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Civic Engagement and Service Learning for Medical Students: A Phenomenological Study of Transformation

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CIVIC ENGAGEMENT AND SERVICE LEARNING FOR MEDICAL STUDENTS: A
PHENOMENOLOGICAL STUDY OF TRANSFORMATION

by

ROY RODRIGUEZ

A DISSERTATION

Presented to the Faculty of the University of the Incarnate Word
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF THE INCARNATE WORD

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With Thanks,

Roy Rodriguez
DEDICATION

This dissertation is dedicated to my children Virginia, Vanessa, and Ryan. You are and remain, my greatest blessings in life. Remember that love and respect are most important in life.

“Watch, stand fast in the faith, be brave, be strong. Let all that you do be done with love.”

1 Corinthians 16:13-14
Service learning is an effective academic technique that emphasizes integration of course instruction with outside community service and allows for a more enriched learning experience by promoting critical reflection. With medical students encountering a growing diversity in patients, service learning is essential in linking academic learning with their community experiences. This study was conducted at a local medical school using service learning programs in underserved communities. The purpose of this study is to understand the experience medical students had in a service learning program involved in some underserved communities. This study implemented a phenomenological research design in which semi-structured interviews were used to collect information. Spradley’s Developmental Research Sequence implemented both domain and taxonomic analysis. This study revealed that medical students were able to gain skills in leadership, clinical practice, compassion, and a greater understanding of the social realities of the underserved. Community service, serving communities, student learning and institutional support emerged as themes that contributed to student transformation. The potential of this study would provide insights that may help other medical school service learning programs contribute to developing a sense of lifelong civic engagement.
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Chapter 1: Service Learning

Context of the Study

Institutions of higher education have a long history of maintaining curriculums that reinforce democratic morals in an effort to encourage civic responsibility within their communities (Harkavy & Benson, 1998; Patrick, 2000). Civic responsibility “depends on its citizens as voters, volunteers, and general participants in the civic life of the nation” (Michelsen, Zaff & Hair, 2002, p. 1). Service learning and community outreach programs contribute to the success of civic engagement that responds to community needs. Presidents in higher education are becoming firm examples and advocates of civic engagement within their perspective campuses and surrounding communities (Gearan, 2005). Established in 1973, “the Carnegie Classification has been the leading framework for recognizing and describing institutional diversity in U.S. higher education for the past four decades” (Carnegie Foundation for the Advancement of Teaching, 2015). In 1985, Campus Compact was “designed to honor and expand the role of college students and their schools in working to improve their communities” (Gearan, 2005, p. 32). Created in 2006, The President’s Higher Education Honor Roll “annually highlights the role colleges and universities play in solving community problems and placing more students on a lifelong path of civic engagement by recognizing institutions that achieve meaningful, measureable outcomes in the communities they serve” (Corporation for National & Community Service, 2015).

Good civic engagement should not be just a volunteer sense of engagement in serving the community (Latham, 2003). More importantly, it opens up an opportunity to extend academic proficiency and resources with community partnerships that help lead towards social change (Gearan, 2005). This approach of utilizing both service learning programs and community
partnerships should foster social change and address community needs (Jacoby, 1996). Research indicates that service learning programs focus primarily towards encouraging undergraduate students towards lifelong civic engagement (Logsdon & Ford, 1998; Lu & Lambright, 2010). Graduates students have revealed an interest in participating in service learning programs. It is rare to find service learning program opportunities for graduate students in serving communities that encourage civic engagement (Beckman, Brandenberger, & Shappell, 2009). Furthermore, both undergraduate and graduate students in a service learning programs that integrate specific curriculums share similar potential benefits.

Moorer (2011) stated that “undergraduate and graduate business students perceive themselves very similarly as related to success in participating in a service learning project; learning from a community service activity; civic engagement; and technical skills” (p. 70). Research indicated that universities can create learning models that promote civic engagement that is sustainable over time not just based on goal accomplishment (Smith et al., 2013). Service learning programs encourage students to take ownership of all opportunities in serving their communities. Students are more likely to become actively engaged and connected with their community (Joseph, Stone, Grantham, Harmancioglu, & Ibrahim, 2007; Morgan & Streb, 2001; Stewart & Wubbena, 2014). It allows for individuals to connect both life experiences and knowledge obtained in an academic setting to create opportunities for civic engagement. According to Latham (2003), civic engagement enriches lives of fellow community members by responding to their social needs, expanding the impact of ethical public leadership, promoting civic participation, and cultivating a community that is inclusive of democratic social awareness. Students would join community partnerships and projects that help solve community problems, in which service learning is essential in linking academic learning and community involvement.
When members of a community have a civically engaged mindset, they are more likely to strive to make their community a better place to live for themselves and all members of society.

Gearan (2005) stated that “even the most academically focused institutions have found that community ties work to their benefit. Connecting coursework with community service and critical reflection has been shown to improve academic learning, address community needs, and foster civic responsibility” (p. 34). Bringle and Hatcher described civic responsibility in the context of service learning addressing community needs, but also indicated benefits to students, university, and community partnerships:

Virtually all universities are interested in committing their resources to develop effective citizenship among their students, to address complex needs in their communities through the application of knowledge, and to form creative partnerships between the university and the community. Service learning provides one means through which students, faculty, and administrators can strive toward these aspirations. (Bringle & Hatcher, 1996, p. 237)

Service learning programs promote civic engagement through service learning opportunities that combine both civic leadership and responsibility towards social change. Service learning connects students with partnerships focused on community needs identified concerns and student expertise. Some of the characteristics associated with being civically responsible include (a) the importance of democratic values; (b) passion for community involvement; (c) proactive implementation of knowledge and skills that will benefit others; (d) consideration for members within a community as a collective; (e) personal accountability for one’s actions (Thornton & Jaeger, 2007).

A need for universities to develop graduate service learning programs would foster a shift from the individual to collective that occurs when learning and critical reflection take place as a result of being a civically engaged and community-based member (Mundel & Schugurensky, 2008). These opportunities have been made tangible in the development of future service
learning programs dedicated to the cultivation of lifelong civic engagement that results in (a) enhancing campus civic engagement; (b) addressing community needs; and a creating a possibility for student transformation (Kaye, 2004). Institutes of higher education are encouraged to modify curriculums that serves community needs and fosters a sense of civic engagement to impact every member of a community. Service learning provides that opportunity to link academic teachings with real world settings. Understanding health disparities can help solve any barriers in health disparities in many communities (Duffy et al., 2014).

Additionally, socioeconomic inequalities continue to form barriers and challenges for many communities (Gurin, 1998). Research indicates that communities overwhelmed with social imbalances face a growing number of severe morbidity and mortality rates. These many health disparities of the community compel educational institutions to modify their education model to confront the issues of the underserved (Duffy et al., 2014). Meanwhile, the underserved continue to become marginalized and in need within our society. Based on this concern, there is an increased need for civic engagement that responds and implements visions for social change in confronting debilitating healthcare disparities (Ferrari III & Cather, 2002; Wee, Xin, & Choon-Huat Koh, 2011). Likewise, Eckenfels (2009) argued that “American medicine has lost its connectedness to society and, in the process, has become self-absorbed, devoted more to its own technology and what it is able to do than to what patients and society actually need” (p. 5).

Research indicates despite the inequity, it is through service learning and community engagement that leaders can provide a voice of social change for many underserved communities. Medical education that infuses service learning is more likely to build and improve community partnerships and help prepare future healthcare professionals with a diverse mindset that leads to better understanding any differences in community populations (Stewart &
Furthermore, narrowing social marginalization in challenged communities is going to require sustainability in civic engagement in meeting community needs. Members of a community need to have a connection that is responsible in solving potential and existing problems (Underwood & Jabre, 2010). Local communities linked together through age, ethnicity, class, or religious affiliations labor tirelessly to achieve change or solve issues but simply fail in achieving lasting change. People in these varied communities need to be actively engaged in order to maintain a strong sense of social change not just end result (Wheeler & Edlebeck, 2006).

One example of a medical school service program addressing underserved communities is Frontera de Salud “a service organization founded and staffed by medical, nursing and allied health students committed to bringing primary healthcare to the under-served” (Frontera de Salud, 2015). Another example is Morehouse School of Medicine (MSM) established to educate medical students in various specialty occupations that address the needs of underserved communities challenged with social economic barriers (Buckner, Ndjakani, Banks, & Blumenthal, 2010). Furthermore, there has been a need for humanistic medical practice due to increasing diversity in many communities. Medical doctors need to address changes in society to better understand patients and cultural differences in underserviced communities (Wear & Kuczewski, 2008). Eckenfels described current clashes between providing humanistic care in spite of limitations in current health care costs accessibility to the underserved:

This clash between the moral imperative of medicine as a humanistic call to serve and the reality of accelerating costs, limited access, and declining perceptions of quality care has led to a kind of schizoid state, with the physician caught between the daily routines required to deliver the latest advances in health care and the intrinsic values fundamental to education and practice. (Eckenfels, 2009, p. 5)

Instituting service learning into medical school curriculum can be a valuable component that provides learning through lived experience and reflection. It is with reflection that students
become engaged and realize the value of their service. Additionally, service learning laced with a holistic approach can enhance compassion that cultivates personal disposition. This method creates opportunities to gain better patient understanding and sense of compassion in practicing clinical skills. Student learning is then heightened and will lead to personal growth (Ferrari III & Cather, 2002).

When a medical student engages in service learning compassion and empathy are developed and forms a new sense of professional identity. Civic engagement provides an opportunity to serve communities in need and gain new competencies in providing care in challenging social environments (Steiner & Sands, 2000). Improving humanistic qualities leading to personal transformation requires experiencing (a) disorienting dilemma; (b) engaging in a critical assessment of one’s assumptions; (c) exploring new roles and relationships; (d) building confidence in those new roles and relationships; and (e) integrating one’s life experiences into the new perspective (Mundel & Schugurensky, 2008).

Statement of the Problem

This study will add to the field of knowledge in service learning programs in medical schools that are focused on developing students serving in underserved communities. Research indicates that service learning programs are not fully incorporating an opportunity for students that lead to lifelong civic engagement. This is happening despite all the advantages students can achieve in linking classroom knowledge with community experiences that lead to personal transformations (Buckner et al., 2010; Richards, 2013; Stewart & Wubbena, 2014). According to Vogel and Seifer (2011), “sustained institutional participation in service-learning can be effective in fostering a greater culture of community engagement in academic institutions and serve as a stepping stone to other forms of community engagement” (p. 200).
This concept is currently applied in some medical schools, and hopefully will expand to all medical schools in fostering a lifelong goal towards civic engagement. Students with some lived experiences extend their competencies that help develop resources for social change (Goldberg, McCormick Richburg, & Wood, 2006). With academic and professional experiences, the potential for this student demographic being civically committed, engaged, and impactful is paramount (Lu & Lambright, 2010; Maccio, 2011). Institutions of higher education need to recognize the importance graduate students bring to a service learning program. There are many studies on service learning programs liked with community partnerships that benefit academic goals and address community needs (Azer, Guerrero, & Walsh, 2013; Sabo et al., 2015; Underwood & Jabre, 2010).

However, very little is known about the role that these partnerships have on student transformation in meeting community needs. Research indicates, students often reflect of their volunteering experiences as positive experiences, but those good spirits should not be a temporary feeling. In order for the student to have an enduring transformation, service learning should be managed in ways that are appealing and innovative so that the essence of giving remains. This transformation helps to develop medical students for a life commitment and devotion in serving undeserved communities (Eckenfels, 2009). This study will provide future medical school service learning programs with an understanding of how to successfully developing and supporting programs for medical students. This study explored medical student transformation based on their experiences addressing community health disparities in a service-learning program.
Purpose of the Study

The purpose of this study is to understand the experience medical students had in a service learning program involved in some underserved communities. Using interviews rich in personal descriptions of the participant’s experiences, this study captured emerging themes based on individual critical reflections and student-faculty discussions. This study focused on community service learning in a medical school in South Texas.

Research Questions

The research questions are focused on medical students’ personal experiences of civic engagement and meeting community needs.

1. What are medical students’ views of service learning and how does it relate to civic engagement and meeting community needs?

2. What are medical students’ view of their own transformation into civic leaders’ committed to civic engagement?

Significance of the Study

This study explored a phenomenon of medical students’ personal transformation as a result of critical reflection after experiencing at least a year in a service-learning program. The need for this study was based on a lack of research involving (a) medical students in civic leadership or engagement programs, (b) their potential as lifelong civic leaders, and (c) their role working with community partnerships in addressing community healthcare disparities. Through the findings and conclusion of this study, universities will gain an understanding of service learning programs promoting the importance of civic engagement and addressing community needs among medical students. It is vital that service learning programs seek two aspects that allow civic leadership
and engagement development partnering with community programs that promote civic engagement and encouraging faculty to integrate service-learning options within curriculums.

This research will benefit service-learning programs and community partnerships in improving programs based on reflections of medical students serving community needs. Worrall (2007) revealed higher institutions collaboration with all partners creates a sense of reciprocity that helps promote diversity. Linking both service learning program and partnership opportunities ensures that all goals for all stakeholders are maximized. Thus, service learning success is contributed to its linkage to societal responsibility, which helps bolster social self-efficacy (Vogelgasang & Astin, 2000). The findings of this study will help improve existing community service learning programs in medical school. This study will create an awareness to the importance of service learning programs in osteopathic medicine. The hope is to provide any recommendations, if applicable, for service learning programs to develop and encourage medical students to become civically engaged leaders throughout their lifetime.

**Theoretical Framework of Study**

The study is based on experiential and transformational learning theoretical frameworks based on a constructivist paradigm. Kolb’s Experiential Learning cycle consists of “concrete experience; reflective observation; abstract conceptualization; active experimentation. It requires the learner to experience, reflect, think and act in a cyclic process in response to the learning situation and what is learnt” (Chan, 2012, p.406) and Mezirow’s Transformative Learning Theory is “the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one’s experience in order to guide future action” (Mezirow, 1996, p. 162). Critical reflection is an important factor that helps create personal change based on self-analysis of lived experiences. Students engaged with various community organizations may be more
creative in motivating staff and provide innovative ways to improve operations while serving as a human resource allowing an expansion of the organization’s services to the community (Blouin & Perry, 2009).

Critical reflection can have a much broader perspective that extends beyond that of our socially accepted definitions and conclusions obtained through life experiences. The personal information “we gain through experience and the way we practice our craft are just as important. The initiation of reflective practice involves using information in some form, which almost always includes our past and current experiences” (Merriam, Caffarella, & Baumgartner, 2007, p. 172). Kolb (1984) describes the learning model’s primary two dimensions of the learning process that results from critical reflection to testing out one’s learning in new situations:

There are two primary dimensions to the learning process. The first dimension represents the concrete experiencing of the events at one end and abstract conceptualization at the other. The other dimension has active experimentation at one extreme and reflective observation at the other. Thus, in the process of learning, one moves in varying degrees from actor to observer, and from specific involvement to general analytic detachment. (p. 30-31)

Critical reflection is considered a key concept in establishing transformational learning. In relation to medical students, serving underserved communities presents challenges to their own assumptions, values, and beliefs. Reflection is essential in critically thinking through encountered experiences, which is important in learning from those experiences.

Transformational learning occurs when an individual’s experience a situation and reflects on that experience. This will allow for them to critically reflect on their assumptions, beliefs, and values. They will then be able to explore and strengthen their new learning and relationships with others. They are able to re-assimilate their life experiences, along with how they interpret, process, and act upon their transformed perspectives (Mundel & Schugurensky, 2008). The
purpose of this theory is to build on prior experiences to learn and connect new knowledge through critical reflection. Mezirow states:

Reflection on content or process may result in the elaboration, creation, or transformation of meaning schemes. Reflection on assumptions involves a critique of these premises that may result in the transformation of both meaning perspective and the experience being interpreted. (Mezirow, 1990, p. 6)

Critical reflection is important for both professional and academic settings to appropriately assess and unite any learning that has occurred. Mezirow (1990) stated that “perspective transformation is the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand and feel about our world” (p.22). For example, many medical students may have preconceived biases surrounding many cultural aspects of society, good or bad, but through civic engagement a transformational occurrence may emerge. Overall, critical reflection is an essential part of human growth as it allows us to connect meaning with our experiences that might not otherwise has been considered. Fundamentally, it provides a venue for us to make sense of our actions and surroundings.

**Overview of the Methodology**

In this study, a phenomenological qualitative approach was used to explore medical students’ experiences in a service program providing healthcare services to the underserved that leads in developing lifelong engagement. Creswell (2003) states that “the researcher identifies essence of human experiences concerning a phenomenon, as described by participants in a study. Understanding the lived experiences defines phenomenology as a philosophy as well as a method” (p.15). Qualitative research provides a humanistic approach to search for truth beyond that of the positivist methodology, and requires a search for meaning and interpretation, and personal experiences. Research should be focused on discovery, new insights, and all perspectives from others being studied that offer the greatest contributions to new knowledge.
This naturalistic approach involves many personal experiences, self-observation, life stories, and experiential, historical, and intercommunication based texts to provide meaning to subjective experiences (Merriam, 1998). The purpose for applying this design and approach was to gain as much insight into the transformational phenomena that occurred with medical students’ experiences in a service learning program that have helped shape their development into future civic leaders. This qualitative approach of phenomenology, with roots in psychology and philosophy, focuses on the essence or structure of personal and shared experiences (Merriam & Associates, 2002).

Social change that results in empowering people beyond the ideas of sources of domination is a reflection of freedom. This change is often a result of how participants change their particular interpretations of the phenomena and institutes of authority. Participants are able to move away from any rationality, and begin changes in emotion and motivation (Denzin, 2003). It is the meaning behind these experiences of the participants that this study intended to better understand. This study focused on 10 medical students involved in a service learning program that led to personal transformation through reflection towards a humanistic approach to moral practice.

Limitations of the Study

This study included the following limitations: first, this qualitative study was restricted to 10 medical students enrolled in a south Texas medical school active in service learning programs. This results in an inability to make generalizations of other medical students or graduate students in general in service learning programs serving communities. The second limitation of the study was the time constraints from medical students’ class schedules given their challenging studies and active service learning.
**Definition of Terms**

The following definitions are presented in order to understand and identify how certain terms are being used in the study.

**Attending** - Medical attending is defined as someone “serving as a doctor on the staff or a hospital who regularly visits and treats patients and is in charge of other staff members” (Merriam-Webster, 2013).

**Colonias** – Spanish for colonies

**Community Service Learning** - A different meaning of service learning.

**Culture**- Culture is defined as “the beliefs, customs, arts, etc., of a particular society, group, place, or time (Merriam-Webster, 2013).

**Higher education**- Higher education is defined as “education beyond the secondary level, particularly education from a college or university” (Merriam-Webster, 2013).

**Pathophysiology**- Changes that occur in the body causing diseases.

**Promotores**- The Spanish name for community health worker that translates to “the promoter”. The term is used for individuals from their communities along the Texas-Mexico border trained to teach other members of a community health prevention.

