TOPS Tech Utilization: Systemic Barriers and Facilitators in Louisiana

Melissa Clare Ledoux
Louisiana State University and Agricultural and Mechanical College, mcl9197@gmail.com

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TOPS TECH UTILIZATION: SYSTEMIC BARRIERS AND FACILITATORS IN LOUISIANA

A Thesis
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Abstract

TOPS Tech is a social welfare program in Louisiana that provides students with financial support to obtain the specific training that they need to get the jobs that are available in Louisiana. Since 1998, 42,918 students were eligible for the award, yet only 5,515 (12.85%) students enrolled full-time and utilized it (Louisiana Board of Regents, 2012). In order for educational leaders in Louisiana to improve participation in the TOPS Tech Program, they must first understand the barriers faced by students who want to utilize it. This study explored the potential factors contributing to the utilization (or underutilization) of TOPS Tech. This study used a qualitative design to capture participants’ perceptions of the factors that restrict or enhance access to TOPS Tech utilization within Louisiana. Qualitative data were collected through individual face-to-face interviews as well as phone interviews with policy-makers in Louisiana. Barriers and facilitators identified in this study were categorized as nine higher-order themes: Community Factors; Societal Perceptions; School, Parent, School-Parent Collaborative Relationships; Workforce Development; Eligibility; Costs Associate with Post-Secondary Education (PSE); Exposure; Communication; and Policy Context.
Chapter 1
Introduction

School social workers have historically bridged schools, families, and communities by helping students improve their educational achievement and social, emotional, and behavioral wellbeing (National Association of Social Workers [NASW], 2012). School social workers hold the same values as the broader profession: service; social justice; dignity and worth of the person; importance of human relationships; integrity, and competence (NASW, 2012). They advocate for vulnerable student populations and social justice in education, just as social workers do for the larger population. One specific area of focus for school social work is closing the achievement gap in the education system.

Achievement Gap

Historically, the achievement gap was measured as either differences in average scores or differences in proficiency rates between groups of students. These gaps are evident in standardized test scores, grade point averages, dropout rates, and college enrollment and completion rates (Bromberg & Theokas, 2013). The achievement gap is significant to social workers because it separates economically disadvantaged students and students of color from advantaged students. This gap was narrowed considerably since the late 1980s; however, progress since then has been marginal. These socioeconomic and racial gaps in educational achievement demonstrate the inequality and social injustice within the U.S. educational system.

There are economic concerns in relation to achievement gaps. A racial achievement gap exists where the average Black or Latino student is roughly two to three years of learning behind the average White student (Schhneider, Martinez, & Ownes, 2006). Researchers have measured the impact of lower performing Black and Latino students and their impact on educational
attainment and estimate that U.S. earnings alone would be $120 billion to $160 billion higher in 2008 if there were no racial achievement gap (Schhneider, Martinez, & Ownes, 2006).

There is also an emerging opportunity gap in America. Citizens that are born to lower-income parents have a difficult time moving up economic statuses. Children born into the top fifth of the income distribution have about twice as much of a chance of becoming middle class or better in their adult years as those born into the bottom fifth (Isaacs, Sawhill, & Haskins, 2008). One way that children from lower-incomes can move up economically is by earning a college education (Bailey & Dynarski, 2011).

Some researchers argue that the achievement and opportunity gaps are mislabeled, and this widens the gaps. Ladson-Billing (2006) notes that the racial achievement gap unfairly constructs students as "defective and lacking" and "admonishes them that they need to catch up" (p. 4). Rather than the term —achievement gap,— Ladson-Billing suggests the term "education debt," which holds us all accountable. Instead of focusing on telling people to catch up, we have to think about how we need to work together rather than separately to find solutions. In addition, Perry, Steele, and Hilliard (2004) argue that blame can no longer be placed on Black culture or poverty, and as a society we must create a culture of achievement. Hillard (1984) argues that there is a deliberate manufactured crisis in education that can be traced back to the days of Blacks in slavery where there was a great divide between the education of the children of wealthy landowners and the children of slaves. The children of slaves were never intended to receive the same education, as to keep them in their place. Regardless, to move forward, schools and teachers must show students that they believe that students can achieve at high levels regardless of their race. There is a great deal that schools and teachers can do to encourage high achievement for all of their students. School social workers can help to facilitate this desired
standard for all as they have a long history of working to eliminate social inequality, as well as, their traditional work in elementary and secondary education (Gibelman, 2005). Now, they are increasingly charged with postsecondary education (PSE) as well.

