in the community activity and the service-learning course, leading to different outcomes later on. It is also possible that some student variables may change based on the students' critical reflection and critical thinking, which may then impact their service-learning experience as well as their outcomes. Therefore, arrows are used in the proposed conceptual framework to demonstrate that this is an interconnected, dynamic, iterative process. This type of cyclical, iterative process is reflected in Kolb's (1984) cyclical model for experiential education and Freire's (1994) description of experiential education

as a recursive cycle of action-critical reflection-action. Theory-based research from Kiely (2004) also provides support for this conceptualization, with findings suggesting that faculty may want to continue to support students' critical reflection and critical thinking after they return from international service-learning programs. According to Kiely, this may foster additional outcomes and perhaps lead to even greater change in students' affect, behavior, and cognition following their service-learning experience. Therefore, arrows going in both ways are included in between the mediating variables and outcomes levels of the proposed conceptual framework, as this indicates the possibility that students may continue to engage in critical reflection and critical thinking that could further their developmental outcomes even after the service-learning course is complete.

Jameson et al.'s (2013) Conceptual Framework for Typology of Academic Learning Outcomes also includes arrows representing the iterative, cyclical learning process that students experience in service-learning. This service-learning framework from Jameson et al. also used broken lines to indicate the fluid nature of the domains, with each domain connected with and impacted by the others. This led to the use of broken lines in the proposed conceptual framework in this article, which indicates the fluidity and interconnected nature of the levels and the domains within each level of the framework.

The final piece of the proposed conceptual framework is the final arrow that leads back to the first level of the framework: student context. This arrow suggests that students who take multiple service-learning courses will bring the outcomes from their previous service-learning course(s) into their next service-learning course, which will then impact students' experiences and learning in that course. The Process Model of Intercultural Competence also includes an arrow at the end of the model leading back to the start, as Deardorff (2006, 2009) believed that developing intercultural competence is an ongoing process. Theory-based research findings from Jameson et al. (2008) also support the notion that service-learning courses in a sequence should be designed to build on service-learning courses earlier in the sequence, as students' previous service-learning experiences and learning outcomes will impact their subsequent service-learning experience(s).

Future Practice and Research Directions

The draft conceptual framework (Figure 1) was proposed to improve the research on service-learning. To further the discussion of theory application, researchers and practitioners are encouraged to review, test, and critique the conceptual framework. Researchers can also use these theories to enhance

their own research or to develop new theories that may help the field analyze and measure learning changes in students participating in service-learning. Practitioners may use the proposed conceptual framework as a guide for the design and implementation of service-learning courses and programs by drawing on theories that inform student learning and development.

Researchers are encouraged to conduct rigorous, systematic testing of the linked theories in order to identify inaccurate, missing, or overstated components among the learning concepts or to identify best practices in enhancing student learning. For example, Kiely (2005) suggested that students' "personality traits, social roles...professional background, knowledge, skills, beliefs, values, interests, needs, learning styles, expectations, motivations, desires, fears, and sense of efficacy" (p. 9) all have an impact on students before, during, and after their service-learning experiences. Perhaps these personal aspects are best tested through the use of one theory over another, or perhaps a new theory can emerge. Practitioners and researchers are encouraged to examine the proposed conceptual framework and identify other factors that may be missing, inaccurate, or overstated, or identify additional theories that have proven useful for particular factors or outcomes.

There is also a need to explore how the components of the conceptual framework work in the context of different institutions and settings. Sample questions are: (a) Does the context of the institution directly impact the faculty context, and does that lead to different service-learning courses and outcomes? and (b) Are there connections between outcomes (e.g., empathy may be required to initiate altruistic behavior; Hoffman, 1980, 1981, 1982)? Studying connections between implementation practices and outcomes would enable practitioners to design their service-learning course to maximize specific outcomes (e.g., course goals and objectives). In particular, the student variables domain may be one area ripe for further investigation.

Building on this analysis of theories relevant to research on service-learning and students, there is a need for individual conceptual frameworks for faculty, community partners, communities, and academic institutions, as this would further the practice and research of service-learning by looking beyond the oft-studied student experience and outcomes. The achievement of the long wished-for improvement in rigor in service-learning research will require the application of theories to large, longitudinal studies investigating the long-term impacts of service-learning on students, faculty, academic institutions, community partners, and communities, as there are outcomes that may not manifest themselves until long after the service-learning experi-

ence is complete (Billig & Furco, 2002; Eyler & Giles, 1999; Furco, 2003).

Readers are encouraged to build on the framework offered in this article. Here are a few possible research questions that would build on and improve the proposed framework:

RQ1: Are there any components in the draft conceptual framework that are missing, inaccurate, or overstated?

RQ2: Are there connections between the different components of the framework and, if so, how influential are these connections to potential outcomes?

RQ3: What is the impact of this framework on research, or on the design and implementation of service-learning courses and programs?

RQ4: What are the relative contributions of each component of the draft conceptual framework on the proximal and distal outcomes for students?

RQ5: What would be the design of a comparable conceptual framework for each of the other service-learning stakeholder groups?

RQ6: What other theories would help measure the proximal and distal impact of service-learning courses and programs on academic institutions, faculty, community partners, and communities?

Researchers and practitioners are encouraged to answer these questions while also testing the conceptual framework in the design, implementation, and evaluation of different service-learning courses in different fields, at different institutions, with different faculty and students, with different community partners, and in different settings around the world.

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