**Residency** – Medical residency is defined as “a period of advance training in a medical specialty that normally follows graduation from medical school and licensing to practice medicine” (Merriam-Webster, 2013).
Chapter 2: Literature Review

The purpose of this chapter was to analyze the literature that pertains to medical students in a service learning program and their transformation into civic community contributors. The areas reviewed in this literature review concentrated on: (a) service learning and its use in medical school; (b) civic engagement opportunities and partnerships; (c) student transformation through reflection and learning; (d) institutional support through change leadership and creating a sense of community awareness. Lastly, this review of literature led to the importance in identifying this lifelong transformation to civic engagement and community.

Figure 1. Literature Review Map. This figure represents a system set of actions found in the literature that contribute to civic engagement and service learning.
**Service Learning**

**Why service learning?** Higher education is challenged to go past mission statements that basically advocate community engagement, and modify their learning model that promotes community engagement that is useful and meaningful (O’Connor & Lynch, 2011). With this in mind, service learning provides an effective academic technique that emphasizes integration of course instruction with outside community service and allows for a more enriched learning experience by promoting reflection on the long term benefits associated with this involvement (Joseph et al., 2007). Service learning is one of the most effective tools for universities to connect their students with the community. Research indicated that academic success, social awareness, and community-based action are the three main goals characteristic of service learning (Lee, Olszewski-Kubilius, Donahue, & Weimholt, 2008).

Service learning is a method of learning that is based on connections between both academic learning and practical social experiences (Morgan & Streb, 2001). Another organizational advantage linked with service learning is that it creates opportunities that fosters professional growth and a sense of citizenship (Worrall, 2007). Furthermore, allowing students to share their experience, commitment, unique perspectives, and energy while taking on an active role in solving community needs (Blouin & Perry, 2009). As a result, serving communities promotes confidence and competence serving given communities that leads to improvements in student development (Gutheil, Chernesky, & Sherratt, 2006). Overall, “Service learning also allows students to meet identified needs in the community and establish links between the community and academic/clinical learning” (Azer et al., 2013, p. 441). An example of establishing links between the community and academic learning is to create meaningful civic engagement. Higher education is challenged to go beyond mission statements that simply
suggest community engagement, and to create community engagement that is beneficial and authentic (O’Connor & Lynch, 2011).

Therefore, higher education institutions are modifying curriculums that incorporate service learning opportunities to address community needs. Creating a sense of community awareness helps identify ways to effectively link student academic goals with those of their community partnerships (Hegarty, 2011). However, educational institutions should consider that some students may not want to participate in service learning. When constructing a curriculum that incorporates service learning objectives, outside assistance from experts may be beneficial in attracting doubtful students (Wells, 2006). This understanding will provide institutions with insights that cultivate effective curriculums, whether incorporated from inside or outside resources that balances both student life and study goals. This would also encourage service learning and community involvement.

Service learning programs that offer many different community opportunities fosters student interest and motivation. For example, an effective approach to increase motivation is to empower student involvement in roles, such as student leadership and co-instructors. Students are able to provide creative ideas that increase excitement and promote student participation (Sabo et al., 2015). Research indicated that service learning has been extensively investigated for undergraduates in many academic fields (Logsdon & Ford, 1998; Lu & Lambright, 2010). As a result, this information excludes research on medical students in a traditional medical school setting. However, in areas of the medical field, service learning has made an impact that includes increased community awareness and involvement, self-reflection, and self-discovery. Progressively, higher education institutions are acknowledging that service learning maximizes
student learning. For instance, medical students are able to actively expand their clinical skills and gain confidence around real patients.

Medical school service learning programs provide students with experiences that improve clinical knowledge that fosters personal and professional growth (Ferrari III & Cather, 2002). In order to provide a more humanistic approach to medical practice, medical schools are becoming more civically minded and community aware. “Medical schools are challenged to better prepare future physicians to address the increasing and complicated healthcare needs of racially and culturally diverse societies” (Stewart & Wubbena, 2014, p. 147). The goals of service learning require all involved to devote a lot of time and energy to keep it successful. Service learning leaders must form mission objectives, apply service learning strategies to students and community, and keep service learning reciprocally effective over time, as it is a continuous endeavor.

Additionally, the Arnold P. Gold Foundation defines humanism within a medical context as a, “a respectful and compassionate relationship between physicians, as well as all other members of the healthcare team, and their patients. It reflects attitudes and behaviors that are sensitive to the values and the cultural and ethnic backgrounds of others” (Arnold P Gold Foundation, 2015). In line with this notion, an important facet of service learning is to provide a wide range of service learning opportunities that allows medical students to pinpoint their unique learning goals within a given community (Wee et al., 2011). Specially, service learning provides medical students with much needed hands-on experience in delivering a service to the community. The experience in offering training outside a formal educational setting is another benefit integrated within a medical school curriculum (Eckenfels, 2009). Overall, research indicates that academic success in medical school is not compromised due to service learning
participation. Student involvement should be encouraged because it helps improve clinical skills and patient understanding outside the classroom (Khwaja et al., 2015).

**Service learning in medical school.** Integrating service learning with a medical school curriculum provides students with opportunities to serve the needs of the community, while also allowing them to gain real world knowledge and skill proficiency. Ferrari III and Cather (2002) stated, “Service learning experiences enrich learning and enable a student to develop personally, socially, academically, and spiritually. It challenges their individual creativity and problem solving skills” (p. 223). The experience allows the medical student to expand on their knowledge base beyond classrooms and challenges them to develop desirable skills such as individual creativity and problem solving. This experience is important in reaching curriculum objectives that fosters a working relationship with community partnerships. This a collective endeavor goes beyond individual recipients and allows service learning relationships to support one another in improving community problems (Steiner & Sands, 2000).

When course objectives are linked to community involvement, academic achievement and personal reflection are encouraged. Goldberg et al. (2006) stated, “The four key components of service learning are: (a) experiential education; (b) academic achievement and course objectives that are linked to community service; (c) ongoing and effectively reflection; (d) overall goal of citizenship” (pp. 131-132). These four components are essential characteristics through which experiential learning allows students to connect academic and real-world experiences. Experiential learning is best illustrated when partnering of educational institutions with community partnerships (Maccio, 2011). Research indicated that service programs offer a variety of opportunities suited to meet medical student learning and understanding objectives within different community environments (Wee et al., 2011). Even more, service learning
strengthens classroom content and increases student learning as a result of community service. Students gain an understanding of real world issues such as stereotypes and biases, and how to overcome them. The key to a successful service learning relationship like any relationship is trust (Trail-Ross, 2012).

In contrast, students may lose interest in serving underserved communities over time. For example, medical students once eager to participate in serving underserved communities tend to lose optimism and commitment. This negative outcome extends after program completion, when many are found to have diminishing thoughts towards underserved populations (Stephens, Landers, Davis, Durning, & Crandall, 2015). In order to address community service differences, service learning differs from volunteerism in that there is a reciprocal aspect associated with this type of learning. There is a mutual teaching and learning that takes place by those serving and those being served (Maccio, 2011). Furthermore, students may feel heavy academic workloads aligned with service learning opportunities may lead to a decrease in academic performance. Offering service learning opportunities that reinforce classroom learning provides improvements in clinical skills and patient understanding due to student reflections. These reflections may foster motivation and compassion that leads to meaningful and quantifiable relationships between students and community populations (Khwaja et al., 2015).

When higher education institutions focus on a goal of promoting citizenship, students tend to realize the impact service learning has towards solving community needs. Successful civic engagement depends on strong community partnerships that achieve progressive solutions on solving community problems (Ferrari III & Cather, 2002). Students gain an invaluable learning experience in terms of personal growth and developing their professional identity (Maccio, 2011). For instance, community service learning (CSL) programs serve as opportunities
to develop medical students’ future personal and professional identity. Medical students are encouraged to participate in compassionate caring in civic engagement early in medical serving community needs. These rich community experiences help develop professional identities that convey a sense of compassion. Therefore, medical schools should offer several service learning opportunities that lead to a broad professional distinctiveness (Beck, Chretien, & Kind, 2015).

Institutions that interchange knowledge with their community partnerships promote a sense of professional identity for students. Civic engagement is essential in creating opportunities that address community needs and fulfill institutional goals. Together, new knowledge is acquired and leaning is enriched for both parties (Stewart & Wubbena, 2014).

For example, Frontera de Salud also called Frontera, a “student-run volunteer organization run by health professional students at the University of Texas Health Science Center San Antonio (UTHSCSA) that are committed to bringing healthcare to the underserved” (Frontera de Salud, 2015) and impoverished communities in South Texas. Frontera de Salud did not find a simple situation in diagnosing a patient or referring them to their doctor. Community members had no access to doctors or healthcare. In order to have successful patient outcomes, a shift was made to address preventive healthcare and patient teaching that focused on the needs of the community. Students educated Promotores (Promoters) on healthy living options and preventive healthcare, in exchange, the students themselves were educated about community social barriers and disparities (Smith et al., 2013).

Another example of health outreach partnership is the East Harlem Outreach Partnership (EHHOP) that the Mount Sinai School of Medicine formed in 2004. EHHOP is a free clinic run by the medical students and is attending-directed. It is located in East Harlem a community that is populated predominantly by Mexican immigrants. This population is in great need of health
assistance as it is one of the unhealthiest districts in New York City (Smith et al., 2013). In a 2002 Office of Service Learning Initiative website, Ribeau (2002) describes civic engagement as an opportunity to strengthen and support service learning:

Learning through activities that contribute to meeting others’ needs also helps students gain a greater awareness and a deeper sense of appreciation of how academic disciplines can contribute to solving real human problems. They not only learn the abstract theories on which those disciplines are based, but they also realize how that theory can be applied to improve the human condition. (p.3)

Further, students who engaged service learning understood classroom material better, achieved social awareness, developed compassion, and had better understanding of diversity (Bentley & Ellison, 2005; Boss, 1994; Gutheil et al., 2006). Overcoming these barriers creates a better appreciation and understanding in working with diverse populations. For example, medical students experienced many health disparities, social barriers, and cultural differences outside of the classroom. The real world human experiences led to student reflection that challenged their personal assumptions, values, and beliefs leading to better student learning. Students were better incorporate this new learning in better serving social inequalities and health disparities in various communities (Duffy et al., 2014).

**Civic Engagement**

**Opportunities.** Civic engagement encourages various opportunities where engaged citizens can “express opinions and make decisions, even if initially only at the margins of society, to gain exposure to new ideas, and augment their critical thinking skills” (Underwood & Jabre, 2010, p. 2). Civic engagement creates an opportunity to acquire leadership skills that are required to empower social change within challenged societies (Wheeler & Edlebeck, 2006). In an interview for *The Project Pericles*, Latham (2003) describes civic engagement as an ongoing sense of commitment and an opportunity to respond to social needs democratically:
A commitment to enriching public discourse on significant questions, responding to the social needs of the local and global communities in which we live, cultivating effective and ethical public leaders, encouraging civic imagination and creativity, and otherwise promoting a democratic way of life in a multicultural and increasingly globalized world. (p. 2)

As a result of this academic responsibility, institutions are challenged to modify learning models that encourage civic engagement programs that leads to lifelong civic engagement. Understanding that students are more likely to form lasting habits and mindsets from this experience. Students should be encouraged to participate in various service learning opportunities which leads to active civic engagement after graduation (Levine, 2003). Social inequalities are arguably an important concern in civic engagement. Sociologists suggest a social justice model that incorporates service learning provides students with knowledge and abilities to expose and focus on root causes of social inequality (Eyler, Giles, Stenson, & Gray, 2001).

For this reason, students are not simply delivering acts of charity but moving towards change. Civic engagement objectives should provide a pathway towards civic engagement and opportunities that respond to community needs. Research indicates engaged communities with a common location, shared concerns, or similar condition work together to confront any concerns or threats to the community’s welfare (Cline & Kroth, 2008). As a result, civic education should foster a sense of social justice that has an interdisciplinary approach in solving diverse issues within a community (Daly, Devlin-Scherer, Burroughs, & McCartan, 2010). Within the context of civic engagement, community service can be mistaken with service learning. Community service is focused on promoting community welfare and providing assistance to common community needs. Community service is commonly linked with undertakings such as: building homes, working at food banks or volunteering at a nursing home.
In contrast, service learning connects classroom teachings with community service (Lee et al., 2008). This distinction is important for several reasons, Buckner et al. (2010) stated, “Service learning is a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities” (p. 1645). Additionally, service-learning students personally experience social realities and barriers of an underserved community. Students acquire an understanding and sense of compassion in understanding community challenges, patient social concerns and cultural differences. For instance, students may ask a patient to go for a thirty-minute walk, to improve their health through physical activity; but in areas with depilated infrastructures and high crimes rates options might be limited (Smith et al., 2013). Creating healthy and active community environments and policy development are approaches for battling physical and chronic illness, and it requires the participation of individuals, multiple organizations, and address known barriers and focus on methods to safely increase activity, such as working with city organizations to increase park security, adding sidewalks, and enforcing stray animal laws.

As mentioned, community members confront many challenges correlated with current economic, social, and government changes. It is especially relevant to include a variety of perspectives to contribute and solve community needs through civic engagement (Easterling & Millesen, 2012). For instance, student-run clinics provide additional medical services for community needs coexisting within current healthcare structures. In doing so, they are able to perform basic and preventive health care while reaching nationwide medical aims in care (Wee et al. 2011). When an individual is able to acknowledge his or her role and accept a moral
responsibility in society, he or she is better able to meet societal expectations in an optimistic, meaningful, and with measurable outcomes.

As a society, an improved civic education should be advocated for identity development and perseverance of civic engagement. Institutions “should help to prepare responsible, engaged citizens that is, people who know relevant facts and principles, participate in politics and civil society, and are committed to certain moral values, such as concern for the public good” (Levine, 2003, p. 63). Service learning is a reciprocal process “one of the ways in which American higher education fosters the development of good citizens is through service learning, a unique form of experiential education” (Einfeld & Collins, 2008, p. 95). Different from experiential learning that involves gaining experiences in civic engagement program serving communities. Service learning encompasses programs that benefit student, community partnerships, and higher education institutions (Cline & Kroth, 2008).

Research indicates students who connect with community partners are able to achieve a sense of community compassion. Students gain a purpose in serving communities needs through commitment and motivation. This connection develops a consciousness in creating moral direction in forming professional identities (Smith et al., 2013). By implementing service learning objectives laced with critical reflections, students are able to better understand patients, social barriers, and cultural differences in real world settings (Cline & Kroth, 2008). As institutions are responsible for developing students who will be engaged citizens of their community, it is also the responsibility of the student to better understand their civic obligations in obtaining meaningful and measurable roles within their communities (Underwood & Jabre, 2010).
With this in mind, it is evident that the social needs of the community are varied and require services of more than one academic discipline. Medical schools stimulate service learning programs successfully in resolving community needs through interdisciplinary teamwork such as nursing, dental, and physician assistants. Each healthcare discipline is distinctive in its services and works as a team to meet the needs of the community (Smith et al., 2013). Service learning has grown into a program that provides numerous opportunities for medical students to meet and connect with community members in ways that otherwise may have never occurred. It allows a medical student a vision into the lives of the people who live just outside the doors of the university, its clinics and hospital.

When a medical student understands many facets of a given community, learning becomes possible on many levels due to the needs within a community (Ferrari III & Cather, 2002). Being civically engaged provides an exclusive opportunity for an individual to obtain lasting experiences to further develop leadership skills by functioning as a collective toward achieving common community goals (Underwood & Jabre, 2010). Leadership is not individualistic; it is collectivistic in that a leader must lead others toward a common goal. Service learning is an opportunity for students to attain useful skills that will enhance their medical professionalism and build on caring personal identity.

**Partnerships.** Medical schools have a potential to build strong relationships with community partnerships connecting both an academic and economic dynamics (Gearan, 2005). Community members realize that this energy promotes service learning partnerships that encourages civic engagement in solving community problems and is considered a great contribution for a community and its leaders (Underwood & Jabre, 2010). Higher educational institutions are developing and placing students on paths that create lifelong commitments to
civic engagement. These students are encouraged and motivated to promote social changes in underserved communities (Thornton & Jaeger, 2007).

When service learning curriculums focus on ways to sustain its civic mission in resolving community needs, social awareness and reasonability become possible for all members (Beckman et al., 2009). Research indicates that civic citizenship is the result of university partnerships with their communities that results in transformation and value in achieving their communal objectives:

For universities, community engagement of staff and students is regarded as an expression of their corporate citizenship. To be effective, such reform needs to be based upon genuine partnerships with communities and community organizations so that communities, student teachers and the universities change and benefit from resulting joint initiatives. (Bronstein, Anderson, Terwilliger, & Sager, 2012, p. 121)

One example, the Advanced Leadership Institute (ALI), in central Wisconsin operating from 2005 to 2009 is effective program committed in developing community leaders that civic minded in addressing the needs of the community. One characteristic of this program involves using reflective practices that enhance personal enthusiasm and skills needed for effective leadership (Easterling & Millesen, 2012). This impact associated citizens that are civically responsible and engaged in serving communities is sustainable and helpful for service learning programs. For instance, programs that work with diverse members of a community are better prepared to help other diverse members another community (Marullo, 1998).

Being active in the community allows individuals to curtail individualistic thinking that promotes personal development. This identifies personal issues that might not have been identified or resolved creating a sense of responsibility among community members (Boss, 1994). In contrast, some of the challenges associated with service learning programs include time constraints and inadequate faculty involvement (Worrall, 2007). However, it is understandably
beneficial to form meaningful relationships with community partners. This is accomplished with achieving meaningful and measurable outcomes and consistent social interactions throughout the community (Scott, 2012). In a joint effort between partners, service learning should solve and foster a sense of social change in addressing health disparities in underserved communities (Hunt, Bonham, & Jones, 2011; Sabo et al., 2015). Partnership is important to the success of service learning programs in terms of health prevention and basic care in underserved communities. Improvements that decrease health disparities requires sustainable effort, both partners must work together to customize service-learning experiences that solve community needs (Mi, Stefaniak, & Afonso, 2014).

Notwithstanding any efforts that challenges medical school education to serve underserved communities. A partnership that addresses goals of both medical school service learning programs and community partnership in resolving community needs is essential. Building a relationship that is reciprocal of needs and benefits of all stakeholders is important (Hunt et al., 2011). The collaboration between universities and community partners in building and maintaining a strong partnership that is sustainable and meets needs of all participants:

- Support from academic administration should include a financial commitment for faculty participation and supplies. Participation from faculty from several courses is essential. Integration into several different clinical program options and levels increases the likelihood of project survival. Time and attention is important when locating an appropriate partner. Building a strong partnership is an intentional nurturing process that includes attending to the needs and desires of all partners. (Schoon, Champlin, & Hunt, 2012, p. 717)

More importantly, community partnerships should be beneficial to faculty, students, and community partners. In partnership, new research is possible that leads towards efforts and goals of improving community wellness and overcoming health equity (Sabo et al., 2015). An area of focus which has gained widespread significance in population health studies is social
determinants of health. In order to educate medical students about this important matter, partnerships are formed between community partnerships and medical schools with a clear objective to solve health disparities and social inequalities within their local communities (O’Brien, Garland, Murphy, Shuman, Whitaker, & Larson, 2014). These partnerships between medical schools and community partnerships benefit curriculum models that identify and create solutions to solve community needs. Thus curriculum objective must incorporate experience, morals and compassion that contributes to improving the overall wellbeing of community members (O’Brien et al., 2014).