**Social Work in PSE**

School social workers employed in PSE settings play critical roles in the lives of young adults, such as addressing academic concerns, helping students adjust to new environments, or identifying behavioral issues (Gibelman, 2005). Regardless of job title, social workers have the opportunity to support students’ academic and personal growth during this critical phase of their lives (NASW, 2012). As federal initiatives place greater emphasis on college success, this creates a new territory for school social work practice (Gibelman, 2005). As school social workers are traditionally guided by policy and practice, social workers in PSE settings must turn their attention to federal, state, and local educational policy initiatives as well.

The federal government has had significant and increasing involvement over the past century in education, which is perhaps the largest social welfare program in the U.S. Several federal policies have been created in the last 100 years to close the achievement gap in elementary and secondary education and advance PSE, such as the Elementary and Secondary Education Act (ESEA), the Improving America’s School Act (ISAS), and the Head Start Program. As an increase in the need for employees with postsecondary degrees grows, so does the demand for community colleges and technical schools (Baum, Little, & Payea, 2011). The Truman Commission Report, published in 1946, called for significant changes in postsecondary education, such as the establishment of a network of public community colleges, which would be free of charge for all youth who would benefit from such an education. The Commission helped
popularize the term “community college” in the late 1940s and helped shape the future of two-year degree institutions in the U.S. (Thelin, 2004).

**Community Colleges**

Community colleges and technical schools often serve as an access point to higher education for many students, as these institutions award more than 800,000 associate degrees and certificates annually (National Commission on Community Colleges, 2008). These institutions are attractive to certain portions of the population in that they offer lower tuition, lower admission requirements, and geographical proximity to a larger population. Community colleges often provide opportunities for education and job training that may otherwise be unavailable. From the opening of Joliet Junior College in 1901 to present, there are over 1,600 community colleges across all fifty states (Brint & Karabel, 1989; Phillippe & Patton, 2000). Community college programs include associate degree and transfer programs, worker training and retraining programs, occupational/technical programs, developmental programs, community services, economic development activities, and support services (Phillippe & Patton, 2000).

Community colleges have traditionally enrolled a diverse group of students such as low-income and minority groups (National Center for Education Statistics [NCES], 2008). Another key group in this setting is part-time students; 52 percent of part-time students at public two-year institutions were young adults under the age of 25 (NCES, 2008). The Taylor Opportunity Program for Students (TOPS) program was designed to address the academic migration of young adults from Louisiana to other areas of the country. Young adults have been shown to be a key demographic indicator for future economic growth and wellbeing (Georgetown Public Policy Institute, 2012).
TOPS

TOPS is a statewide tuition assistance program designed to retain Louisiana high school graduates in the state to pursue a postsecondary education (Patrick F. Taylor Foundation, 2011). In 1989, Mr. Patrick Taylor convinced the Louisiana legislature to adopt the –Taylor Plan. This plan granted financial access for low and moderate-income students based on academic merit. Qualifying students were awarded free tuition and waived fees at any Louisiana 4-year public college or university. The popularity of state-funded merit-based tuition increased, and it has since spread to twenty-three other states (Patrick F. Taylor Foundation, 2011). A full table showing the current states or districts that operate state-funded merit-based tuition programs, as well as the eligibility components of these programs, is located in Appendix A.

Taylor’s Plan was originally funded through the state general fund, but in 1999, Louisiana voters approved a measure that set aside one-third of the Millennium Trust, the $4.6 billion tobacco-settlement, as a permanent fund to support the program (Gose, 1999). In 2010, this Trust covered over $20 million (16.9%) of TOPS’ cost (Patrick F. Taylor Foundation, 2011). Currently, TOPS is administered by the Louisiana Office of Student Financial Assistance (LOSFA). To date, Louisiana has spent $1.5 billion on TOPS, which marks a 212% increase since 1998 alone.

**TOPS Eligibility and Benefits.** From fall 1998 to 2012, 238,181 students met eligibility requirements for TOPS. Students can qualify for a TOPS scholarship up to one year after graduation from a Louisiana high school or GED program. The scholarships last up to eight full-time semesters as long as students meet various eligibility conditions, such as a minimum grade point average (GPA). TOPS covers all tuition, however, it does not cover fees at postsecondary institutions. TOPS can be applied to Louisiana accredited public, private, or for-profit colleges
and universities in Louisiana (LOSFA, 2013). Table 1 presents the current the eligibility components of TOPS.

<table>
<thead>
<tr>
<th>AWARD</th>
<th>CURRICULUM</th>
<th>CORE GPA</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors</td>
<td>College Prep Core 19 Units</td>
<td>3.00</td>
<td>27</td>
</tr>
<tr>
<td>Performance</td>
<td>College Prep Core 19 Units</td>
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<td>23</td>
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<td>Opportunity</td>
<td>College Prep Core 19 Units</td>
<td>2.50</td>
<td>20</td>
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<tr>
<td>Tech</td>
<td>College Prep Core 17 or 19 Units</td>
<td>2.50</td>
<td>17</td>
</tr>
</tbody>
</table>

**TOPS Tech.** TOPS Tech is a sub-program within the TOPS packages. It was designed to pay tuition for skills or occupational training to Louisiana high school graduates within the Louisiana community and technical college system, Louisiana approved Proprietary and Cosmetology Schools, and Louisiana Public Colleges and Universities that do not offer a baccalaureate degree. A student may, however, pursue skill or occupational training with the Louisiana Public Colleges and Universities that offer baccalaureate degrees (LOSFA, 2013). Overall, TOPS Tech makes up a small portion (1.12% in 2011-12) of the overall budget of TOPS (LOSFA, 2013). Since 1998, 42,918 students were eligible for the award, yet only 5,515 students enrolled full-time and utilized the award (Louisiana Board of Regents [BoR], 2012).

**TOPS Tech and social welfare.** TOPS Tech is an important social welfare program for Louisiana because it assists qualifying high school graduates who wish to attend community colleges or technical schools. Louisiana’s overall economy is highly dependent upon skilled workers in industries such as oil, gas, and manufacturing. While educational and job opportunities are improving across the nation, Louisiana ranks 50th in the nation for jobs that demand college graduates (Georgetown Public Policy Institute, 2012). This type of industry landscape requires jobs that do not require a bachelor’s degree; however, these jobs may pay
high-wages. TOPS Tech provides the specific training that residents need to get the jobs that are in Louisiana.

Louisiana’s economy depends on skilled workers, especially those in industries such as manufacturing, oil, gas, chemical, and agriculture industries (Department of Agriculture, 2010). Louisiana students need training for jobs in these key industries, and TOPS Tech can help facilitate this connection. Moreover, as a social welfare program, it is important to consider the ways in which government programs for education are utilized. Understanding how students utilize TOPS Tech will help understand how to target the program to students who need it or may benefit the most. This will ultimately help to address achievement gaps at the level of PSE by targeting underrepresented low-socioeconomic status (SES) or racial/ethnic students, which will lead to overall greater employment and higher wages for a wider proportion of the population. An improved understanding of the utilization of TOPS Tech will help the state of Louisiana and educational leaders identify barriers and facilitators of TOPS Tech utilization. This study will explore the potential factors contributing to the utilization (or underutilization) of TOPS Tech.

**Key Terms and Definitions**

Utilization: The use of TOPS Tech to enroll in a post-secondary institution

Barrier: Prevents utilization of TOPS Tech

Facilitator: Allows or assists access to TOPS Tech

Taylor Opportunity Program for Students (TOPS): A state scholarship program of four different award (Honors, Performance, Opportunity, and Tech) levels for Louisiana residents who meet academic requirements and attend either Louisiana public or private college and universities, Louisiana community, technical, and vocational schools
TOPS Tech: One of the four levels of TOPS that pays for tuition to any schools in the Louisiana Community, Technical, and Vocational systems, and Louisiana public colleges and Universities that do not offer a baccalaureate degree

Post-Secondary Education: The level of education that occurs after secondary education in the United States at universities, colleges, technical or vocational schools.

Community colleges: PSE institutions that are primarily two-year public institutions resulting in certificates or associate’s degrees

Technical schools: PSE institutions that provide training in technical and mechanical fields resulting in certificates or associate’s degrees

Vocational schools: PSE institutions that provide instruction and introductory experience in skilled trades

Four-year universities: PSE institutions that are composed of teaching and research facilities often with graduate and professional schools that award bachelor’s, master’s, and doctoral degrees.

A list of relevant acronyms is available in Appendix B on page 85.
Chapter 2
Literature Review

Since the founding of social work in 1889, social workers have been charged with shaping social welfare policy to positively impact society’s most vulnerable populations (Domanski, 1998). The importance of higher education is growing as young people are faced with high unemployment rates, high costs of education, and an increasingly globalized marketplace. Traditionally, the federal government charged the states with the responsibility to provide, administer, and finance their own kindergarten through 12th grade (K-12) education systems; still, there are numerous instances throughout history in which the federal government has engaged in educational policy to promote public education as a social welfare program. This review of literature will outline the federal government’s engagement in K-12 education, PSE, and the higher education landscape in Louisiana. In addition, TOPS Tech utilization will be discussed in relation to EST.