Furthermore, partnerships that identify community needs through community awareness campaigns create curriculums that help medical students link classroom teaching in serving the needs of underserved communities. The relationship creates an opportunity to share community information while students gain proficiency in patient care that extends academic knowledge and real world competencies (Azer et al., 2013). However, identifying new areas of research and best practice requires all involved to devote much time and energy to keep it successful. Sabo et al. (2015) argued that “co-teaching brings new energy, directions, and partnerships to the course and helps to alleviate potential burnout among faculty and partners” (p. S42). Overall, the most important goal of the service learning experience, from the academic institution’s perspective, is to educate students to be enlightened and engaged individuals who will go out and contribute for the overall benefit of the community as a whole. This is to educate students to become future professionals who will be engaged citizens of their communities. From the community partner’s perspective, the goal is to gain an invaluable resource of service and knowledge in the form of student contributions.
Student Transformation

Reflection. One of the fundamental benefits associated with service learning is personal growth through personal reflections constructed through one’s lived experiences. Service learning is heavily tied to the action-reflection theories of John Dewey, who encouraged the importance of merging action with reflection to develop greater understanding of experiences (Richards, 2013). Reflection allows students to better understand classroom learning and aligns it with community service objectives, thus giving students more of an incentive to participate in community service opportunities (Trail-Ross, 2012). However, a student’s use of reflection should summon a critical self-assessment of moral judgment and focus on principle service objectives. Service program objectives should not focus solely on what is deemed socially customary or appropriate (Scott, 2012).

Research indicates that service learning programs experience should be reflected and result in student learning. Using reflective practices, the student should be able to link their acquired experiences to new learning environments which reinforces curriculum learning objectives (Beckman et al., 2009). As previously mentioned, civic engagement and service learning means being able to connect what is learned in an academic setting with real-world experiences that facilitates social awareness. This connection occurs when students are able to reflect on the impact of their experiences and interactions. This allows for students to analyze these interactions and focus on what they have done, why they participated, how it made them feel when they were in the process, and what they took away from the whole experience. It allows for them to develop a sense of awareness that their worldview is not universal but is profoundly shaped by their life experiences (Richards, 2013).
When utilizing service learning in a structured way to connect academic content and skills to community needs, students are empowered to apply their academic, social, and personal skills to improve their community and grow as individuals (Kaye, 2004). Some of the best practices for reflection in service-learning include “setting goals, knowing the audience, making time, choosing a method, sharing expectations, identifying resources, reviewing skills, creating transparent evaluations, demonstrating the importance of different types of reflection, and embracing/capitalizing on teachable moments” (Stewart and Wubbena, 2014, p. 152).

Examination begins with an assessment of the students’ experience and the learning outcomes that are appropriately beneficial and relevant to education objectives. Students are expected to have an opportunity to contribute to the reciprocal mission of service learning. Students experience personal growth through critical reflection and experimenting with that new knowledge in different situations. This heighten in combing both service learning duties with and community mission opportunities (Buckner et al., 2010).

Research indicated that critical reflection is best exemplified as being the reflective practice of internalizing one’s life experiences to find the hidden meaning and importance within each lived experience. A goal is to gain an enlightened sense of one’s experiences and the awareness that perceptions are influenced by various life factors. Reflection is a reinforcing factor that ties together student community service, coursework, and civic engagement (Stewart & Wubbena, 2014). Student reflection should occur after experiencing new environments, such as when serving in underserved communities. Thus experience in reflection can lead to new constructed knowledge and confidence in approaching similar environments. Student transformation is possible through reflection that may lead to compassion and lifelong civic engagement (Beck et al., 2015). Reflection is an essential part of student learning due to its
experiential foundation for all students. Students are able to reflect on their service learning experiences and are able to extract that value in similar and new learning experiences (Beckman et al., 2009).

For example, a study conducted by Jones & Abes (2004) stated that the study’s participants shared their experience with being involved in service learning and that it provided them a more integrated identity. They also stated that this was evidenced by changes in how they perceived their daily interactions and relationships with self and others, their openness to new ideas and experiences, and their willingness to be more involved within their community. As a result of this study, it can be argued that when students are open to new experiences and what can be learned from these experiences, they allow themselves to be more open to personal growth. This openness requires a transformative approach to learning, in that students must be engaged in and is willing to be transformed by the experience. This requires an open mind, a willingness to be changed by the reflective practice, and ultimately the respect for the transformation that should occur. Reflective practice associated with this type of learning allows for students to engage in their personal identity, academic, and professional development while obtaining a sense of self-authorship (Goldberg et al., 2006; Jones & Abes, 2004).

When students are able to develop their identity in relation to their self-authorship, they are able to fully connect their values to their cultivated sense of self-awareness and the impact they can have on their communities becomes more meaningful. This is evident when students are able to link course content to their community experience and gain insight by comparing their personal perspectives to those of others. Students also participate in professional opportunities that they might not otherwise have been able to participate in outside of a service learning experience. As a result, personal development is the most important benefit of service learning
It allows for students to identify their personal value system and how they can be responsible members of the community. More importantly, students must find ways to reflect beyond coursework in service learning, and include all mindsets that include past stereotypes, prejudices, personal feelings, and any sensitive issues encountered during their experiences (Stewart & Wubbena, 2014).

Overall, ongoing reflection allows for students to truly engage in a much deeper understanding of their life, academic, and community experiences, which leads to personal development and transformation. For example, through reflection medical students are able to gain insightful lessons in serving in hospice service learning environment. Students can reflect on death and human suffering. Reflection in this experience creates a personal understanding that us useful in similar environments leading to improved student learning (Su, Lee, Lai, & Su, 2014). These connections allow for an empowering effect to take place in which students take an active role in their learning and growth. For example, in an Asian service learning program study, medical students working in both student-run clinics and home-based programs in underserved communities were able to solve many problems gained encouraging appraisals. They were able to teach preventive care and overcome many barriers within the communities (Wee et al., 2011).

**Student learning.** Student development is the result of experiences in new environments and personal reflection. Experiential learning is acquiring new knowledge through reflection and experience involving new environment or experiences. Its overall objectives are to provide students with a sense of confidence in confronting new environments or learning opportunities. Service learning provides real-world situations that require critical reflection that maximizes student learning (Eyler, Giles, & Braxton, 1997). Kolb (1984) described learning in the context
of experiential learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (p. 41). Critical reflection is important for both professional and academic setting to appropriately assess and unite any learning that has occurred. Critical reflection can also have a much broader perspective that extends beyond that of our socially accepted definitions and conclusions obtained through life experiences in simple journaling.

Smith et al. (2011) identified that a broader sociological notion of reflective knowing is a concept of critical reflection that occurs beyond reliable and traditional social environments. Critical reflection is an essential part of human growth due to connect meaning with new experiences that are not easily understood. Fundamentally, it provides an opportunity for students to make sense of new experiences their surroundings. Merriam et al. (2007) stated that any social changes that occur in society requires an examination of all current and new social environments. Service learning aims to connect academics with social awareness of important issues affecting communities. Social responsibility is an important goal of service learning rooted in community-based action and student learning (Lee et al., 2008).

Students who attain a developed sense of self-authorship while participating in service learning experiences demonstrate greater proficiency in performing action-oriented tasks, excelling in their academic programs, and exhibiting increased empathy towards others compared to their peers who do not participate in service learning experiences (Maccio, 2011). Azer et al. described educational benefits gained from service learning experience and community engagement opportunities:

Learning by doing and service learning have several educational benefits including: (a) Fostering responsibility, accountability, and caring for others; (b) Extending students' learning from classroom learning to community services; (c) Enabling students to develop skills that are less likely developed in traditional modes of learning. These skills
include contributing to public safety, environmental protection, and public education about common diseases and healthy living habits; (d) Enabling learners to experience the exact meaning of learning and how service learning could add new dimensions to their learning experience. (Azer et al., 2013, p. 441)

Therefore, it is important for institutions to assist students in the development of their sense of impact in their community. Jones and Abes (2004) stated that as a result of service learning, students continued to identify their experience as a clear breakthrough in the progress of their personal growth. It is this development that should inspire students to want to continue giving back to their communities long after completing their studies. Research has shown that the application of knowledge is useful in building an understanding of concepts through “immediate or concrete experiences are the basis for observations and reflections. These reflections are assimilated and distilled into abstract concepts from which new implications can be actively tested and serve as guides in creating new experiences” (Kolb & Kolb, 2005, p. 194). Likewise, Mezirow (1997) described a source for personal transformation through reflection in confronting assumptions:

We transform our frames of reference through critical reflection on the assumptions upon which our interpretations, beliefs, and habits of mind or points of view are based. We can become critically reflective of the assumptions we or others make when we learn to solve problems instrumentally or when we are involved in communicative learning. We may be critically reflective of assumptions when reading a book, hearing a point of view, engaging in task-oriented problem solving (objective reframing), or self-reflectively assessing our own ideas and beliefs (subjective reframing). Self-reflection can lead to significant personal transformations. (p. 7)

Thus, students described acquiring beneficial skills through reflection when faced with challenging situations. They were able to use their new skills in new environments and situations that were even more challenging. This learning situation is consistent with experimental learning and a systems perspective (Poulin & Silver, 2006). All stakeholders should contribute in creating a curriculum that encourages critical reflection opportunities in serving communities. Reflection
should occur after new experiences that leads to personal growth, confidence, and new knowledge. Students can use different means to reflect about their experiences, but the overall goal is to expand and form thoughts (Sabo et al., 2015).

When students are involved in various service learning opportunities, they are able to connect their experiences, tie it with the curriculum, and better able to recognize new opportunities for personal growth and community involvement. The key component of this is to allow past knowledge and experience to serve as a foundation to better support current knowledge and experience that is being attained. Service learning and community involvement allow for a deeper understanding of the true impact that one can have on others. Students gain an understanding of this perspective and true potentiality of their contribution to society by way of their chosen field (Goldberg et al., 2006). There is greater opportunity for development when students participate in more than one service learning experience while enrolled in their programs, so to reinforce their academic and experiential learning in various contexts (Lu & Lambright, 2010). For example, students who participated class projects gained skills that led to personal growth and professional development. Service learning provides students with greater competencies gained through linking academic and real world experiences (Wells, 2006).

Furthermore, students were able to connect both academic learning and real-world realities. Thus allowed students to vision realistic concepts due to their new knowledge that makes sense in any new environment. Since students were able to understand real world applications, they were able to better engage and understand course material precisely and correctly (Wells, 2006). Likewise, Mezirow (1997) stated, “Educators must assume responsibility for setting objectives that explicitly include autonomous thinking and recognize
that this requires experiences designed to foster critical reflectivity and experience in discourse” (p. 10).

For instance, medical students developed a transformative attitude in “SERVE (Service, Education, Reflection, Volunteerism Elective) a unique one-year course that reengages 4th-year medical students in service to their communities in a structured educational environment. SERVE students report that the course has increased their involvement in the community, supported their growth into a teaching role, and enhanced continuity within student-run free clinics” (Jones, Blinkhorn, Schumann, & Reddy, 2014, p. 296). As a result, students who completed the program retained robust attitudes and enduring commitment towards community service after their medical school education.

Hence, experiential learning led to student compassion and confidence with their new knowledge. Clinical skills and medical knowledge were improved and expanded. Students in SERVE were transformed and had future plans to continue serving underserved communities in the future (Jones et al., 2014). This outcome was an improved sense of (a) self-identification; (b) empowerment; and (c) motivation in doing more to give back to the community. As medical students, these students typically have more life demands such as work and family, in addition to their academic demands.

From the student perspective, it is important for the student to feel a sense of attainment and accomplishment. For example, residency programs are necessary in medical school as an opportunity to further expand students experience in terms of competence, clinical and patient knowledge. A resident learns through experience due to reflection which allows them to build off newly acquired knowledge and use it in new experiences of situations. However, when the focus is strictly on attaining clinical skills, humanistic skills such as compassion and empathy become
secondary (Eckenfels, 2009). Overall, students are encouraged to reflect on previously held attitudes and assumptions with new obtained experiences. They continue to challenge identities and influence personal beliefs, values and assumptions towards social change (Beckman et al., 2009).

**Institutional Support**

**Change leadership.** Higher education’s main objective is to develop reliable, compassionate, and useful community driven citizens. Students participating in service learning gain an opportunity to discover a true understanding of social responsibility towards social change (Einfeld & Collins, 2008). A commitment to civic engagement is an annual goal for many higher education institutions. There are various benefits associated with service learning generally well documented in undergraduate programs (Logsdon, & Ford, 1998). Medical school leadership to create change in service learning programs requires leaders who can create this change by being involved in individual developments and helping them accomplish their organizational goals (Wilson & Rice, 2004). In order to better understand the importance of providing opportunities for medical students in service learning programs, there must be an understanding of any possible contributing factors in leadership that create change within higher education institutions. Educational leaders need to go “beyond the scope of one individual, however visionary; it requires the creative and expert input of many individuals both to identify future directions and to take forward the organizational transformation that will be necessary” (Middlehurst, 1999, p. 327).

Leadership styles must reflect the leader’s actions and behaviors that support organizational values, standards, and statements. Leaders must also align their actions with that of the organization’s values and overall goals to ensure trustworthiness, which is essential during
change Gurin (1998). Equally important, leaders and followers should share in their vision and goals. Leaders must identify organizational needs and translate them into meaningful opportunities that will lead to improvements during change. Effective leadership should be viewed as reciprocal process.

Leaders influencing followers and at the same time followers are influencing leaders. Leadership characteristics needed in organizational change should be responsive in creating new change and provide a sense of future direction (Darling & Nurmi, 1995). In contrast, change leadership tends to have certain characteristics that may be contributing to institution reluctance to change. Leadership characteristics striving for an effective organization during change need to continually create a vision of how the organization will operate both internally and externally in the future. Leadership styles may need to be adjusted in real time, which will effectively enable followers to work together in an ever-changing future environment (Gurin, 1998).

These characteristics that are sharpened with obtaining updated knowledge surrounding program change leading to an effective organization transition. Participative leadership skills can be enhanced with follower participation in decision-making, which will lead to a perceived feeling of appreciation and contribution to new developments (Ismail, Mohamed, Sulaiman, Mohamad, & Yusuf, 2011). Leaders can initiate change and provide organizations with creative strategies that may lead to more successful change strategies. For example, 10 large companies that had undergone a major change decision a common link was discovered, in which they demonstrated effective communication and employee empowerment (Gurin, 1998).

Leaders can create this change through follower development and helping them achieve their organizational goals. Effective leadership communication requires a sense of creativity that induces a state of mind that is compelling enough to form a strong employee enthusiasm and
commitment toward the organization. Organizations should be open and sensitive to cultural
diversity, which requires empathy and a vast understanding of the needs and differences of
others. Leaders must consider that their success is not based on just fulfilling leadership
responsibilities, but development that lead to organizational commitment (Darling & Nurmi,
1995). These emotional links also lead to avenues of engagement with followers helps reinforce
trust and validity in leadership communication. Communication plays a critical role in increasing
trust and confidence by explaining to followers’ reasoning behind the change and how it paves
the way success in the future (Kowske, Lundby, Rasch, Harris, & Lucas 2009). Along with
effective communication, leadership should consider other competencies that lead to
empowerment to accomplish successful departmental changes.

Research suggests leadership competencies that help establish strategies that may help
organizations achieve their goals and create personal connections. These competencies include
helping skills, tangible relevance, self-knowledge, customer focus, realistic optimism, and
cautious loyalty (Noer, 2010). These competencies appear to center around empowerment and
open communication, which may lead to essential leadership opportunities in successfully
improving organizational commitment. Leadership styles that create a new cultural of shared
values need to emphasize open communication and a desire to learn helping skills, which include
being an empathic listener, coach, communicator, and helper. Organizational commitment can
then be better preserved through open communication and transparency into helping create
change (Noer, 2010). Leaders can also create a culture of shared values of empowerment and
positive perceptions, which will contribute as an important variable in contributing to an increase
level of satisfaction and decreased levels of stress within organizations during change (Savery &
Luks, 2001). A full understanding of different leadership styles may provide an opportunity to appropriately utilize a sense of inspirational movements.

Effective leadership should be constantly changing and developing new creative plans (Gurin, 1998). Leadership styles should provide a future vision, support, reinvigorate the job, and reinforce employee value. Inspirational leadership can help reduce apparent consequences that change has on organizations (Kowske et al., 2009). Organizations that practice inspirational leadership effectively will result in a more responsive culture, which allows leaders to internalize their vision and values. Followers are able to learn which goals are essential in achieving a capacity to lead them. The organization can utilize these opportunities of vision and values through change resulting in improved influence, satisfaction and commitment (Wilson & Rice, 2004).

Furthermore, a study in East Malaysia on change leadership found that empowerment does have an impact between organizational commitment and achieving any goal. They also found that leaders must properly implement transformational processes including: (a) individual consideration; (b) individualize influenced attributed; and (c) individualized influence behavior (Ismail et al, 2011). Additionally, empowerment reduces stress brought on from organizational change and lowers quality of work life and job satisfaction, which can cost an organization greatly in terms of commitment. Leadership styles that initiate employee empowerment generate vast improvements in organization performance and overcoming change resistance, but also helping followers reach their personal goals (Savery & Luks, 2001). The findings remain consistent with existing research that leadership should demonstrate a certain degree of moral obligation that ultimately assures organizational viability (Carmeli & Sheaffer, 2008). More importantly, higher education has a civic obligation to support any surrounding underserved
communities. Service learning programs should link classroom studies with community experience in responding to any health care disparities (Buckner et al., 2010).

**Community awareness.** Institutions of higher education should maintain a curriculum that reinforces civic engagement in an effort that encourages creating opportunities in serving local communities. When service learning programs provide opportunities to serve communities, students gain proficiencies that lead to personal transformation. Institutions that use service learning programs have an opportunity to serve and solve community needs that drives a potential towards lifelong civic engagement (Beckman et al., 2009).

Furthermore, Latham describes ways to build on civic engagement created on campus that will extend beyond campus and into community awareness both locally and globally:

To enhance the capacity of faculty, students and others to be more fully engaged in the local and global communities in which we live, we need to take concrete steps to build on the civically engaged work that is already being done on campus. With this in mind, interested faculty are working with and through the Center for Scholarship and Teaching (CST) to promote, support and facilitate civic engagement on campus. (Latham, 2003, p. 8.)

This approach of utilizing existent resources allows for a more civically inclusive approach possible. From the perspective of service learning, in order to be effective, students must link their academic studies with experiences gained in a service learning program. They must actively use critical reflection to extend their knowledge and create new meaning beyond their past assumptions and beliefs involving both academic and social aspects (Lee et al., 2008). For example, effective leadership is based on individual leadership knowledge, ability, and skills in a given environment. This provides an active teaching strategy that links theory and experience. Learning increases in active learning opportunities as opposed to a genetic educational setting. Therefore, leadership is only enhanced with learning experiences (Underwood & Jabre, 2010).
It is not an easy task to stay actively engaged within a community after a task has been completed. Good civic leadership should not be just a continuing sense of engagement with the community. Therefore, effective leadership should be constantly developing curricula in face of situations that respond to changing community needs (Gurin, 1998). For example, medical schools are faced with challenges that provide effective curriculums focusing on underserved communities with a growing diversity (Buckner et al., 2010). Research indicated that subjecting medical students to a variety of underserved communities routinely leads to an overall enthusiasm in wanting to continue to solve community needs in the future (Wear & Kuczewski, 2008). Furthermore, medical school service learning objective should be designed to inform students with the rapid changes in health care and create opportunities to experience real world environments. However, missing is participation from community members who can provide information about and within the community (Hunt, et al., 2011).

Medical students are able recognize changes in health care and create reciprocal opportunities for all stakeholders. The significance service learning provides students is in confidence and compassion in serving challenged communities. When medical students meet the needs of the community, solutions to many healthcare problems become a reality (Waddell & Davidson, 2000). For example, according to a study based on home visits, The University of Florida offered a two-semester course for first year students that created opportunities to gain experience in serving community in an attempt to expand their classroom teachings. Home visits led to opportunities to reflect on these new experiences that led to personal and professional growth (Waddell & Davidson, 2000). Likewise, when a service learning program serving indigenous communities in the southwestern United States offered opportunities for students.
They encountered new experiences that led to better understanding, overcoming and resolving social determinants within the community (Sabo et al., 2015).

Community based learning created opportunities for medical students to learn from academic learning in the classroom to actual patient experiences. For instance, in reflection interns were able to build extend their knowledge and gain a sense of confidence and commitment to serving communities. Most students reported that their experiences led to reinforcing their commitment to medicine and provided them with a sense of purpose in being in medical school (Poulin & Silver, 2006). Stewart and Wubbena (2014) stated, “Students appeared to develop a better understanding of their roles as physicians and of professional work environments, while also developing a better understanding of public health and the impact of health legislation and policies” (p. 153). Finally, the most beneficial outcome was a result of overcoming social barriers and resolving community needs. Thus provided opportunities for members of an undeserved community with a variety of services to help overcome community challenges (Poulin & Silver, 2006).

Summary

Overall, this literature review concluded with several existing findings related to the topic. First, the use of service learning provided students with opportunities to serve communities and gain a sense of personal and professional growth that fosters civic responsibility in helping underserved communities overcome many barriers and health disparities (Cline & Kroth, 2008). As applied to medical students, service learning is an essential organizer that brings together medicine and communities. Students are able to better patient understanding and cultural differences in varied community settings. Service learning hopes to link clinical skills with real world community settings. Medical residency has long been performed in
hospitals. However, service learning can serve as an extension of a real world environments that opens up many of the conditions underserved communities face daily (Eckenfels, 2009).

Second, civic engagement created an opportunity to share knowledge between all stakeholders involved in service learning serving communities. Medical school and community partnerships can share knowledge and benefits through service learning. Academic experience, technology, and science resources associated with service learning and provided to the underserved communities. Students through reflection are better prepared academically, socially, and confidence in serving an increasing diversity among patients in underserved communities (Hunt et al., 2011). Third, service-learning experiences revealed that a benefit exists between student and community. Through critical reflection students were transformed leading to personal development that establish a professional identity. Student form a professional identity that fosters civic engagement and community involvement towards social change (Steiner & Sands, 2000).

Fourth, institutional role in adopting service learning for medical students may require organizational change that requires leadership styles that work together. Leadership styles need to adapt and response to avoid these detrimental facets and provide a sense of change and initiate strategies that transition an organization to be successfully. These leadership styles include charismatic, transformational, and value-based that help create a very strong organizational commitment and change (Wilson & Rice, 2004).

In conclusion, the importance of building community partnerships is essential in fully developing service programs that provide shared information that leads to better positioning academic learning with real world environmental settings (Lee et al., 2008). Service learning is credited with proactively enriching student learning while providing a necessary service to the
community as a whole (Blouin & Perry, 2009). Students who participate in service learning programs in a community partnership tend to build upon their experiences in new or similar learning opportunities. Experience in serving underserved communities often leads to solving community needs and strengthening academic success (Mundel & Schugurensky, 2008). Finally, serving underserved communities creates an opportunity for personal growth and social awareness. Student identity is strengthened through active participation in solving community problems (Wheeler & Edlebeck, 2006).
Chapter 3: Methodology

Rationale for Study

Research for this study was conducted at a medical school in South Texas. Purposeful sampling was implemented to obtain meaningful information relating to medical students’ views. Merriam and Tisdell (2015) stated, “Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (p. 96). For a qualitative study to have rigor, it must be well articulated with information about the researcher’s prior hunches, biases, and experiences with the phenomenon of the study.

The study included a rationale for the qualitative methodology selected and its relevance to the research question. Researchers need a clear explanation of participant selection, data collection, and also an explanation of finding emergence from the data (Hunt, 2011). The research questions for this study are:

1. What are medical students’ views of service learning and how does it relate to civic engagement and meeting community needs?
2. What are medical students’ view of their own transformation into civic leaders’ committed to civic engagement?

Qualitative research has flexibility in choosing different methodological approaches and theoretical frameworks that best provides a basis of meaning and interpretation. Qualitative research compasses several forms of inquiry to establish an understanding and explanation of the meaning of social phenomena’s in its natural undistributed setting (Merriam, 1998).

As stated by Creswell (2008):

The literature justifies the research problem, but it does not lead to the questions asked in the study. The questions are general, allowing the participates to help construct answers.
Thus, in a qualitative study, the literature is of secondary importance whereas the views of the participates are of primary importance. (p. 54)

As Merriam and Associates (2002) stated that “drawing from a tradition in anthropology, sociology, and clinical psychology, qualitative research has, in the last twenty years, achieved status and visibility in the social sciences and helping professions” (p. 3). The aim of this study was to gain a better understanding of how medical students view service learning and how it impacts their connection within their community, whether it be local, state, national, or global. The general goal of this study was to explore student views on the relationship between service learning and meeting community needs.

**Overview of the Methodology**

Qualitative research has a profound impact on many disciplines, which makes it appealing in understanding all humanistic perspectives and interpretations. Qualitative inquiry implores a focus on many separate disciplines, in which an important factor doing qualitative research is that does not belong to a single discipline (Denzin & Lincoln, 2008). When choosing a particular study design, it requires an understanding the philosophical foundation that underlies the kind of research. The researcher should mirror their personalities, attributes, skills and the type of research intended within the paradigm (Merriam, 1998). This study implemented a phenomenological research design in which open-ended semi-structured interviews with medical students was used to collect data. Merriam & Associates (2002) stated that “the defining characteristic of phenomenological research is its focus on describing the ‘essence’ of a phenomenon from the perspectives of those who have experienced it” (p. 93). Furthermore, Creswell (2014) stated that “phenomenological research is a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by participants” (p. 14). A qualitative approach was utilized to
gain insight into student’s perspectives and personal experiences relating to service learning in their medical school programs, being involved in underserved communities, and provide any recommendations, if applicable, that other universities could do to encourage and develop their medical students into lifelong civic engagement. Open-ended semi-structured questions were used to allow the interviewer more flexibility when conducting interviews enabling the researchers to follow up on participant leads while maintaining the focus of the interview (Merriam & Associates, 2002).

**Selection of Participants**

The choice for participants was limited to currently enrolled medical students in a South Texas medical school. The selection of participants and research site are deliberately selected with the assistance of a gatekeeper. Creswell (2008) described this ongoing sense of collective process in bringing together a qualitative research study:

> The selection of participants and research sites is intentional and purposeful to understand best the central phenomenon under study. Researchers often seek out gatekeepers to gain access to individuals and sites to study. In gaining permission, qualitative researchers are sensitive to the potentially intrusive nature of their research, and are mindful of respecting individuals and sites, potential power imbalances, and “giving back,” or reciprocating. (p. 240)

With this in mind, the power balance was clearly identified between researcher and interviewee. The participants for this study consisted of 10 medical students currently enrolled in south Texas medical school who had completed more than 1 year in community service learning program in medical school. Through references from the service program director and faculty mentors, potential students were selected, initial emails were sent out to eight tentative participants. Creswell (2014) stated, “It is important to gain access to research or archival sites by seeking the approval of gatekeepers, individuals at the site who provide access to the site and allow or permit the research to be done” (p. 188).
Consent forms were given to each participant prior to conducting the interviews. Subject participation was on a voluntary basis. Participants were selected based on their willingness to participate in the study and a pseudonym was provided for confidentiality. The 10 participants were enrolled in a medical in south Texas, had previous service learning experience in underserved communities, have personal reflections, and have incorporated this experience within their medical studies and clinical training. Some of their previous service learning experience examples include participating in student-run clinics in underserved areas along the Texas-Mexico border and a student created walk program for health awareness and fitness that served the local community within the San Antonio area.

Data Collection

The duration of the study consisted of two academic semesters to allow for data collection and analysis. After Institutional Review Board (IRB) was reviewed and approved, interviews were conducted in a small private study room at the medical school library to ensure convenience for the participants. According to Creswell (2008), “one-on-one interviews are ideal for interviewing participants who are not hesitant to speak, are articulate, and who can share ideas comfortably” (p. 226). The participants’ responses were listened to with concern and empathy, allowing a stronger grasp and understanding of their experiences (Ezzy, 2010). Interviews were allotted no more than 1-hour time frames per interview. Interview questions focused on the interviewees’ world, terminology, and perceptions allowing a more categorical approach that fit their shared experiences (Patton, 2002). Interview questions were descriptive, semi-structured, and open-ended to effectively capture information from and about the participants’ reality (Brenner, 2006).
In qualitative research, Creswell (2008) stated that “the interviewer asks open-ended questions so that the participants can best voice their experiences unconstrained by any perspectives of the researcher or past research findings” (p. 225). Interview questions were carefully and completely organized prior to conducting the interviews in order to decrease variation among interviews, promote highly focused interview sessions, and to allow easier analysis of future transcriptions (Patton, 2002). The interviews contained a strong sense of preparation and agility in both understanding the given population and knowing areas to focus and refocus on, and what to explore further throughout the interview (Sherraden & Barrera, 1995). Interview recordings were collected using a Sony ICD-PX440 Stereo IC Digital voice recorder Built-in 4GB and Direct USB, iPhone 6s and field note documentation. In order to ensure accuracy, all interviews were transcribed manually after each session. Thematic analysis of the transcriptions was conducted in order to identify themes relating to the research purpose.

**Protection of Human Subjects**

Prior to the beginning of this study, University of the Incarnate Word IRB approval was obtained before interviewing potential participants. The purpose of the study and its potential future use were completely explained to each participant. The consent form contains a “written permission to proceed with the study as articulated will be received from the informant” (Creswell, 2014, p. 209). I provided both personal and advisor contact information pertaining to the study. This study involved medical students and over 18 years of age. There was minimal risk of stress or danger to the participants.

The participants were provided a signed consent form as an agreement to participate in the study and were informed that they may withdrawal at any time from this study without consequence. Participants were given pseudonyms to ensure confidentiality. The interview
process consisted of “verbatim transcriptions and written interpretations and reports” (Creswell, 2014, p. 209). After data collection and analysis was completed, all information was stored on a password protected computer. When this project was completed, all recorded information will be destroyed after 5 years unless participants give explicit permission to keep their interview results or share it with the service learning program involved in this study for future research purposes.

**Data Analysis**

Interviews were analyzed using transcription and layered analysis based on inductive tactic, in the form of a domain analysis and thematic analysis in order to allow identifying common themes within the data. Patton (1980) stated that “inductive analysis means that the patterns, themes, and categories of analysis come from the data; they emerge out of the data rather than being imposed on them prior to data collection and analysis” (p. 306). The use of domain analysis and taxonomic was indicative of ethnographic analysis, in trying to identify possible viable cultural patterns (Spradley, 1979). I executed individual analysis of each interview conducted. Once an individual analysis of each transcription was complete, I conducted the final analysis of all ten combined transcripts to identify the main patterns to prepare a domain and taxonomy analysis within the data.

Spradley’s Developmental Research Sequence (Spradley, 1979, 1980) was used for analysis because it included analytic methods that afforded the most in-depth analysis of a given cultural in terms of language to gain an understanding of their experiences in a service learning program (Lee, Nargund-Joshi, & Dennis, 2010). Key terms were delineated into domains with identifiable terms and their possible associations. I used thematic analysis for further identification of experiences and commonalities within all transcriptions where themes of patterns emerged.
Figure 2. Data Analysis Guide (Spradley, 1979). This figure represents the levels of analysis implemented in this study.

Levels of Analysis

The data analysis guide began with interviews that were analyzed using transcription and then layered analysis, in the form of domain and taxonomic analysis, in order to identify any hidden meanings within the key terms. The study utilized word lists and key words in context described by Ryan and Bernard (2003), where generated word lists based on participants’ responses and allowing a better concentration on any core information. A pattern relating to the usage and number of times they were used and were able to build upon what had been previously analyzed when using Spradley’s technique. This study articulated implicit conceptualizations of service learning by exploring semantic patterns from medical student experiences in a community service learning program serving underserved communities.

Creditability and Trustworthiness

I employed several methods to help validate accuracy of the potential findings that was gathered in the study. Creswell (2014) stated that “a procedural perspective that I recommend for research proposals is to identify and discuss one or more strategies available to check the
accuracy of the findings. The researcher actively incorporates validity strategies into their proposals” (p. 201). For the purposes of this study, creditability was achieved using member checks, in which I provided a copy of the analysis to interviewees to ensure that his/her message was properly conveyed (Creswell, 2014).

I clearly stated any bias and assumptions initially and monitored throughout the study, and used thick rich descriptions “providing an adequate database, that is, enough description and information that readers will be able to determine how closely their situations match, and thus whether findings can be transferred” (Merriam & Associates, 2002, p. 29). Reliability or validity in qualitative research often “refers to the correctness or credibility of a description, conclusion, explanation, interpretation, and other sort of account” (Maxwell, 2013, p. 106). To ensure trustworthiness, I used multi-site designs, which is studying the same phenomenon among different medical students serving in communities in several program sites assigned by their community service learning program.

**Role of the Researcher**

My role as the researcher and primary data collection instrument led to gaining an understanding of all humanistic perspectives and interpretations of ten medical students serving underserved communities. As a researcher, I understood that “the role of the researcher as the primary data collection instrument necessitates the identification of personal values, assumptions, and biases at the outset of the study” (Creswell, 2014, p. 207). I have served several communities in a medical capacity as a medical professional, educator, and consultant. I also held leadership roles in community health settings, assisted physicians, nurses, and patients with health education. Notably, I worked over 8 years in hospice care providing care for terminally ill patients. I believe my past experience has heightened an awareness to the benefits of community
service learning on community outcomes and feels he is well adapted to issues addressed in study. I feel my experiences has left a readiness to work closely with key participants involved in service learning.

My passion for service learning increased throughout doctoral course work. I witnessed and experienced sharing knowledge with the community that helped bridge an understanding between a university and the community. The shared knowledge was initially only available within educational institutions, but we shared classroom knowledge to help educate and bolster community understanding when social injustices and barriers were identified. According to Creswell (2014), “Gaining entry to a research site and the ethical issues that might arise are also elements of the researcher’s role” (p.187). I have developed new personal values and perceptions of higher education to mean more than a return on investment. Higher education should lead towards a transformation involving human contribution, because without personal transformation there is no significance in one’s life journey.

Although, I have made every effort to ensure objectivity and personal bias, I do have assumptions about everyone receiving proper and equal health care based on my own past health experiences. I have experienced many missed diagnoses that led to inappropriate and ineffective health care. These misdiagnoses were due to a lack of communication, absence of human compassion, and nonexistence of follow-up care due to lack of health care coverage. Over the years, I have formed biases towards medical professions because of the scarcity of a humanistic training in medicine. This lack of humanistic training results in miscommunication, lack of education, and proper care for patients, especially patients’ representative of diverse and lower socioeconomic status. Due to the qualitative research logic of inquiry, I have formed a personal connection, exhibit compassion, and remain subjective throughout data collection. I have
recognized my past experiences and set those aside to remain objective in viewing, collecting, and understanding the qualitative data collected in his study.

Summary

This chapter discussed gaining an overall understanding of 10 medical students’ views on their civic engagement development and personal transformation throughout their experiences serving underserved communities from a phenomenological perspective. The chapter included a rationale for the study which included research questions, provided a qualitative methodology, selection of the participants, data collection, and protection of human subjects. Finally, the chapter identified qualitative data analysis and guide demonstrating levels of analysis, identified all credibility and trustworthiness and provided a role of the researcher personal statement.
Chapter 4: Analysis and Findings

The purpose of this research study was to understand the experience medical students had in a service learning program involved in some underserved communities. The two research questions guiding the study are focused on medical students’ personal experiences of civic engagement and meeting community needs:

1. What are medical students’ views of service learning and how does it relate to civic engagement and meeting community needs?

2. What are medical students’ view of their own transformation into civic leaders’ committed to civic engagement?

This chapter begins with exploring how medical students experience community involvement prior to medical school and how that experience led them to medical school.

Table 1

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Years in Medical School</th>
<th>Years of Community Service prior to Medical school</th>
<th>Years of Community Service Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walter</td>
<td>27</td>
<td>M</td>
<td>4 years</td>
<td>3 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Skyler</td>
<td>28</td>
<td>F</td>
<td>4 years</td>
<td>6 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Mike</td>
<td>33</td>
<td>M</td>
<td>4 years</td>
<td>3 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Gus</td>
<td>29</td>
<td>M</td>
<td>1 years</td>
<td>8 years</td>
<td>1 year</td>
</tr>
<tr>
<td>Saul</td>
<td>25</td>
<td>M</td>
<td>3 years</td>
<td>4 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Lydia</td>
<td>26</td>
<td>F</td>
<td>4 years</td>
<td>8 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Jesse</td>
<td>28</td>
<td>M</td>
<td>4 years</td>
<td>2 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Marie</td>
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<td>F</td>
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<td>1 year</td>
<td>4 years</td>
</tr>
<tr>
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<td>4 years</td>
<td>6 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Hank</td>
<td>30</td>
<td>M</td>
<td>4 years</td>
<td>7 years</td>
<td>4 years</td>
</tr>
</tbody>
</table>

This chapter provides an introduction of the 10 participants through a demographic table and short narrative summary from each participant. This chapter uncovers findings using ten interviews. It is important to note this is not an attempt to generalize all medical students in
service learning programs, but is based on the experiences of each participant’s own personal lens.

**Participant Narratives**

**Walter.** Walter’s interview was conducted in a student classroom on the first floor under the medical school’s library. He had served as student leader in many community service leaning projects and agreed to participate in the study. He arrived wearing his white medical school lab coat and was awaiting his residency match. He is a 27-years-old Mexican-American from Austin, Texas. He got started in community service in high school with the help of a Latino leadership organization:

I was very involved in community work in high school and beyond… I started with an organization called *The Natural Hispanic Institute* which was a Latino leadership organization that got me interested in community work… From there… I think my sophomore year of high schools, I started volunteering with a long care clinic in Austin. I started doing some small projects with some of the doctors.

However, Walter did include an earlier community service influence that supported his decision to attend medical school from his mother, who was a nurse practitioner serving low economic areas in South Texas and along the Mexican-Texas border. He seemed to embrace his Mexican-American culture throughout the interview, often with a deep emotional connection to the poor.