Federal Engagement in K-12 Education

Federal engagement in K-12 education arguably began with the 1954 Brown v. Board of Education Supreme Court decision, which ended segregation in American public schools and signaled a dramatic shift in how American society began to view and utilize public schools. Brown v. Board of Education states that separate but equal schools are inherently unequal, and overturned the Supreme Court’s former decision in the 1896 Plessy v. Ferguson of separate but equal ruling (347 U.S. 483, 1954). Despite the ruling, more than 98 percent of Black children in the South attended segregated schools one decade after Brown. Unfortunately, the Supreme Court, on its own, created little desegregation because it lacked the power to overcome local racial resistance (Klarman, 2006). Educational outcomes for poor and minority students, while improving, are still lower than those of their white counterparts. Today’s racially separated
public school system reflects and reinforces persistent status differences between whites and nonwhites by enabling a system of funding that shortchanges students of color (Spatig-Amerikaner, 2012). Schools with 90 percent or more students of color spend a full $733 less per student per year than schools with 90 percent or more white students. The spending difference between these schools is large, as mostly white schools spent $733 more per student than the mostly nonwhite schools, (e.g. 9-18 percent more) (Spatig-Amerikaner, 2012). Nevertheless, this Supreme Court case set the stage for future government involvement in education.

The first major federal policy initiative began with President Johnson’s War on Poverty in 1964. The War on Poverty was important to education in that it established, and ultimately influenced, programs and policies such as the Head Start and Early Head Start Programs, the Elementary and Secondary Education Act (ESEA) of 1965, the Improving America’s School Act (IASA), and the No Child Left Behind Act of 2001 (NCLB) to help support children's education in America. Each major federal policy initiative will be discussed next.

**The Head Start Program.** During Johnson’s War on Poverty, Dr. Edward Zigler developed the Head Start Program with the intention of improving early childhood programming for low-income families. More specifically, the program provided emotional, social, medical, nutritional and psychological services to low-income families with preschool children in an effort to provide foundational supports for children before they entered kindergarten (Office of Head Start, 2011). To this end, the Office of Economic Opportunity (OEO) launched an eight-week Head Start project in 1965 and 1966. Head Start expanded throughout the 1970s and 1980s, including bilingual and bicultural programs and exceeded a budget of $1 billion dollars in 1984 (Head Start, 2013). In recent years, the program was expanded to include Early Head Start for infants and toddlers, a focus on school readiness, emphasis on high quality instruction,
increased program monitoring, and more fiscal accountability (Head Start, 2013). The Obama Administration continued to increase funding for both programs as well (Office of Head Start, 2011). The Head Start program is one federal public education program to promote academic success for low-income children, specifically in the area of early childhood learning. Federal priorities centered on K-12 education are evident as well. The Head Start Program would lay the foundation for federal focus on K-12 low-income children, and thus the ESEA.

**ESEA.** ESEA was passed in 1965 and was designed to focus federal funding on lower-performing schools with the enrolling of children from impoverished families. Title I of this Act was specifically aimed at improving education for disadvantaged children in poor areas and placed federal emphasis on this population for the first time. Title I sought to close the achievement gap between high-and low-income children, which was particularly important for racial and ethnic minority children as well (Carmichael, 1997). As such, ESEA marked a new era of significant federal involvement in education.

The reauthorization of ESEA in 1995 led to IASA. IASA began the movement towards standards-based education and assessment, and it reauthorized ESEA of 1965. IASA had multiple guiding themes: high standards for all children; a focus on teaching and learning; partnerships among families, communities, and schools; and resources targeted to areas of greatest need (U.S. Department of Education, 1996). Together, ESEA and IASA included greater federal supervision and accountability for education. The next reauthorization of ESEA in 2001 resulted in NCLB, the most significant federal engagement in K-12 education to date.

**NCLB.** NCLB was designed to help every child in America, regardless of ethnicity, SES, or background, achieve high standards through standards-based accountability, measureable educational goals, and increased federal control over education (U.S Department of Education,
2003). Title I of ESEA remained in NCLB as well, yet additional accountability measures were created to ensure that low-income students make learning progress at the same rate as their higher-income peers. NCLB is the most recent of several historical policies designed to impact K-12 education as a social welfare program.