Medical school for me was always, mom was a nurse practitioner. She had these great stories about her patients coming from Mexico… All the hardship they went through and the *Cruzados* (crusaders). It was very compelling to me in that sense. Early on, I was indoctrinated with it.

Additionally, Walter mentioned some regrets in not taking a more research minded approach in many of the community service learning projects. His idea of research is rooted in his desire to become involved in any future community health problems, in which student mentorship and advocacy are in his future goals:
They say medical school and medicine is a never ending learning process throughout life…I think as far as whatever community, I’ve served. They have given me a lot of unique perspectives in how to approach specific problems that occur in the communities and I think they have given me a good place to look at advocacy work in the future. I foresee myself being involve directly in community life and I’d love to take on the students. I would like to be somewhere with an academic institution…and make sure that is a very big focus on how I relate to them. I think those are the major ones.

Furthermore, he mentioned having difficulty in the classroom, but realized connecting his curriculum with the community as beneficial to his learning, “I am not as good at that stuff. The test taking with the class is challenging, but getting to intersperse it with things out in the community as your curricular interest was good. Third and fourth year clinical, it is amazing.”

**Skyler.** Skyler is fourth year Asian medical student with three years of community service learning experience. She is a 26-year-old enthusiastic and intelligent student leader. She met me at the university library in a private student room for medical students. Skyler did not go directly into medical school after college, but instead chose to explore other areas of study. She mentioned that it gave her a variety of interdisciplinary approaches in practicing and understanding medicine.

I started medical school late. I did not go straight into medical school right after college. I decided…I wanted to figure out other routes in the medical field first, because I majored in Business and Biochemistry. I was pretty well rounded…I didn’t want to go straight into school. Then after a while, I decided that medicine was the way to go…I guess I have a different world of perspective in terms of how I approach medical school in first place. I think that’s important thing to know about me. So far, for medical school, it’s been great. It has been a blessing. I have learned so much the last 4 years. It’s pretty amazing, what I’ve been able to do and see…just talking to the patients and helping them the way I can now, it’s where I should be.

She mentioned the impact medicine had on people working in various medical departments. She was able to understand a behind the scenes approach to medicine, and how it contributed in helping people overcome health conditions. This experience gave her a strong conviction to go to medical school. She hoped to apply that same multidiscipline experience as a future physician.
Prior to medical school, I worked in tissue harvesting. I worked in transplant world…I worked with a lot of ophthalmologist, medical examiners, pathology and I really liked the hands on aspect and the science behind medicine. But also working in transplant…I saw the impact that medicine had on the patients and how patients before and after their care. It was just very rewarding. I was very in all of everything that I saw and everything I did. That is when I decided what I want to do…I want to be able to make that impact on others, the way medicine has on me. That’s why I want to do it.

Further, she mentioned that her family had a long family history of community service and involvement to others. “Ever since I was in elementary school, my family, they do a lot of community service. I always raised in that type of environment. Ever since I can remember, we were always helping others, helping others less fortunate.” This concept of community giving provided a solid humanistic foundation. She mentioned it gave her a sense of purpose and comfort practicing medicine.

Mike. Mike is a 33-year-old from Phoenix, Arizona and is a fourth year medical student. He requested to meet at the university library in private study room for medical students. He was nervous in the beginning of the interview, but became more at ease, as he shared his experiences. He worked as a mechanical engineer for Lockheed Martin for several years before coming to medical school. Mike mentioned that during his undergraduate years, he developed an interest in working with pediatric patients volunteering with his college fraternity.

In my undergraduate years, I was in a fraternity but we only did modest amount of community service. I did some volunteering at Texas Children’s Hospital from 2008 until 2012 mainly working with sick kids and playing games with them. I worked in the emergency department and helped check in patients.

Mike mentioned a humanistic balance between the pathophysiology of medicine and translating it into a more pragmatic approach for people to better understand their health conditions. He had just come out of a class that discussed humanistic approaches to practicing medicine. He explained the different challenges in being able to communicate with culturally diverse patients.
There is a fine balance. There is an approach that has to be fine-tuned to the patient. I think that some people do just fine with facts, statistics, and diagnosis. You tell them what to do and they will do it… I think that some other people have an understanding rooted more in their emotions. That’s something that you have appeal to as well. I would not say that there is an all or nothing aspect. I think I would be remiss if…I did not say that giving the facts based diagnosis or talking to a patient did not include elements of appealing to emotions and vice versa. I think it depend on the person. I would say people call it the “art of being a physician” is probably rooted in that balance between the two.

Finally, he understood that communication is important for people, but identifying what method of communication to use required practice and understanding of the patient. He mentioned with time and practice, he was able to communicate more effectively with patients; “Third year was probably the best time that I was able to do that and learn more about how to talk patients that way.”

**Gus.** Gus was a first year medical student. He spent his entire first year working at a student-run refugee clinic. He had also travelled to Panama and helped general populations and villages with various health care needs. He is a 25 year Iranian who moved to the United States at a very young age. His parents always encouraged him to have strong sense of community engagement. Gus requested that we meet at the university library in private room due to his busy schedule. Gus mentioned his progression in community service ultimately led to developing an interest in medical school.

I started in community service in middle school. I started volunteering in hospitals and then in high school…I continued to volunteer in different hospital communities and building houses for the homeless. I guess more in college that is when…I started reaching my peak of community service. I joined the organization called Blazers and we would host different events for awareness. We would help out the Mary Lee Foundation is a foundation for the mentally disabled. We helped build sheds for the people living there and took them out to games to have a good time overall. They were just various amounts of activities. We hosted events for female awareness day. Just various events for the general Austin population which is really nice. I continued to volunteer in hospitals in different settings. I had a pretty deep interest in the medical field.
Gus mentioned that despite his limited service learning opportunities as a first year medical student, prior experiences helped prepare him for service learning. He described that early experience.

I got involved with SARHC (San Antonio Refugee Health Clinic) early on and I had a history of just volunteering in different hospitals and different community areas. I knew what I was getting myself into…when I started medical school.

He stated that his remaining time in medical school will be balancing his goals as a medical student. “You just have to know how you are balancing your life in order to make the greatest contributions to society, because that is what the entire class wants as medical students. They want to contribute to the society as much as possible.”

Saul. Saul is a 26-year-old medical student who was born and raised in Spain. He had moved to the United States nine years ago. He moved to Austin, Texas, to complete his undergraduate degree, afterwards he worked for 1 year before entering into medical school. We met at the university library in private study room for the interview. Before our interview, he looked tired and explained how hard the curriculum is but had no regrets. “It has been lot of hard work. Lots of hours studying and then working during third year. Fourth year is more chill, but overall, if I had to do it again, I will do it again.”

Saul mentioned his enjoyment working with at risk children, especially getting them interested in going to college. He had worked for several community programs prior to coming to medical school. He wanted to be available during off hours entering into service learning, because he felt a doctor is always a doctor regardless if he was at work or not.

Before coming to medical school…I worked in different community programs. For example, the first one that comes to mind is Ventana del Sol (Window to Sun) which mentors’ children at risk on how to go to college and how to be a good example for them.
Additionally, he mentioned a goal of also mentoring high school students who are doubtful about ever attending college. He said his sister who doubted her own potential for a college education, despite having a high potential. He felt that his past collegiate accomplishments and as a future physician could provide some sense of inspiration. He mentioned a time he had overheard a student in health career high school say, “I am not smart enough for medical school or like I cannot pay for it or I do not know how I’m going to do it.” Nevertheless, he believed in the impact a college education had on a person and how it shaped their future.

I will like to volunteer my time. At the same time, I will like to volunteer with high school kids. I have a high school sister…I see a lot of potential in her…but she does not see it on herself. I would love to volunteer with high school kids…give them enough hope of going to college and on getting an education. I think your level of education helps your future…what you end up doing later on in life.

Finally, he mentioned speaking different languages and teaching Spanish to medical student to better prepare them for community service learning on Mexican-Texas border. He explained that “it affects the community in a different way, but I just wanted people to be able to give a proper care to Spanish speaking only patients and at least try to communicate with them.”

Lydia. Lydia agreed to participate in the study based on the recommendation from a teacher mentor at the student-run refugee clinic. Lydia and I met at the university library in a private study room for medical students. She is a 25-year-old medical student born in Harlingen, Texas. She grew up in the Valley and moved to San Antonio when she was about 14 or 15 years old. She explained that she had always grown up in underserved vulnerable populations and had made many friends. She told me that although medical school had been hard and challenging, she always felt a deep sense that this is where she needed to be in life.
Lydia mentioned working as an animator for teenagers in a refugee complex. She explained to me that an animator was a person who empowers others for social change. She said that:

Prior to graduate school, in my undergraduate degree… I served as an animator for the junior and spiritual empowerment program at a refugee complex. The role of an animator is to serve as a true friend to the youth ages 12 to 14… help empower them to become that change, a social change and their environment. I had a group for the 4 year olds called junior youth. I was so involved in that community… I then later ended up with the job at the activity center. I not only had a junior youth group, I taught, I did homework help with the kids, that was every Thursday night. I have over fifty kids come with their homework. Most parents didn’t speak English… but they knew the importance of education. So they would bring their kids and their backpacks. We would help with homework. I taught ESL classes for the parents. I had computer days and game days for the kids. Refugee’s lives are so different… especially for the kids, in my experience.

Additionally, she explained the difficulty refugee kids had with their own culture and that of the United States. She told me that it was like living a double life, but also how she helped them bring it together.

Refugee kids and their parents brought their culture to the United States… so they live double lives. I am most familiar with Somalians. They live a life where, at home everything is done the Somalian way, the way it was done in Africa. And then they have their American life… that their parents know nothing about. At the activity center it was their opportunity to kind of bring the two together. I worked there for four years.

Further, she mentioned that a lot of students working in the student-run refugee clinic come from refugee families from different countries. She also stated that “so, then you have the few that grew up in America, but there grew in very culturally aware communities. So that barrier of you, me and them isn't there and they want to help and bring everyone together.” She seemed passionate about service learning experiences and felt that medical school would help extend her service in helping refugees currently entering the United States.

Jesse. Jesse requested that we meet in a private study room in the university library. He described himself as a non-traditional student. Jesse was a 29-year-old medical student from
Dallas, Texas. He graduated from University of Texas at Austin in 2009 and worked as an EMT (Emergency Medical Technician) and paramedic during a gap between undergraduate studies and medical school. He mentioned that he had copiloted a service learning program with another classmate called, *Salud al Pasito* (small steps to health) “which was our student run organization. Its goal was to promote walking as a form of exercise and an easy way for people in the community to have access to exercise.”

Jesse mentioned that interest in community service started during his undergraduate studies. He was involved in a Pre-Medicine society that encouraged service learning. He did acknowledge very little involvement as a youth, but became increasingly involved as an undergraduate. He said that:

Younger, I did like Cub Scouts…so we do little projects, but nothing major. I didn’t do Boy Scouts, and I didn’t do any major volunteering up until college…when I was in my pre-med society. We had service projects, we would do toy drives…that kind of thing, usually donations, low time commitment, higher reward, at least in terms of looking good on a resume, but nothing major…then it wasn’t until medical school that I became more actively involved.

Jesse said despite his past experiences in serving the community, he was excited to have started a service learning program that would integrate his curriculum with the community. He mentioned an interest in health prevention, “like hey, this is what you should be eating, just finding a way to communicate with people like, you don’t have to buy fancy foods to be healthy. It is hard, but it is going to be an interesting challenge.” In essence, he felt prevention was a contributing factor in creating a service learning programs for San Antonio.

**Marie.** Marie is a 27-year-old from San Antonio in her fourth year in medical school, Texas. She requested to meet in a student classroom under the university library due to her busy schedule and a lack of private study rooms. She mentioned that most of her service learning
experience was working on the Texas-Mexican border helping underserved populations.

However, she was critical of her past community service experience and stated:

   To be perfectly honest I am trying to look back…I did volunteer in when I was in college…I am being brutally honest it was hospital volunteering. It confirmed my desire to even getting the medicine…because I was so new to idea. It was a pre-requisite for the application process to graduate school. I had volunteered here and there, but never consistently with an organization and purpose.

She mentioned that she did not come from a medical profession family. Not one of her family members worked in the health care industry, so she considered her medical school education a new life journey. She shared a childhood experience of fighting through health illness and loss among family members, which gave her a yearning to help people with similar challenges in her area. She described her initial involvement and said that:

   My initial semester in medical school…I went to some organizational fairs and was naturally drawn to the outreached trips within our own community, but also within the Texas-Mexico border. Being from South Texas and originally from San Antonio, I have always wanted to get involved, never knew how…I never quite became involved in my own community, whether it was high school or college. I saw this opportunity to really explore individuals that live in my neighborhood.

   **Steven.** Steven met with me at the university library in a private study room in the late afternoon. He was a 28-year-old medical student in his final year. He grew up in the Middle East. Eventually, he had moved to the United States in 2008 on a fully funded scholarship to attend the University of Texas in Austin. He studied molecular biology and graduated in 2012. Afterwards, he worked a couple of years in microbiology research, before entering into medical school in 2014. He described his early experience in serving the community as an undergraduate student.

   As a pre-medical student and undergraduate…I volunteered at a couple of hospitals in Austin as a medical volunteer. I was involved in discharging patients, feeding them and other basics…I also worked in the capacity of mentor for middle school students in Austin. I also did some Arabic teaching for Arabic student majors at UT Austin, where I was just volunteering as a teaching assistant for those students…that’s all in terms of community involvement.
Steven felt that his early experiences helped his decision to go to medical school, but he also wanted to work in a capacity of leadership. He mentioned that early on he understood the importance of working in an interdisciplinary team consisting of physician assistant, nurse, and dental students. “People come with preconceived notions about different disciplines, medical students come with preconceived notion about nursing students or dental students and vice versa. It takes time to breakdown those barriers and get to work together as a team.” He described his early entry in service learning working at a student-run refugee clinic and chance at a leadership opportunity and stated that:

I was involved in the capacity of medical student volunteer…where I saw patients and a lot of the patients were Arab speaking and given my background, I decided to get more involved in it. After the first semester of medical school…the medical student leader before me of was looking for someone to take over his spot, I took over the spot…I started working as a medical student leader for about a year at the refugee clinic.

Further, Steven mentioned that time was a challenging factor during medical school especially when it came to service learning. “I wish I had more time to dedicate to it, I don't know if that was realistic, because with the first year of medical school being very hectic one focused on learning the basics of medical school, that’s a challenge.” He pointed out that despite all the challenges he would do it all over again and enjoyed serving people. He was interested in where his role as leader would take him in the future.

Hank. Hank requested that we meet in a private room in the university library. He was a 30-year-old medical student in his final year and a former teacher from Colorado. He went to the University of Colorado and studied biochemistry. Afterwards, he worked for Teach for America and was placed in the Rio Grande Valley. He taught high school science to at a local area high school in that region for about 6 years. There he witnessed many of social, health, and economic challenges occurring in that community. He described his initial involvement and understanding
surrounding that community. This understanding led to a Master’s degree in Public Health prior to going to medical school. He stated that:

Prior to medical school, I was heavily involved in my community in Mercedes, Texas. That was a town of roughly 13,000 people. You want your students to succeed in their education…but you realize that a lot of the students may come from the Colonias (Colonies), they do not have running water or electricity…there are other factors that are contributing to their ability to be successful. Additionally, you always think of the classic example: asthma in students, and students who have uncontrolled asthma who going to miss more days from school…which is going to put them further behind. So really to be able to address those things. We learned in public health that…someone is healthy about only 20 percent and that is attributed to their medical access or medical care. About 80 percent is directed towards all those other things…towards their social network, violence, food choices, and family income. Those other factors that are directly or indirectly contributing to their family and their individual’s ability to be healthy.

Further, he mentioned that those contributing factors needed to be addressed with a multidisciplinary approach based on his years in teaching. Hank felt that it allowed others to look at many other factors that might affect patient health. He contributed this realization of social concern for his reason for going to medical school. He described how his years of teaching helped shape his success in serving people and during medical school. He stated:

In medical school…I have been involved in various different projects. I feel that my ability to participate in those projects is as a direct result of my teaching. Because having that experience for 6 years before medical school. As a teacher, you’re grading papers, writing lesson plans, motivating hundreds of students on a daily basis, and working with parents and the community. When I came to medical school, I was able to focus on many things that were going on. I was able to get involved in student government leads, international trips, being involved heavily in the state-run free clinics, being involved in community research and several other projects…so a lot of my additional learning happened outside of the classroom since being here in medical school.

Data Analysis

The purpose of this study was to gain an understanding of medical students’ views on civic engagement and service learning. This study explored their experiences in a community service learning program that effectively contributed to personal transformation. Through analysis, this chapter seeks to answer two research questions:
1. What are medical students’ views of service learning and how does it relate to civic engagement and meeting community needs?

2. What are medical students’ view of their own transformation into civic leaders’ committed to civic engagement?

This chapter was structured in two sections. Section one consisted of a domain analysis in which “any description of cultural domains always involves the use of language. Cover terms, included terms, and sematic relationships are all words and phrases that define and give meaning to objects, events, and activities you observe” (Spradley, 1980, p. 89). Section two consists of two taxonomies which are “a set of categories organized on the basis of a single semantic relationship” (Spradley, 1979, p. 137). The objective of a taxonomy was “to offer a strong sense of what may be part of a social scene, including how participants make sense of it and what one might experience” (Manning & Kunkel, 2013, p.105). Key terms were delineated into four domains: (a) community service; (b) serving communities; (c) student learning; (d) institutional support. Two taxonomies: Civic Engagement and Service Learning.

![Figure 3. Main Domains](image)

*Figure 3. Main Domains. This figure represents the main domains identified through the analysis.*
Domain Analysis

The analysis began with identifying semantic relationships and different means of community involvement that became a Strict Inclusion (X is kind of Y) community service learning. The focus was on service learning and its overall cultural meaning based on categories identified from members of a given domain. The overall meaning of a domain consisted of “any symbolic category that includes other categories is a domain. All members of a domain share at least one feature of meaning” (Spradley, 1979, p. 100). The goal was to conduct a domain analysis that was in-depth unpacking the complexity of a given culture. Data analysis began with community service learning from the student perspectives focusing on community involvement. Medical students shared their previous community experiences, which consisted of community partnerships, program development, and community mobilization that helped increased their community involvement and helped them build strong community relationships.

Community service. Medical students stated that community partnership, program development and community mobilization all became a kind of community service that helped develop their service learning goals. Community partnerships helped create a sense of networking that helped initiate many of the service learning programs.

In an interview, Saul shared a realization that community partnerships provided additional resources that helped network into additional resources.

Hooked up in a way like, “What is your community service learning?” Oh, we are going to start walks around San Antonio. We have a contract with the San Antonio parks and recreation department that can help minimize price. I think having a network of people within the community that know about the CSL program. They will say, “Your CSL is about walking”, in our case. “You should talk with these people, because they already know about our programs and they are going to help you to make your program happen.
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*Figure 4. Domain Analysis: Community Service. This figure represents cultural terms used by the students to represent kinds of community service performed.*

As represented in Figure 4, Marie also shared her experience working with community partnerships, and understanding their need to grow strong relationships that sustain itself and continue project goals, even in the absence of the medical students.

It’s hard to be there for the community offering medical services or offering educational services, because you cannot be down there every month or sometimes even every quarter. I feel the success of a project is dependent on what your community partner is doing on the ground 24/7. If you don’t build those strong relationships or not communicating what your goals are from both ends that is when projects can get into trouble with not serving the population to the best of its ability. Projects can fizzle out and I feel like you are doing a disservice to these people that you saw in September giving flu shots and then all of a sudden you are not going to be back for another year. You lose all of that relationship building. It is hard as a student because you do not always have time due to the school schedule.

Community partnerships provided an opportunity for students to teach members of a community to become informed and advocate for themselves. Hank shared his experiences in educating members of a community to not only sustain program goals, but also teach it in other areas of the community not initially reached.

My third year of medical school, I returned back down to the Valley to do about 6 months of rotations down there. We were trying to train people, these Promotores (Promoters) who are from various communities to train their communities on how to reduce free standing water, making sure things are covered, so that we can reduce mosquito-borne illnesses. And of course, now the big thing we are worried about is Zika, which is carried by the exact same mosquito vector as Dengue and like Chikungunya.
These examples of community involvement helped students form a better understanding of their curriculum and it can be applied into a real world experience working with various community partnerships.

Program development allowed students a chance to create programs that responded to specific community health needs and provide basic health solutions. Thus, they opened up opportunities to communicate and learn how they can connect their curriculum with the needs of the community. Skyler explained that:

I started *Salud al Pasito* (Small Steps to Health) which was an organization that I talked to you about yesterday. Basically, we wanted to show the community small steps that they could take to better their health by just going out there and talking to them, getting to know them. So during my first year, I started in this organization that puts on walking events with three parts. The first part is the health fair, where we actually just sit down and talk to them about their vitals that day, then blood glucose monitoring and perform orientations inviting people from all over San Antonio to come and participate.

Furthermore, program development opportunities also allowed students a chance to integrate a multidisciplinary approach. The students were able to provide the community with additional resources based on their individual health needs, in this excerpt, Skyler pointed out “my involvement in the program was creating community and professional relations. I would try to get different schools to come to the walk like nursing, physical therapy, dental and attending physicians to come and talk to the people.” Program development provided student opportunities to learn and share with other health professionals about the population and their health needs. Together, students developed service learning programs that also integrated their experiences that helped provide simple health solutions.

Hank was able to mobilize community networking that led to uncovering and understanding hidden information beyond basic health evaluations (e.g. blood pressure and blood
glucose readings). Thus, providing an opportunity to become closely connected with the members of a community.

If you really want your patients to be healthy, you need to work with all stakeholders. You need to work with everyone and figure out how to take care of your patients at a population level. So there’s two aspects of it. There is the information side, tracking their Pneumococcal Vaccines and their A1C (Glycated Hemoglobin) and their blood pressure. But then I think what is even more important is the other side of population health, and that’s community mobilization. I think it is something that I have learned as a result of being more involved in community service projects. I not only learned how to be more involved with them, but also how to network. I learned various other facets that are contributing to my patients’ health… I really like mobilize the community towards a common goal. I think that is very important in terms of reducing social inequities and health disparities in the future.

Community mobilization was important for students because it allowed them to better understand any struggles and limitations underserved communities encountered on a daily basis. As students became more comfortable understanding patient struggles, they felt more approachable with the population. In this excerpt, Walter pointed out, “I think the community gives you some of the new nuance on how to make it a little bit more approachable.” Additionally, Jesse shared his experiences in fostering new ideas and developing a strong sense of hope in connecting with his patients.

Someone comes in with high blood pressure. They have diabetes, and they say “I am trying doctor, I am really trying.” You see them again the next week and see them again the next week. Their blood sugar is just too high. You say, “Why can you not get this under control?” When you go out in the community, I see how many mouths they have to feed, and why they are working two jobs. You understand, okay, it is not that they are not trying, it is that they cannot. The limitations they have do not allow them to succeed. How do I help them? It can spark ideas and make you understand. I think it is important, because otherwise, your optimism is going to get drained out very quickly, and you need to have that hope, that idea that people are going to get better.

Finally, medical students mentioned that serving underserved communities helped foster social awareness, overcame barriers, and improve patient empowerment. Social awareness also increased due to the student-run service learning programs. Students felt that it was easier to
accomplish their community service goals, which included opportunities that engaged communities and promoted lifestyle changes.

**Serving communities.** Students found ways to encourage and motivate communities utilizing their classroom learning and finding solutions for better health. Mike explained:

We did a community outreach and data collection at a bicycling program in Brownsville, Texas, to assess the need for a better public transportation. We had a community function called *CycloBia* that was effective at getting people to be more physically active. We also did some outreach at a local middle school. We did height, weight, blood glucose measurements, blood pressure and tried to enroll kids and their parents up for a healthy living and eating activity during the summer.

In overcoming social barriers, students mentioned that better understanding patient personal social challenges and limitations helped to better serve them. Hank stated, “You can learn all about the pathophysiology of diseases, but when you actually see patients, it really puts everything together. You learn various social factors that are related to diseases, and why are diseases happening in the first place.”

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*Figure 5. Domain Analysis: Serving Communities.* This figure represents cultural terms used by the students as kinds of serving communities.

As Gus shared his experience, he explained that having an understanding of an individual’s position and what they are going through allowed him to better provide health care interventions that were custom fit to overcome individual life barriers.

I am taking a class called, Homelessness and Addiction and it has been more of an eye opener to meeting the general homeless population and kind of understand what they
have been going through, because you cannot help them unless you understand their position. Unless you understand what they have been through and even then you cannot fully understand it. But the best you could do is try to have a general grasp, so that you can try to tell them that, “I see where you are coming from and I am here to help no matter how upset you may be or how angry you may be with yourself or with the world.

While serving underserved communities, students found that small approaches to improving one’s health came from their own personal experiences. Students mentioned that actively listening with a sense of compassion led to discovering new ways to promote healthy lifestyles.

Skyler shared her experience in which she captured a sense of empowerment that led to physical activity and a chance for an open conversation with the community.

Little steps, Salud al Pasito (Small Steps to Health) translates them to small steps towards better health. The small steps that we try to engrave in people, I will say, “Do not look for the closest parking spot, look for one a little further.” That is a little more walking that you do every day. One of the physicians who came and talked, said, “He would tell his patients to walk 30 minutes a day and they would say no. That’s too much, that’s too long.” He then said, “Okay. Can you walk that way for 15 minutes and just walk back to me?” They would say, “Yeah. I can do that.” Same thing, still walking 30 minutes but it is just the way you say it and the way you approach it. It is different. It makes a big impact. That is why I started it and that is how it grew. At the health fair, medical students would talk to the community and empower them to ask questions.

Saul had a different experience: for Saul, having patients gain a better understanding through repetitious learning was important. He said that patients gaining a sense of empowerment and understanding of their own health issues impacted their motivation to make small health improvements in their daily life, even after leaving the program for the day.

The thing that I would take away is to slow down for the patients, ask them to repeat the things back to you. I think that is the biggest thing I took away from the walking program during CSL. I have seen how much is lost in between from the things understood versus what they were told. I think the biggest thing that I’m going to do is make sure that patients will repeat back to me, what is it that I just told them, “Can you repeat to me what are you going to do when you get home or this and that.” I never get tired of repeating things over and over again. I think that is the biggest take away from the CSL programs.
Additionally, students grew a sense of confidence in serving underserved populations. Jesse stated, “You will know, I can go into a room and I can talk to these patients. Even if I make a mistake, it will be fine, because I know what I am saying and I know how to talk to them.” Students also realized overcoming these social barriers had an overall benefit that could enhance their future careers as physicians.

**Student learning.** Medical students mentioned that patient understanding, connecting service and learning, and cultural understandings all became a kind of student learning that improved through service learning. Student learning occurred in different ways for many students and opened up new perspectives in practicing health care. Patient understanding came from experiences that encompassed both social aspects and personal determinants. Learning these perspectives allowed students new ways to address many of the social aspects refugees faced.

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*Figure 6. Domain Analysis: Student Learning. This figure represents cultural terms used by the students to describe kinds of learning.*

As represented in Figure 6, Steven shared his experience involved in the social aspects of his patients that help better understand their challenges in a refugee camp.

When I saw patients, I was able to practice basic stuff like clinical encounters, how I would greet and interact with them. I learned how to take a relevant history and physical and how to perform physical exams on the patient. These things, I did not get to practice, especially as a preclinical student, so in the first two years of medical school, we only did a lot of book learning. We did not get a lot of patient interaction, so that was actually the only venue for me and the student volunteers that were in the first year of medical school.
to actually see real patients and get to treat real patients. It was a big plus of the student-run free clinic and community service learning. In addition, you get exposed to the social aspects of this population, for example the refugees, a lot of students do not know what issues they suffer from or what barriers they have to healthcare, so that was another facet that helped with my education. In medical school, we focused so much of the first two years on basic sciences of medicine and science and less about the social aspects. It was a huge learning venue for me at least in the social determinants of health care when it comes to the refugee population. I was able to get a better idea of their barriers and how they go about trying to address those barriers. We were able to change some of the things about the clinic to try to address them.

In understanding personal determinants, many students required experience that went beyond classroom instruction, clinics, and personal living conditions. Sual stated, “They don’t teach us how to speak with people not medically related. They teach us all this medical vocabulary, all this knowledge, I think experience is what teaches you how to talk with the community.” Hank, similar to Saul, realized that experience extends into a more personal aspect. Hank provided a description of patient understanding that extended beyond clinical examination and uncovered root sources to their health problems.

I’ll give an example of a community service learning project we were doing in Guatemala. We were seeing all these patients in our clinic in this community, and all of them had horrible conjunctivitis, it looked like it might be allergens or something. They also had some breathing problems. Then we went out and did household surveys, we would walk into their houses and you would see, this is where they have their houses, little cooking stoves, and the walls are just covered, just layered in soot. It was no wonder they are having these problems, because it was the stove that they were using producing so much stuff, and it was in a closed space, so they had a lot of breathing problems too. In the clinic you could give everyone their medications, you could treat the red eyes, you could...you know...give them some steroids or something to help with the asthma and everything. It would probably cost several thousand dollars to treat their medical needs. Or you could figure out well, let’s look at these stoves and maybe there is better stoves they could use or actually build something that would take the smoke outside of their house. It would probably cost not as much as the medications. I mean, it would probably cost a significant amount up front, but the amount long term would significantly reduce the amount of money spent on healthcare in a foreign country.

Students discussed clinical environments that integrated their curriculum into service learning, which helped students better connect and communication with their patients. They found a sense
of inspiration, because they were able to see their skills displayed with real patients, which gave them a better understanding of their studies. In this excerpt, Mike shared his experiences in communicating with patients.

I think the biggest correlation between my course work and CSL had mostly to do with more of the clinical aspects of being able to talk to patients in the community. It was not so much like a diagnosis and treatment sort of thing or clinically differential or prescribing anything or making recommendations. It was more just about education and being able to talk to patients in the community, the biggest correlation that I have drawn with our clinical skills, staff asking those sorts of things.

Gus found new cultural discoveries and a better understanding with his patients, he further shared his experiences of learning beyond classroom texts that allowed his social weakness to turn into strengths.

I think in some ways it sometimes helps more than just book learning. You see different conditions out there. You learn how to interact with people, you learn their beliefs and you see the difference in cultures. You have to learn to accept the differences first of all and once you do, then you can actually educate yourself about the different cultural differences in the world. In that way, I think volunteering in these sorts of clinical settings and outside the clinic in the community service learning. It has been an eye opener because you really do appreciate that and you work on your weaknesses and build something.

Walter spoke of the benefits of service learning, for Walter it was about getting an opportunity to extend his studies beyond the classroom and get some real world experiences.

You get these lectures on how to learn to be a very good humanistic practitioner, but it is a lecture that doesn’t translate to real life skills. I think being able to do the CSL component has given an outlook to actually do them… a framework to help me orient these experiences…not just to be experiences, but with learning objectives and with specific things that I need to get out of them. I think it has been very important, if not more important, things I have done in terms of connecting the learning with the practice.

Furthermore, students mentioned a sense of inspiration that developed from connecting their service with learning. Skyler stated, “I did want to teach pathophysiology of everything like diabetes and things like that. When I did go through it in the community, it would remind me of
what I needed to study and what I didn’t.” Marie had a similar experience in feeling a sense of inspiration created in bridging her service and learning within the community.

I would say that the community service learning is so intertwined with what I am learning in the books, because it kind of lights my fire or rejuvenates me as to why I am here, so that helps me work harder in my studies and also you can only learn so much from textbooks, but you cannot learn the humanistic side of it, which is what I am learning from CSL projects.

More than half the participants discussed their cultural experiences that occurred within their service learning programs. Students shared that communication, understanding, and beliefs were key components in culturally understanding many of the patients in an underserved community. For example, Skyler said that understanding different cultural responses to illness helped overcome her own assumptions, beliefs and values.

You become more comfortable and that is what I took away from it. I learned what other people did when they did not go to the hospital when they were sick. How different cultures approach different illnesses differently that was a big thing. I learned if someone was sick with a fever, they put a pot of hot water underneath their bed to suck away the illness, which is really interesting, and I did not say that was weird. It is interesting and I did not see anything weird, just because it was not harming anybody, it is interesting. Different cultures like coining, things like that. Some of those misconceptions are when people come in with their backs coined, because I’ve had my back coined, it is a cultural thing. It feels awesome. It looks horrible when someone goes into the hospital with that, but if you understand the culture, if you understand your patients, do not have to call CPS (Child Protective Services) and it is not child abuse if anything it is the opposite.

Lydia also shared her experiences in understanding cultural beliefs regarding patient comfort zones. She said that learning to approach and speak with patients required some awareness and carefulness.

At school we only get a certain type of people, and you learn how to speak to them and how to approach them. But then when you bring in cultures from all over the world, we need to be careful about it, if you put a woman and a man in the same room or if you have two of the same speaking people from the same country, or what if you sit them too close to each other, what if you touch them, because everyone has their own comfort zone according to their culture. These are things that I had had to pick up very quickly working with so many different refugees.
Jesse focused on how to convey medical interventions to patients. During the interview he spoke about how simple medical interventions were not understood among the patients. He felt that communication was important, because of members of the community spoke different languages. He mentioned that conveying patient health information based on their level of understanding was important. This is something he expressed in the interview and wanted to share with other students.

Communication was the main thing when we were doing during screenings, trying to communicate with the community. This is what we were looking for, this is why it is important, because people will say, “Oh, I get my arm pressed on every time I go to the doctor, I don’t know why.” That actual happened, which was shocking to me and especially to other medical students, because we what actually happening. When we had the meeting on Tuesday, we asked what’s a pulse, and the medical students are sitting there like, I know what a pulse is, but conveying that to someone who has not done a year, two years of medical school, has not done all this pre biology, medical curriculum and undergraduate, it can be challenging. Being able to be comfortable with that and convey that to the population is what we are trying to do.

Medical students talked about institutional support in providing a pathway for community service learning within local communities, especially continued support along the Texas-Mexico border and abroad. Students discussed the importance faculty mentorship, gaining funds for programs, and faculty involvement had as kind of institutional support. More than half of the participants discussed how important institutional support was for many student-run clinics, health programs and state wide service learning opportunities.

**Institutional support.** Marie spoke about the struggle to find a good mentor that would invest in the student and share resources that helped academically develop and nurture student leadership. She felt that it would help build student clinical and leadership skills. For example, she spoke of it in a positive manner and described an ideal mentor in a service learning program stating:
Finding a good faculty mentor is hard to come. I mean it is hard for you to find a mentor that you connect with or work well with, it is hard to find mentors who also have time and resources to invest in the students, because faculty who are not around here are often busy with their professional and personal life...maybe their own academic goals...career goals. You need to have a mentor that will be able to sit down with the students and just lead us, you learn as doing, but also what you can learn exponentially, when you have someone who is reiterating the foundations of CSL which is why are we doing this, who are the stakeholders, or just to reinforce what we need.

Included Terms

- Faculty mentorship
- Funds for programs
- Faculty involvement

Semantic Relationship

- Funds for programs is a kind of Institutional Support

Cover Term

Institutional Support

Figure 7. Domain Analysis: Institutional Support. This figure represents cultural terms used by the students as kinds of institutional support.

As represented in Figure 7, Hank spoke of the balance in mentorship that allows students a chance to develop their own leadership skills, along with following university requirements and protocols.

All these student-run free clinics, they came about from students and faculty that signed on as mentors, from Frontera de Salud (Border Health) and other programs. And they are very student-driven. What happens then, at the same time you need some type of faculty mentorship. So I think the problem is where do you strike that balance. You need to have some type of official seeing it over, making sure everything’s safe, making sure protocols are being followed. They need to really allow students to drive the boat and really develop their own leadership.

Equally important, Walter further discussed some missed opportunities where his mentors could have welcomed research opportunities to grow. He felt that this missed opportunity could have led to new skills in research. Walter stated, “I feel like there were opportunities to have done some research based on my service in the community that I just did not do. I do not have the wherewithal to research well. My mentors, some of them certainly did, but there was neither a push from me nor from them to really make that a big focus.”
On the other hand, Gus shared his mentorship experience involving his mentor’s great passion towards community service learning. He felt it inspired him to reach a new level of service to the community.

It’s always been a dream of mine to be in Doctors Without Borders. A lot of my colleagues show that same passion. Yeah. I definitely want to get more involved with community service when I am a physician as well. I do not know if you have heard about Dr. Dunlap, but he does trips for his medical students. We just got back from Panama last week. We had a weeklong trip there just helping out the general population and villages. It was a great journey to see how much He can teach us from his passion. I strive to be at that level one day, that would be great.

Students mentioned that funds for their programs were easily available to them, but felt that opportunities were not always easily promoted. Some of the participants shared their experience on the differences between institutional funds availability and other organizational resources for funds. Mike stated, “Student government association has an appropriations fund. Anybody with a project idea can go and try to get funding. I think many people do not know about it, so you could increase funding size and pull that out better.”

For example, Lydia spoke of her challenges as a student leader in acquiring program funds and personal grants to continue to support student-run programs.

Yeah, as a student leader this past year, I have become more aware of all the loops that we have to jump through to be able to get grants and use the money in certain ways or find out about certain things. Definitely, at an institutional level, just making it easier for students to become aware of these opportunities, be aware of grants, just have things that are more accessible that we do not have to dig through information. We already do not have enough time.

Hank had a different perspective on the matter. Hank felt that his program offered good funding but also realized that other organizations in the community offered fund assistance as well.

So more funding is always great. I think our school actually has done pretty well, especially for local trips compared to other programs, I have heard of. And I think our school provides a lot of funding for projects. And so, I know there is other programs like Methodist and I think Baptist that gives a significant amount of grant funding to our programs as well. So that is always helpful.
Finally, faculty involvement was very important for students in terms of professional development and personal growth. Students mentioned how mentorship led to a sense of direction and purpose in providing medical services for the community. Hank shared his experiences in how faculty involvement would improve community service learning in more than one capacity.