These federal policies and standards set in K-12 education heavily influence the government’s role in PSE policies.

**Federal Involvement in PSE**

The federal government’s role in education is not limited to K-12. In fact, a number of federal policies impacted PSE within the past two centuries, beginning with the Morrill Acts of 1862 and 1980. Additionally, the Servicemen’s Readjustment Act of 1944 (GI Bill), the National Defense Education Act (NDEA), and the Higher Education Act (HEA) were also significant in the country’s development of higher education. Each of these policies will be outlined here.

**Morrill Acts of 1862 and 1890.** The Morrill Act was signed into law by President Lincoln in 1862, and provided each state with 30,000 acres of federal land to support the development of higher education (Library of Congress, 2010). The states could sell the land and use the proceeds to fund public colleges that concentrated on agriculture, mechanical arts, and military tactics, as well as classical and liberal studies. Sixty-nine colleges were funded by this Act including two colleges that would later merge to form Louisiana State University (LSU) (LSU System [LSUS], 2013).

While the original Morrill Act of 1862 sought to extend access to higher education by providing endowments to all land-grant universities, it also prohibited distribution of money to states that excluded students based on race. An exception was made for states that provided separate land-grant institutions for Black students. The majority of these states were in the South.
During the Civil War era, education for Blacks no longer seemed impossible as private organization, northern philanthropists, and ex-slaves begun to finance education in the south (Anderson, 1988). Historically Black colleges and universities are those institutions of higher learning founded prior to 1964 for the purpose of providing postsecondary education to African Americans (Brown & Freeman, 2002). For example, in 1892, Southern University received funds under this Act. The schools formed under the Second Morrill Act of 1890 are the core of what is known today as historically Black colleges and universities (Nemec, 2006). In the beginning, Anderson (1988) argues that these Black educational institutions were formalized training academies for industrial work with deliberate plans to keep Blacks in subordinate roles in the South.

As a result of this policy, there is at least one land-grant university in every state and territory in the United States, including the District of Columbia. Land-grant universities are important because they are dedicated to research, education, and outreach to address states’ localized needs and the needs of the larger society (Association of Public Land-Grant [APLU], 2012) The United States Department of Agriculture (USDA) administers and oversees the land-grant funds at the federal level (APLU, 2012). For example, what would become LSU was established in 1870 and its mission is the generation, preservation, dissemination, and application of knowledge and cultivation of the arts (LSU, 2012).

Land grants to universities helped shape postsecondary education in the late 19th and early 20th centuries by providing federal support for higher education. Following this, the mid-20th century included the greatest number of policy innovations in relation to higher education. Three specific federal policies emerged in the 20th century to support higher education in the United States. These included: the 1944 G.I. Bill, the NDEA, and the HEA.
**The GI Bill.** The GI Bill provided benefits for returning World War II veterans that included cash payments for tuition, living expenses while in college, and vocational education available to any veteran who had been on active duty for at least ninety days during war time (Servicemen’s Readjustment Act of 1944, 1944). The GI Bill was viewed as an attempt to stop a looming social and economic crisis as millions of young men came back from World War II who had not completed their formal education and were not unemployed (U.S. Department of Veteran Affairs, 2012). Through the GI Bill, 7.8 million veterans have received education benefits and 8.5 million have received unemployment assistance. The GI Bill had a substantial impact on higher education, creating greater student diversity and social integration (Bennett, 1999). In less than a decade after the Bill’s inception, the number of graduates more than doubled and the number of new two and four-year colleges rose by 10 percent. The GI Bill has long since contributed to economic growth not only financially, but also in terms of human capital and marginally closing the achievement gap (Herbold, 1995).

**NDEA.** After the implementation of the GI Bill, NDEA was created to help the country fight against potential international threats. It was signed into law in the midst of the Cold War to counteract the believed superiority of the Soviet school system (Jolly, 2009). NDEA focused on training young scientists, technologists, engineers, and mathematicians (National Defense Act of 1958, 1958). NDEA provided one billion dollars over four years for 40,000 loans, 40,000 scholarships, and 1,500 graduate fellowships. The majority of NDEA funding was earmarked for academically capable students who did not have the financial means to pursue undergraduate or graduate degrees. Matching state funds were also available to help bolster the program (National Defense Act of 1958, 1958). NDEA marked a significant commitment by the federal government
to not only help fund PSE for its citizens, but also to create a competitive educational landscape with other nations and help address the needs of low-income students.