I think would be helpful, and this is a problem I’ve thought about, but having support at the institutional level from the dean of the school of medicine and faculty to be more involved in these projects… I do not think we have enough faculty involvement. In finding and doing international projects, a limiting factor is finding faculty. The departments have to meet like their goals and stuff and do everything for the hospital, but it is something that comes from the top down. They need protected time to go on these trips to help teach and to help volunteer at these clinics. Then I think it would drastically, increase the amount of services you are able to provide and mentoring to medical students. So I think that is probably, by far the number one immediate thing that could be done to improve community service learning.

Jesse questioned the availability of all the support staff, which he felt required an institutional wide agenda that encouraged more involvement.

With our program, like we were inundating physicians with our request to come out and talk, to come out to our walks. You have to have that priority set by an institution to start it and then have to have an Attending’s say, “This is what we are going to do, and have the Residents say, “This is what we are going do, and again, and have med students say, “This is what we are doing, then nursing. You have to have a whole institution wide thing and I do not know how to do it. The other way to do it is from the bottom-up, with med students starting, because Attending’s don’t have time necessarily, Residents definitely do not have time, so you got to find the right people in the organization that have the flexibility. Med students, even though we are studying all the time, we still have our weekends off. Residents do not have their weekends off, Attending’s are on call on weekends, so you have to find the populations that work. Nursing students potentially too, more shift work based organizations.

Skyler shared her experiences in obtaining funds and institutional support, she needed to develop her program. She spoke about not only getting funds but also support for her service learning program.
At the institutional level, I would give students all the opportunities to serve the community. Give them all sorts of opportunities. I think this institution does a great job. They do a great job to give the students who want to be involved in community service, be involved. For me, I wanted to be involved and I also had an idea and they were very supportive of it, they pushed it, they helped me and now we are on the mayor’s fitness counsel. Yeah. They are very supportive. I think in this institution is supportive and community service is what is needed.

Taxonomies

Section two of the data analysis consists of two taxonomies that categorized all the domain analysis in an attempt to understand their relationships together. A taxonomy comprehends a cultural meaning with an understanding that “every culture creates hundreds of thousands of categories by taking unique things and classifying them together” (Spradley, 1980, p. 88). The taxonomies were assembled to demonstrate what constituted categories medical students identified as transformational elements. The use of a taxonomic analysis led to categorical elements “in identifying elements likely present in a particular situation, context, or even culture” (Manning & Kunkel, 2013, p.102). The taxonomies were used to answer the second research question: What is medical students’ view of their own transformation into civic leaders’ committed to civic engagement?

Civic engagement. Manning & Kunkel (2013) stated that “using taxonomic analysis seek to maintain participants’ language use and perspective throughout the process while simultaneously differentiating the information into useful set or system of categories that’s elevates one’s understanding of the data” (p.107). The taxonomy shows that community partnerships, program development, and community mobilization are ways of becoming involved in a given community. The cover term, Community Service, explains that the medical students are working with community partnerships in ways to combine resources and services for
the community, creating programs that serve the needs of the community, and establishing a
sense of community mobilization that brings together community efforts from all participants.

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*Figure 8. Taxonomy: Civic Engagement. This figure represents a category of cultural terms used to describe civic engagement.*

The taxonomy (Figure 8) illustrated relationships of two categories of civic engagement:
domain analysis is used to help identify and compare possible complex phenomena based on
participant experiences. Community service brought a sense of mission and purpose for
practicing medicine among students. Despite a hard curriculum, students found an appreciation
that reinforced their goal of becoming a medical doctor. Skyler said she felt that community
service helped inspire students to study harder or realize the purpose of being in medical school.
She further stated that service learning helped students learn and retain course material. Skyler
spoke of her past experiences recruiting students for her service learning program, she would
remind them to take a break and let the two connect with the student. She said that:

*What I have done so far is advertise all the walking events, all the opportunities to contribute to serving the community and just talking to students one by one seeing, gauging their passion for it. A lot of times, everyone wants to do community service. That is why they are in medicine these days. A lot times the why, if they don’t, it is a test. I have to study. One of the things, I have learned, that worked was you need a break. You cannot study for 24/7. It was good to take time off and remember why you do things and why you’re studying so hard. A lot times, students will lose sight of that. I tell them just take a break…an hour, come out have fun, clear their mind…then go back and then study even harder. Then you will retain more. That has helped a lot of people in my class*
actually whenever they come out to the walking events especially, *Salud al Pasito* (Small Steps to Health). I say thanks for coming, you do not have to be here. They all told me I am here because it reminds of why I have to go back and study. It reminds me why I do the things I do. All the sacrifices and stuff that comes into play when you become a physician.

Marie spoke of all the ambience of life in the *Colonias* (Colonies) and how it reinforced why she was serving this community in medical school. Her initial experience led to additional visits and gave her a direction of where she wanted to take her practice in medicine.

So I got involved with the organization called *Frontera de Salud* (Border Health) and I just went on my first trip to McAllen, Texas, and incorporated portions outside the city called *Colonias* (Colonies) and one in particular was in Donna, Texas you could walk a few steps and you are on the border. There it was so moving to me that so many people out there are untouched with what I consider normal things in my life like doctor’s visits, school, education, good grocery stores, access to food. Stepping into a world that was physically close to me, but it seemed so far away. They were living without plumbing and electricity and we were providing flu shots, lipid screenings, glucose screenings and things that they have never been able to have access to so they have no idea how their health is doing, I guess it that really opened my eyes like “Wow”. In my scenario I was pursuing a doctor of medicine, I guess it lit a fire, so since then I went on other trips and became even more involved in my second year. I led the organization as student coordinator and I started a fifth trip within Eagle Pass, Texas, which I am happy to say they are still strongly going down there, I think it just re-enforced why I wanted to do medicine, I think it gave me an idea of how I want to serve.

Walter had similar experiences in how civic engagement provided a sense of direction in that patients exist beyond clinic and hospitals and can live anywhere health needs are not being met.

He mentioned that the environment will dictate medical decisions to make, because they need to respond to the particular patient and their living conditions.

I think it is easy for us as physicians to forget that we do not operate in a white tower of a clinic or a hospital…our patients have a context around them. You do not ever get to see that context unless you go on to the community and community service learning has brought that to me. Has given me not only the opportunity… but the reason and the cause to go out to communities and see what are the actual conditions…I am having to advice in light of, have to advice against, things that I have to know about and be cognizant of that may affect my patients. That is one important thing. I think another has been really a deep seeded love of community. It is one thing again to sit there and practice medicine in your clinic, but to get to go to that same *Colonia* (colony) and see the same people build that bond.
Furthermore, the taxonomy demonstrated social awareness, overcoming social barriers, and patient empowerment as ways of serving communities. The *Serving communities*’ domain, identified ways that the medical students helped bring awareness to many of the local communities. The medical students found ways to overcome many of the social barriers that many of the members of the community confronted. They were able to create a sense of empowerment for many of the patients within the community.

**Service learning.** The second taxonomy, *Service Learning*, revealed that patient understanding, connecting service and learning, and cultural understandings were ways of student learning. The cover term, *Student learning*, described understanding patients, connecting service and learning, and cultural understandings as ways of better understanding patients, promoting diversity that helped develop service learning goals. The term combined elements of students learning in terms of patient understanding, meaning that students become familiar with patient cultural beliefs, norms, values, and assumptions, which enhanced their service learning experiences. Students indicated that through patient and cultural understandings, a sense of compassion developed. About half the participants commented on how their community service learning experiences helped develop a sense of compassion towards others in need. Gus said that:

> Compassion has been one of the greatest things, I took away from community service learning and you cannot be taught how to be compassionate. That compassion comes from within and it is through experiencing people who need your help and once you are able to serve them and help your community that is where the true compassion comes out.
Lydia had a similar experience regarding compassion. She spoke about seeing where and how compassion made a difference in serving patients in a refugee clinic. Lydia said that understanding refugee’s personal experiences helped cultivate a sense of compassion and patience.

There have been incidents with some patients where they get worked up and it is not their fault. They’ve been through so much as refugees, political refugees in their escapes. It is tough for them to express their emotions especially trying to depend on someone while they have been trying to be independent their whole life. There had been situations where you might get yelled at. They are talking in an angry fashion, but because of that compassion, because of your understanding, what position they are in, you do not need to retaliate. You do not need to start an argument. You just listen to them because that is what they want. They want someone to listen to them and there had been plenty examples like that. It made me a better learner.

Also, Walter said he was first uncomfortable with only the differences in backgrounds that existed between the people in the ColoniaJs and medical students. He spoke about that initial personal realization and despite it, he remembers moving past it quickly and felt comfortable with the people and their community.

I think the only being uncomfortable comes from recognizing, the difference between the backgrounds for you and members in the community. With that one, what especially
comes to mind was my first couple experiences working with the Colonias (Colonies) along South Texas. Where it was very humbling and made you realize you have a lot of privilege being here in medical school, things that maybe you did not recognize you had before. It is very eye opening in that regard, but discomfort in terms of who I was working with and where I was working, not really not so much.

Furthermore, the taxonomy represented that the ways of institutional support are faculty mentorship, program funding, and faculty involvement. Institutional Support described ways that the students viewed as mentorship that included assisting them with program development and funding. Overall, the two taxonomies revealed a sense of personal change resulting in students wanting to become change agents as ways students experienced a sense of transformation. This transformation described components that encompassed medical student meanings that led to personal transformation. As a result, students experienced opportunities that increased compassion, a developed a sense of purpose in their studies, and resulted in becoming a change agent in their future community endeavors.

Becoming a change agent emerged from the study after students experienced civic engagement and service learning initiatives and wanted to continue in some capacity after graduation. More than half of the participants commented on some sort of student and community contribution such as teaching, mentorship, and community organizations. Hank said that teaching was his past profession and inserting it into his community service learning has given him a purpose for continuing to serve the needs of the local community.

So when I did Teach for America, the standard joke is like once a teacher, always a teacher. Yes, you do your service in these communities for a couple of years, but it is not a commitment for 2 years, it really is a commitment for life. And that is like reverberated throughout medical school. It will be that way for Residency and it will be that way forever. I planned it, like I want to stay here for Residency, and I will be here, even if I do private practice, I will still be involved in my community. I work with the County Medical Society and other institutions, too, so I will be here to continue to work with projects and meet the needs of the population.
Steven and Marie both mentioned how they both wanted to make civic engagement some part of their medical practice. Steven stated, “It would part of my medical practice or at least be part of my goal in future to be involved in any community clinic or subsidize health facility, where I can volunteer to serve the community and give back.” Marie shared a similar desire to serve the needs of the community and become a mentor in the future. She also mentioned the possibilities of continuing to serve in several community organizations after graduation.

I think everything that I have experienced here getting involved with CSL and meanwhile pursuing my MD, I have absolutely focused on somehow involving that in my future practice and right now I don’t know career wise, whether I want to be affiliated or not with the teaching institution, whether it’s like private practice versus university, or if it’s in an academic setting, I definitely want to somehow be one of those mentors I talked about…I can work with students and continue these projects and share my own experiences…I would love to get involve that way, but if I am in the private sector, I definitely see myself getting involved with community organizations, like a great example here is the Good Samaritan organization that one of our faculty doctors Carmen Molina works with and just finding out what my community resources are and going that way.

Jesse felt a sense of program support after graduation, for him it would be going back to the program he helped develop to counter obesity. He also felt through private practice he would be able to intertwine the needs of the community with general practice requirements, such as student physicals.

One of the things I like to do, is hopefully Salud al Pasito (Small Steps to Health) is still around, I like to actually come back and talk as a physician, that would be my eventual goal. That’s one of the things I’d like to do. Now, that I’m going to be here for residency, it’s possible. Two, my biggest is prevention is weight gain, so obesity in childhood and then healthy lifestyle, so exercising, finding stuff to do that’s fun for them, and that’s going to be partnered, probably through a school system. That’s the only way we can do it, in my mind…is when everybody does physicals, as pediatrician, I’m going to be doing physicals for the rest of my life, whenever I do community service, because that’s what they’re going to want. They’re going to want student physicals for athletes…there’s going to be something involving, that’s going to happen. But health prevention, like hey, this is what you should be eating, just finding a way to communicate with people, you don’t have to buy fancy foods to be healthy. It’s hard, but it’s going to be an interesting challenge.
Saul further discussed that he sees his future community service extended beyond medicine in the capacity to help undergraduate students understand the importance of an education through mentorship. He shared his personal experience with his sister and wanting her to realize her full potential despite personal doubt of her abilities.

I’ve been already thinking even during residency...trying to reach out for the schools, undergraduate schools around...where I’m going to be working and try to mentor kids, because a lot of times people are scared about medical school like, “I’m not smart enough for medical school or like I cannot pay for it or I don’t know how I’m going to do it.” I will like to volunteer my time. At the same time, I will like to volunteer with high school kids. I have a high school sister and I see a lot of potential in her, but she doesn’t see it on herself. I would love to maybe volunteer with high school kids and at least give them enough hope of going to college and on getting an education and helping with that, because I think that it does help with your level of education. It helps your future and what you end up doing later on in life.

Finally, the taxonomies illustrated how medical students participating in a service learning program viewed community service, serving communities, student learning, and institutional support resulting in some sense of transformation. Medical students categorized these domains to make sense of their experiences in constructing ways to identify and execute service learning initiatives presently and in the future.

**Summary**

This chapter introduced the 10 participants who shared their individual experiences in a service learning program serving underserved communities in South Texas. The two sections of data analysis revealed domains were constructed based on their experiences in terms linked through sematic relationships and “when people talk, they almost always express themselves by using terms that are linked together by means of semantic relationships” (Spradley, 1979, p.108). The taxonomies revealed “subsets of folk terms and the way these subsets are related to the domain as a whole” (Spradley, 1979, p. 137). The data analysis identified an understanding of the experiences medical students viewed as civic engagement and service learning that ultimately
led to transformative developments as a result of a service learning program. In the final chapter, these patterns will be further analyzed using adult learning theory and any related literature. The chapter will close with conclusions, implications and recommendations based on the findings of the study.
Chapter 5: Discussion

Introduction

This study focused on medical students involved in a community service program serving local underserved communities and in South Texas. The purpose of this research was to understand the experience medical students had in a service learning program and how it impacted their connection within their community, whether it be local, state, national, or global. The two research questions that directed this study were:

1. What are medical students’ views of service learning and how does it relate to civic engagement and meeting community needs?
2. What are medical students’ view of their own transformation into civic leaders’ committed to civic engagement?

In this final chapter, findings will tie into any related literature though compare and contrast and assess any theoretical framework implications of the study. Furthermore, the chapter will evaluate the limitations of the study and provide a researcher’s reflection based of personal reflections collected throughout the study and finally provide recommendations for future study.

The study used a qualitative research design to explore the experiences of ten medical students who participated in a community service learning program. These students were selected through purposeful sampling between the ages of 25 to 33 with a least 1 year of service learning experience. This research provided a better understanding of their lived experiences serving medically underserved communities, which led to individual transformations. Phenomenological research involves an in-depth description of “the whole account of an issue, problem, situation, or experience, using qualities and properties from specific contexts or perspectives, so that the events or experiences take on vivid and essential meanings, a clear portrait of what is” (Moustakas, 1994, P. 60). The researcher remained focused on identifying the
whole account of the participant’s experience in better understanding their specific perspectives. The research analysis indicated through their community service experiences that community service, serving communities, student learning, institutional support lead to personal transformations. These key findings in related to the following taxonomies are civic engagement and service learning.

**Summary of Findings**

The findings provided an opportunity to understand the experience medical students had in a service learning programs involved in some underserved communities. The qualitative method of ethnographic inquiry was used in this study and is the most appropriate method for researchers to implement when studying the habits and cultural norms exhibited by individuals and groups within their natural setting (Thornton & Jaeger, 2007). Student reflection after serving different diverse underserved communities is important in developing new knowledge and is usually informal. Students experienced personal growth and motivation in developing a lifelong civic engagement commitment (Prentice & Robinson, 2007). After the student’s years of service learning in medical school, a majority started thinking about becoming involved with new communities during their residency.

**Community service.** The majority of the participants in this study had at least three years of community service prior to medical school. Each participant had a different community service experience that influenced their view of serving a community. Students understood that serving a community linked with their curriculum provided opportunities to practice clinic skills in real world setting. Although service learning may at times be confused with volunteerism, its learning objectives is to empower students into lifelong civic engagement. On the other hand, volunteerism is based more on community and assistance and enhancements without an
academic partnership (Lee et al., 2008). The students understood that serving a community linked directly to their curriculum would provide a chance to practice clinic skills outside of the classroom. This approach of utilizing diverse interpretations and perspectives with existent issues, allows for the most inclusive approach possible.

Students who actively engage their communities provide an immeasurable resource. Institutions of higher education create learning models that develop students into community leaders and provide service learning programs that help connect them to their community that leads to social change (Easterling & Millesen, 2012). Equally, community partnerships were important in sharing community knowledge and creating sustainable relationships. When individuals and community organizations pair their knowledge of what is already known with what they have learned in their interactions, they are more likely to engage in purposeful action to collaboratively improve the community (Mundel & Schugurensky, 2008).

This was a worthy illustration of the benefit of establishing and sustaining a good community partnership. Students worked hard to establish and sustain community partnerships that eventually led to networking opportunities for student’s programs. Saul mentioned that community networking helped save time and money for both student programs and their partners. He also added that networking with potential partnerships allowed resources not readily available due to their interest in the health programs. Furthermore, medical schools are focused predominantly on the technological benefits for patients and seem to move away from patient and community understandings. Medical students need to focus on patient and cultural understandings to help overcome many barriers faced in underserved communities (Waddell & Davidson, 2000). Hank mentioned that community mobilization went beyond patient data such
as blood pressures, but to learn other facets that may be contributing to their overall health and establish a common goal for the community.

**Serving communities.** Research in serving communities indicated that “the learning objectives of these activities typically focus only on extending a student's professional skills and do not emphasize to the student, either explicitly or tacitly, the importance of service within the community and lessons of civic responsibility” (Bringle & Hatcher, 1996, p. 2). In contrast, the participants in this study developed a sense of awareness, overcame social barriers, and helped create a sense of patient empowerment as a kind of civic engagement. The majority of the participants felt that service learning created an opportunity to fully serve their communities. Service learning programs create an opportunity for students to gain experiences and reflect, often leading to new knowledge. Students are able to experiment with that new knowledge in similar or new environments. Better understanding community and cultural aspects provides opportunities in solving many community needs (Prentice & Robinson, 2007).

Through service learning, students are able to better discover and understand social factors that are contributing to health problems and develop sustainable solutions for community members. Students often discover many contributing factors serving in diverse communities outside the boundaries of a medical school campus (Easterling & Millesen, 2012). For example, Mike, who was newly assigned a leadership role, wanted to expand this role in more creative ways in identifying health challenges within the community. He discussed that creating a community bicycle program not only created an opportunity for transportation, but also an awareness to many current levels of physical activity for the community.

Additionally, Steven mentioned as a student leader, he would canvas the surrounding communities of refugees and place flyers written out in Arabic, Nepali, and three other
languages. In overcoming social barriers for the patients, many students discussed that understanding community social challenges and limitations facilitated a chance to allow members of the community to voice lifestyle issues. Thus, students were able to provide sustainable solutions to many of the social factors that may have been contributing to many of the community’s health diseases. Some students discussed that while understanding many community social and cultural factors, their moral judgement became challenged and at times difficult to understand.

Although literature suggested that moral judgment is not simple to attain, students were able to gain a better understanding of community needs and through reflection create solutions towards social change and solving community needs (Scott, 2012). Furthermore, another way students discussed serving communities was to empower their patients in terms of conversation and motivation to achieving better health. For example, Skyler mentioned that listening to patient physical and supportive resources and remaining empathetic, she was able to discover new ways to foster patient motivation and compliance. Saul also mentioned that better patient understanding led to patient empowerment, but added that reputation between caregiver and patient helped reinforced that sense of empowerment.

**Student learning.** Lee at el. (2008) described how service learning programs can create opportunities that place students in real world environments and that through reflection often leads to new learning. In contrast to traditional education, service learning offers learning through action and periods of reflection. In regard to service learning, participants were asked about their real world experiences in understanding, they mentioned that service learning allowed them to practice their clinical skills on real patients and learn through reflection, how to understand and communicate with them. Steven described how in reflection he used this
understanding of their health issues and barriers to change things at the student-run clinic in order to address them. For example, Lydia mentioned just gaining experience in general helped them better understand their patients, she discussed learning refugee family dynamics, such as parental preferences and male and female comfort distances.

Hank also mentioned a time working in Guatemala and seeing patients with severe conjunctivitis, but reaching the root cause, discovering that their stoves were covered in soot causing the conjunctivitis. Despite all the student and patient benefits of service learning, Eckenfels (2009) warned that service learning problems are not a sole solution to completely resolving health disparities or solving all community needs. In contrast, students in service learning problems have a potential to better understand diverse patients that and gain confidence that helps approach patient care with new perspectives (Steiner & Sands, 2000).

Due to critical reflection and gaining new knowledge, students better able to serve challenging environments and patients with complicated health concerns (Waddell & Davidson, 2000). For example, many of the students mentioned that personal understanding also included communication, learning new ways to communicate with the patients involving medical terminology. Skyler mentioned that she learned to communicate with her patients on their level of understanding. Walter also mentioned experiences that should have a framework and objectives and have detailed goals. For example, he expressed a need to open up dialogue involving the refugees and other community members regarding their health issues and barriers to gaining good healthcare. Furthermore, service learning provided an excellent opportunity after reflection for personal and professional growth. Students gained communication, clinical, and medical practice competency that can be applied in future patient care (Azer et al; 2013).
Institutional support. Currently universities are modeling their curriculum to “encourage student service and community outreach through volunteer initiatives, student organizations, and service-learning while pursuing national civic distinctions such as (Carnegie Foundation for the Advancement of Teaching, 2011) and the President’s Higher Education Honor Roll (National Service-Learning Clearinghouse, 2011)” (Scott, 2012, p. 27-28). In contrast, not all medical schools have completely created a service learning model that empowers lifelong civic engagement and sustainable solutions in solving community needs. Further research is needed before all medical schools commit to this learning model as a mandatory addition to current medical model curriculums (Smith et al., 2013). In the context of pursuing service learning goals, the participants mentioned institutional support along with research was important in full integrating service into the curriculum. Students mentioned that institutional support provided them with many opportunities such as mentorship, program funding, and grant assistance. Although literature suggested that inadequate faculty involvement would have a noticeable impact on the success of the student’s service learning experience as a whole. Service learning and community partner relationships share a unique dynamic that links academic learning with real world settings that leads to new knowledge. Both have an opportunity to share information that benefits each other, but more importantly solve many community needs (Worrell, 2007).

In a like manner, 6 participants mentioned that there is a limitation in finding faculty due to department and hospital goals, but if institutional leadership provided protected time to take international trips to teach or volunteer at clinics, health services and student mentorship would increase significantly. Jesse also stated that timing is an issue in gathering faculty involvement due to Attending’s and Residents having different duty schedules. Another concern is a need for
more mentorship in student leadership development. Hank mentioned that student-run clinics need faculty mentorship due to leadership, safety, and meeting protocol goals, but also finding a balance in allowing students leadership opportunities.

Strong faculty involvement and mentorship is important in leading students into challenging and underserved environments that goes beyond any classroom setting. Students are able to experience a need for basic human needs and exposed to social barriers (Eckenfels, 2009). Furthermore, another aspect of institutional support centered around program funding and student grant assistance during their service learning duration. Lydia mentioned that the institution needs to make it easier to gain grants but was overall is very supportive. She added that program funding was not an obstacle. For example, she mentioned a time when a translator was needed at the refugee student-run clinic and the institution provided immediate assistance. Overall, service learning experiences helped students gain a better understanding of both patient and community needs which led to better ways in providing health and a vision for social change (Beck et al., 2015).

**Theoretical and Practical Implications**

The theoretical framework recommendations for medical schools and future medical students are linked both to experiential and transformative learning. Understanding how these theories fit into the findings, will better guide medical schools and future medical students. Medical school chief academic officers can better understand the context of experiential learning through service learning program initiatives that support student opportunities in: (a) active learning experiences; (b) critically reflect; (c) linking the experience; (d) testing new learning to new situations (Kolb, 1984). An example of experiential learning in action is illustrated through service learning that leads to student transformation beyond that of cognitive association.
The term ‘experiential’, concrete experience is a defining characteristic of experiential learning, be it a community service project, a community engineering project, a local mentorship or an overseas exchange trip. Real-world encounters leave students with a deeper impression than learning merely from textbooks, which enable more fruitful observation, reflection, conceptualization and experimentation. The community service type of experiential learning is particularly effective as such learning connects students’ emotions and empathy towards the subject matters besides the usual cognitive linkage. (Chan, 2012, p. 413)

Using these theoretical and practical understandings can better guide medical schools to develop and shape student leadership and civic engagement potential in serving communities. Student inspiration and institutional support empowers students towards service learning programs (Komives & Dugan, 2010). For instance, medical students were able to identify a need for institutional support through institutional funding, faculty and student grant support allowing that helps create possibilities for service learning. Bordelon & Phillips (2006) emphasized that higher education must find ways to provide service learning opportunities that students find resourceful and supports their academic interests which lead to positive experiences for students. Many of the participants mentioned that student-run program funds, institutional grants for students, faculty involvement and mentorship were ways that proved to enhance service opportunities.

Furthermore, keeping in mind that “traditional classroom-based learning may not always create deep impressions in students because of its didactic, passive and standardized nature, yet the active and practical nature of experiential learning tends to facilitate deep understanding” (Chan, 2012, p. 405). For the student, experiential learning “is portrayed as an idealized learning cycle or spiral where the learner “touches all the bases” –experiencing, reflecting, thinking, and acting –in a recursive process that is responsive to the learning situation and what is being learned” (Kolb & Kolb, 2005, p. 194). Thus allows students opportunities of critical reflection resulting in personal development, transformation. Mezirow stated:
To facilitate transformative learning, educators must help learners become aware and critical of their own and others’ assumptions. Learners need practice in recognizing frames of reference and using their imaginations to redefine problems from a different perspective. Finally, learners need to be assisted to participate effectively in discourse. Discourse is necessary to validate what and how one understands, or to arrive at a best judgment regarding a belief. In this sense, learning is a social process, and discourse becomes central to making meaning. (Mezirow, 1997, p. 10)

Implications of the study indicate, that student outside experiences do not lead to new knowledge. Reflection creates an opportunity for new knowledge to emerge (Dewey, 1933). The findings there were indications on how student critical reflection developed new meaning beyond that of their personal assumptions, values, and beliefs. For example, Lydia mentioned life as a refugee and how understanding their experiences gave a sense of compassion in providing health care. Likewise, Gus also mentioned that fear was his experience, but after reflection, he understood cultural differences and educated himself to many of those differences. Mundel and Schugurensky (2008) stated, “Individuals who participate in service learning projects undergo a transformative learning process” (p. 55). Even though the medical students were not required to perform community service learning campaigns, the experiences shared and reflections acquired helped influence students towards civic engagement as a lifelong goal.

**Recommendations for Future Research**

Some of the recommendations for future research based on the findings of this study include: (1) Identifying the long-term factors on student motivation and commitment in a medical school service learning program when instituting program requirement, (2) Exploring student experiences taking cultural and humanistic courses before participating in service learning programs, (3) Since this study focused solely on a medical school service learning program, a recommendation would be to conduct this study in different health related schools to be able to identify if there are any differences in student experiences, and (4) Identifying whether
there is a difference in experience between allopathic and osteopathic medical students regarding incorporating service learning in their programs of study.

First, a quantitative study is recommended examining motivation and commitment factors when initiating a service learning requirement. Many of the participants mentioned instituting a requirement that the service learning program be a requirement. They were excited about their journey and wanted new medical students to experience the program. However, a few felt that medical school should be about serving the surrounding community with health care on a voluntary basis only. They also mentioned the difficulty of their course load, clinical rotations, and examinations. Several studies have indicated the short-term results of service learning, but are limited on the factors of student motivation and commitment. Second, a qualitative study exploring student’s experiences after taking a cultural and humanistic course before working with the underserved. Some students mentioned possible benefits in taking these classes before participating in a service learning program would help better understand cultural differences.

Third, a qualitative study understanding different health professional’s experiences in the same service learning capacity is needed. For example, many of student-run clinics had nursing, dental, physician assistant students working together as a team serving the community. Lastly, there is limited research on allopathic medical schools with service learning programs for their students. A qualitative or quantitative study would either explore or examine service learning benefits in that capacity.

**Final Thoughts and Reflection**

Kaufman (2001) stated:

We all discovered that in our academic centers it’s hard to become passionate about something that you don’t see or experience personally. All of us ended up choosing careers that were very different from what we had originally intended. What made us
change? Well, it wasn’t our formal training. It was real life experiences in the community that transformed us. (p. 120)

The concept of service learning and its potential for learning through integrating classroom instruction with real world problems, provided the basis for this study. By participating in service learning, these medical students were able to gain: (a) skills in leadership; (b) clinical competency; (c) a sense of compassion; (d) patient and cultural understandings; (e) communication skills; (f) an understanding social factors in an underserved community. Students were able to develop a sense of personal growth and solve many community needs (Jones et al., 2014).

The ideal of transformation seemed apparent, but it was not that easy: many of the participants processed their experiences through reflection. In the beginning of this study, many of my personal assumptions, values, and beliefs about health care were non-humanistic in nature and detached. I had prior experiences in identifying different health care cultures, but never understanding them in-depth. A given culture creates a translation that provides meaning based on their assumptions, values, and beliefs. As the instrument of the study, I wanted to capture students’ reflections after a lived-in experience. Given the medical school culture, I was an obvious outsider, so respecting their demanding schedules and remaining as flexible as possible was taken into consideration. I understood that a surface study in search cultural meanings was an only option due to time. Spradley stated:

Those who advocate studying the surface of cultural meanings argue that we need to see a culture of cultured scene in holistic terms. It is the relationships among the domains that are important; then later, if time allows, we can come back and examine each domain in exhaustive detail. But, because time and resources are limited, most ethnographers agree that an exhaustive study of an entire cultural will never be accomplished. (Spradley, 1979, p.134)
During interviewing, I was invited to a student-run refugee clinic. I had never been to a refugee camp or health care clinic and the environment was slow at first but eventually filled with people seeking health care. Some came alone, other came as married couples or with their entire families. As an outsider, I did not understand many of the cultural rituals, values, assumptions, or beliefs, but only understood a universal need for respect. I was able to see the dynamics created by the interdisciplinary team, especially the medical students as leaders and health care providers.

An interesting aspect was that many students had come from different cultural backgrounds, one being a former refugee, spoke of the difficulty of living two lives, one of an American and the other as an African refugee. Listening to the stories of how other immigrant students traveled and struggled through other countries and eventually coming to the United States was interesting and compelling to hear. As medical students, they had an understanding of many refugee challenges and difficulties that led to a strong sense of compassion, that was an unexpected finding.

Studying medical students preparing to leave for their residency, I had limited opportunities to interview them after years of medical study and community service learning. An interesting aspect to witness was their humanistic transformation and to hear their commitment to the community. Exploring this experience, I was transformed in many different perspectives. First, I was able to see how service can have a meaningful impact on both participant and receiver, that differences are made. Second, despite cultural differences, I realized we are more common than we realize, and that a need to help one another is not easy but possible. Finally, I was reminded that education isn’t just a personal accomplishment, but an opportunity to truly become passionate through real life experiences serving communities. I felt that students’
community service vision and mission during their residency would only continue and possibly lead to a lifelong commitment.

Conclusion

This qualitative phenomenological study was to understand the experience medical students had in a service learning program involved in some underserved communities. The study focused on ten medical students with at least one year of community service learning. This study revealed transformative similarities in compassion and commitment in providing a humanistic approach to patient care. Each participant shared in their own words, a newfound compassion towards a diverse population living in many underserved communities.

Within the study, semantic relationships (is kind of) were represented between cover terms identified with civic engagement and service learning, which identified ways medical students connected past and present community service experiences with new ways to serve underserved communities. Community service, serving communities, student learning and institutional support emerged as themes that contributed to student transformation. The literature demonstrated a need for more service learning programs in medicine and other graduate programs, and potential contributions that included reinforced service learnings impact on student transformation and development.

Lastly, the potential of this study may provide insights that may help other medical school service learning programs efforts of educating and contributing to the development of lifelong civic engagement among medical students. This study will help create a pathway for future medical students to take more from their academic experience by being able to effectively connect their academic and experiential experiences while being more engaged in the community.
References


students and faculty toward community medicine. *Academic Medicine, 89*(12), 1630-1635.


Appendices
Dear Prospective Participant,

I am Roy Rodriguez, a doctoral student at the University of the Incarnate Word working toward a doctorate degree in education with a concentration in organizational leadership. You are invited to participate in a research study of civic engagement and service learning for medical students serving underserved communities in South Texas. I am currently working on my dissertation. The purpose of this research is to gain an understanding of your view on service learning. This research may help to gain a better understanding of how medical students view service learning and how it impacts their connection within their community, whether it be local, state, national, or global.

You are being asked to participate in this study because you are a current medical student at the University of Texas Health Science Center San Antonio (UTHSC). Your participation will involve one face-to-face interview on the topic of service learning. The interview will last about 45 to 60 minutes. Interviews will be recorded using a voice-recording device. Interviews will be transcribed manually for data analysis. Your participation in this research is voluntary.

You can choose not to participate and withdraw from the research any time you wish, with no consequences. Everything learned from you in the study will be confidential and cannot be identified with you. If published the results of the study, you will not be identified in any way. If you have questions now, feel free to ask us. If you have additional questions later or you wish to report a problem that may be related to this study, contact either researcher, Roy Rodriguez, cell number 210-240-5947, email: rrodri22@student.uiwtx.edu or supervisor, Dr. Noah Kasraie at (210) 829-3133 or send an email to Kasraie@uiwtx.edu.

The University of the Incarnate Word committee that reviews research on human subjects, the Institutional Review Board, will answer any questions about your rights as a research subject (210-829-8036). The study has been reviewed and approved by the University of the Incarnate Word Institutional Review Board and UTHSCSA has honored their approval. IRB Number: (#16-01-008).

Thank you in advance for your contribution and support.
Sincerely,

Roy Rodriguez, PhD Candidate,
University of the Incarnate Word, San Antonio, TX, USA.
Appendix B

Interview Questions for Participants

1. What has been your experience so far at in medical school?

2. In what ways have you been involved in the community?

3. In what ways have you been involved in community service learning?

4. How has your service connected with your learning in medical school?

5. What are some challenges associated with community service learning and community involvement?

6. What are some recommendations for community service learning and community involvement that you would provide to make your medical school experience more meaningful?

7. Tell me what your community service learning experiences have brought you?

8. How would you improve the medical student involvement in serving the community?

9. What could be done at the institutional level?

10. If you can change anything about your past community service learning experience, what would it be?
Appendix C

Research Participant Information and Consent Form

Title of Study: Civic engagement and service learning for medical students: A phenomenological study of transformation.
Researcher: Roy Rodriguez Ph. D. student at Dreeben School of Education.
Supervisor: Dr. Noah Kasraie, Ph.D., faculty of Dreeben School of Education.

Description of the research and your participation
You are being invited to participate in a research conducted by Roy Rodriguez, doctoral student at Dreeben School of Education. The purpose of this research is to gain an understanding of your view on service learning. You are invited to participate in this study because you are a current graduate student at the University of Texas Health Science Center San Antonio (UTHSC).

Your participation will involve one face-to-face interview on the topic of service learning. The interview will last about 45 to 60 minutes. Interviews will be recorded using a voice-recording device. Interviews will be transcribed manually for data analysis. Your participation in this research is voluntary. You can choose not to participate and withdraw from the research any time you wish, with no consequences.

Risks and discomforts
There is a minimum risk associated with this research. You will have a choice to use your real name or to remain confidential. If you choose to remain confidential, there is a potential risk that you may be identified based on what you say in the interviews. If you choose to remain confidential, a pseudonym or code name will be used for protection of your identity. Interview and transcripts will be saved in password-protected computers and in a cloud file storage of the researcher and will be shared possibly with the community service learning program (CSL) at UTHSC only with your explicit permission.

Potential benefits
There are no known benefits to you that will result from your participation in this research study. The potential benefit for you is an opportunity to share your experiences and thoughts. This research may help to gain a better understanding of how medical students view service learning and how it impacts their connection within their community, whether it be local, state, national, or global. Also to gain an understanding medical students views on their relationship between service learning and meeting community needs.

Protection of confidentiality
You will have an option to remain confidential or to be identified by marking the appropriate box at the end of this consent form. If you choose confidentiality, I will do everything I can to protect
your identity. Confidentiality of interviews and participants will be collected during face to face interviews. Interviews will be conducted in a private room at the University of the Texas Health Science Center San Antonio and Dolph Briscoe Jr. Library. Confidentiality will be based on participant’s willingness to use their real names or remain confidential. Participants who choose to use their real names will use their real names. Those who chose to remain confidential will use pseudonyms. Key terms collected and analyzed will be stored on the researcher’s password protected computer. Interviews will then be destroyed upon completion of this study.

**Voluntary participation**

Your participation in this research project is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

**Contact information**

If you have any questions or concerns about this study or if any problems arise, please contact any of the following: researcher, Roy Rodriguez, cell number 210-240-5947, email: rrodri22@student.uiwtx.edu or faculty supervisor, Dr. Noah Kasraie, 210-829-3133, kasraie@uiwtx.edu, or the University of the Incarnate Word Office of Research Development (Institutional Review Board) at (210) 805-3036.

**Confidentiality options**

Please mark the appropriate confidentiality statement below:

___ I choose to remain confidential. My name and identifying information will not be used in this study and any presentations or publications resulting from the study.

___ I choose to allow my name and identifying information to be used for this study and any presentations or publications resulting from the study.

___ I would like my contribution to this study, including the audio records and transcripts, to be included in the dataset for other potential studies.

___ I request that the researcher destroy the audio records upon completion of this study and not share the transcripts beyond the completion of this study.

**Consent**

I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study and have marked the appropriate options for researchers to protect my participation in this study.

Participant’s name: ______________________ Signature: ____________ Date: _________

Researcher's name: ______________________ Signature: ____________ Date: _________