**HEA.** HEA followed this trend of federal PSE funding. It was signed into law in 1965 (Higher Education Act of 1965, 1965). President Johnson expressed the need to educate lower and middle income families, provide program assistance for smaller colleges, add additional higher education libraries, and utilized college and university resources to help deal with poverty and development in communities (McCants, 2003). Title IV of the HEA established the first formalized structure for financial assistance to college students (Higher Education Act of 1965, 1965).

Several key policies have influenced educational policymaking in this country. The Morrill Acts gave the Department of Education control in administering support for land-grant colleges and universities. The GI Bill was born out of the need to educate 8 million newly unemployed veterans. In 1958, NDEA was established as a federal education response to the Cold War, and HEA evolved from the need to educate middle and lower income families. In addition to these federal policies, states have also played an integral role in regulating and financing education. Louisiana is one state of particular interest because the history of involvement in higher education is varied and distinctly focused on developing the workforce for economic development.

**Higher Education in Louisiana**

The origin of both public elementary and postsecondary education in Louisiana can be traced to private institutions founded by religious organizations and charitable groups, particularly the Catholic and Methodist churches. In 1825, the first public institution of higher education in Louisiana was established — the College of Louisiana (LSUS, 2013). Nearly a
decade later in 1834, Tulane University was founded by a group of New Orleans physicians (LSUS, 2013). Shortly after, in 1855, the Louisiana State Seminary of Learning and Military Science was founded, but it closed the following year as most of its students enlisted in the Confederate Army during the Civil War. The seminary reopened in 1865, was relocated to Baton Rouge in 1869, and was renamed Louisiana State University (LSUS, 2013). In 1874, the Legislature established Louisiana State Agricultural and Mechanical College in New Orleans under the Morrill Land Grant Act of 1862. By an Act of the 1876 State Legislature, the two institutions merged to form the Louisiana State University Agricultural and Mechanical College (LSUS, 2013). In 1998, the responsibility for the authorizing of proprietary schools in Louisiana was transferred from the Louisiana State Department of Education to the Louisiana Board of Regents. At present, the higher education community in Louisiana is composed of 44 institutions. Thirty-one are in the public sector and 10 are in the private sector (LSUS, 2013). More recently, Louisiana, along with several other states, has prioritized higher education for low-income and high-achieving students. Merit-based scholarships are one way that states are doing this.

**Merit-Based Scholarships**

States have long since explored ways to keep their best and brightest students in the state for college. One method of doing so involves encouraging and rewarding students who excel academically by providing non-need merit-based scholarship programs (Heller, 2002). Non-need merit-based scholarships are awarded to students who have the financial means to pay for education, yet qualify based on test scores and grade point averages. Since the 1990s, 23 states have implemented merit-based scholarship programs that award grants to fund in-state postsecondary education (Heller & Marin, 2004).
One of the first of the merit-based scholarship programs is TOPS, which began in Louisiana in 1989. TOPS financial assistance includes four scholarship levels that are awarded based on a student’s previous academic achievement: Honors, Performance, Opportunity, and Tech. TOPS Tech is the lowest tier of the award levels and is the focus of this study. The under-utilization of TOPS Tech can possibly be explained by EST.

**TOPS Tech Utilization and EST**

Both the federal and state governments have considerable involvement in higher education, particularly in Louisiana with the TOPS and TOPS Tech programs. Current evidence indicates that TOPS Tech is under-utilized (Theriot, 2009; Thurber, 2008), however the reason is unclear. EST and prior research on college access and matriculation may provide insight into the barriers and facilitators related to TOPS Tech utilization.

EST states that an individual’s development reflects the influence of multiple environmental systems. Bronfenbrenner’s theory highlights five environmental systems in which interaction between an individual and his or her environment occurs: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979).

According to Bronfenbrenner (1979), within the microsystem, family, school, religious organizations, neighborhood, and peers directly impact a child’s development. For example, a student that is encouraged by his or her parents to attend a postsecondary institution is more likely to be academically eligible and utilize educational opportunities. In the mesosystem, connections occur between contexts, such as the relation of family experiences to school experiences, or school experiences to family experiences. For example, children whose parents who have not placed a high value on education may not expect their children to attend PSE. The exosystem involves links between a social setting in which an individual does not have an active
role and the individual’s immediate context. For example, when a new industry emerges in a community and workers fill those jobs, the local economy will diversify and may improve. The macrosystem describes the culture in which individuals live such as SES, poverty, and ethnicity. Members of a cultural group share a common identity, heritage, and values. The macrosystem evolves over time, because each generation may change the macrosystem, leading to further development (Bronfenbrenner, 1979). For example, one member of the family who escapes poverty through education will change the macrosystem of that family; future offspring of that family member will be more likely to attend better schools and achieve a higher SES.

The chronosystem is influenced by the pattern in which environmental events and transitions happen over one’s life course and sociohistorical circumstances. Chronosystems also involve the timing of events, as well as the number, length, and perception of events over time (Bronfenbrenner, 1979). For example, racial and ethnic minorities and low SES students have gained more opportunities in PSE in the last half century due to policies that emphasize affirmative action or changes in the perceptions of minority students in higher education.

One could apply ecological systems theory to TOPS Tech utilization and PSE. Potential factors may occur within each of the five systems to impact individuals’ utilization of TOPS Tech, and ultimately their enrollment in PSE. Likewise, it is possible that potential factors influencing the utilization of TOPS Tech occur across all of the five systems. Previous research on general postsecondary education identified several potential barriers to utilization and enrollment, such as geographical location, public transportation and physical accessibility, affordability, industry landscape, norms and expectations, and individuals’ demographic characteristics. These potential barriers may also facilitate utilization and enrollment for some individuals and groups. These factors are aligned with EST and may serve as a starting point to
understand the utilization (or lack of utilization) as well as the potential barriers or facilitators of TOPS Tech within Louisiana.

**Potential Barriers or Facilitators to TOPS Tech Utilization**

**Geographical and Physical Location.** Geographical location plays an important role in one’s decision to apply to or attend higher education. Two specific developments in higher education have emerged to address the limitations that geography may pose – community colleges and online education. Community colleges were originally developed to provide localized PSE (National Commission on Community Colleges, 2008) and were described in Chapter 1. Online education is a relatively new advancement in PSE that also may help eliminate geographic barriers.

In the past several years, online enrollments grew substantially faster than enrollment in traditional higher education. Allen and Seamen’s (2006) research reported that nearly 3.2 million students were taking at least one online course during the fall 2005 semester, an increase of 800,000 students from the previous year. While online education has the potential to bring PSE to place-bound students, additional research is needed to understand how other types of supportive structures, such as TOPS Tech, may address geographic barriers as well.

Geographical or physical location might be a potential barrier or facilitator to TOPS Tech utilization that individuals may experience differently dependent upon their context or personal situation. For instance, students who are unable to physically access education may be less likely to apply or receive a PSE. Those who are located near eligible TOPS Tech institutions, or have adequate transportation options, may be more likely to access the merit-based scholarship program. Geography and transportation may, in fact, be connected in understanding TOPS Tech utilization.
Public Transportation and Proximity. Another potential barrier or facilitator to TOPS Tech utilization is public transportation and physical accessibility. Ninety percent of the U.S. population lives within 25 miles of a community college, which makes these institutions highly accessible to many people (American Association of Community Colleges, 2012). However, 45 percent of American households lack any access to public transportation (American Society of Civil Engineers [ASCE], 2013). Research has shown that bus ridership declines with rising income, however use of other transit such as streetcars, subways, and commuter railroads rise with higher income (Pisarski, 1996). Nationwide, Hispanic and African-American workers have much higher rates of transit usage than non-Hispanic white workers. In terms of spatial layout, public transportation is largely concentrated in the oldest, largest, and most densely developed American cities (Taylor & McCullough, 1998). While much of the population in Louisiana lacks access to public transportation (ASCE, 2013) previous research on this issue suggests that these may be factors related to the utilization of this scholarship program in Louisiana.

America’s public transit infrastructure plays a vital role in our economy, connecting millions with jobs, access to health care, schools, shopping, and recreation, and it is vital to the one-third of Americans who do not have personal transportation (ASCE, 2013). Although Americans are investing more time and money in mass transportation, transit agencies are struggling to maintain aging fleets and facilities (ASCE, 2013). This increased interest in mass transportation comes amid a struggling economy that has reduced transportation funding, forcing service cuts and fare increases (ASCE, 2013). These budget cuts are felt by millions of Americans, especially the poor or disabled who have few mobility options to meet their basic travel needs (Federal Transit Administration, 2010).
If postsecondary education is not nearby or affordable, then public transportation and physical accessibility could pose a barrier for students attempting to access educational options, and potentially influence one’s use of TOPS Tech as a support for this education. This is especially true for students with low-income status. While there are over 18 technical and community colleges in Louisiana, it is likely that some areas in the state do not have easy access to one of these intuitions. This could lead to a student being eligible for TOPS Tech, but not utilizing it. Thus, public transportation and physical accessibility may both be underlying factors within a person’s environment that may contribute to his or her use of TOPS Tech. A full time education often requires flexibility that public transportation or close proximity may not provide. Personal transportation can often be unaffordable while one is also trying to also afford PSE education. Thus affordability is another important factor to consider.

**Affordability.** Research shows that community colleges are, on average, 35 percent more affordable than four-year universities or colleges (Baum, Little, & Payea, 2011). In 2010-11, average tuition and fees for a full-time student enrolled in a public two-year college were $2,713 compared to $7,605 at public four-year institutions. Also, community college students were less likely than students enrolled in other sectors to rely on student loans (Bahr, Gross, Slay & Christensen, 2013). Community colleges are an inexpensive option for many low-income, as well as low-skilled, adults who desire to boost their education and skill set. They also provide a considerably less expensive way for students to complete their first two years of college.

Two barriers related to affordability are: (1) a student’s ability to afford a school that is physically close to him/her, and (2) the alignment between the affordable school’s curriculum offerings and a student’s career goals. While TOPS Tech scholarships pay tuition and offer significant assistance toward paying for college, TOPS Tech does not, in most cases, pay for the
associated fees that come with college attendance. That is, if these fees are more than students can afford, then affordability would still be a barrier to TOPS Tech utilization. While little is known about affordability and accessibility in relation to TOPS Tech, the previous research on other forms of PSE suggests that these may be factors related to the utilization of this scholarship program in Louisiana. Another under researched factor is the potential barrier or facilitator of Louisiana’s industry landscape.

**Industry Landscape.** The state or region’s industry landscape may also be related to TOPS Tech utilization. Over the course of one’s lifetime, an individual with a college degree will earn more than $1 million on average than a worker with a high school diploma (U.S. Census Bureau, 2002). As the U.S. economy grows, and becomes more specialized, attaining a postsecondary education becomes more critical (Educational Testing Service [ETS], 2003). In 1959, only 20 percent of workers needed some college participation for their jobs; by 2000, that number rose to 56 percent (ETS, 2000).

Job growth in the South is estimated to grow by 20 percent; yet, the job growth will be low skilled and low-paid (ETS, 2012). PSE and training for the workforce is the key to creating or attracting high-paying and high-skilled jobs (ETS, 2012). Traditionally, Southern states have focused on manufacturing, utilities, transportation, construction, and housing. Numerous reports indicate that as many as 600,000 manufacturing jobs have gone unfilled because of a shortage of skilled workers, and there is a serious shortage of workers educated in science, technology, engineering and mathematics fields (Atkinson & Mayo, 2010).

The state has traditionally relied on the oil, gas, agriculture, chemical, fishing, manufacturing, and tourism industries to support the local economy. Although these industries are central to Louisiana’s economy, a sudden collapse in any one industry would be devastating
for the state (ETS, 2012). Greater diversification would lend stability to the state’s economy and workforce. New jobs in manufacturing are required to facilitate this diversification and bolster more stability. These new jobs, however, will require more postsecondary education and training than ever before. Higher levels of education not only increase individuals’ access to jobs that provide further training and higher wages, but also provide access to new technology (ETS, 2010). Moreover, education and training could increase employee wages three to 11 percent (Altonji & Spletzer, 1991), resulting in an overall improvement in quality of life as well.

Louisiana’s industry landscape will continue to be influenced by job training. For Louisiana’s economy to grow and develop, it will need more training and education. TOPS Tech is a policy solution that provides students with the needed education to be employed within these manufacturing industries. It also holds the potential to promote the growth of Louisiana’s industrial landscape. In fact, students who are aware of the resources and gaps within the state’s industries may be more apt to utilize TOPS Tech. On the other hand, if students are unaware of the state’s industrial needs and the opportunities within TOPS Tech, then they may not utilize this program to assist in their training. The industrial landscape could pose as a barrier or a facilitator to TOPS Tech utilization. Another barrier or facilitator related to TOPS Tech is the norms related to the culture of education in this state.

**Norms and culture of education.** Norms related to the culture of education in this state could be a potential barrier or facilitator related to TOPS Tech. Expectations of one’s success in school often go beyond test scores or academic outcomes, but are deeply rooted in the predetermined norms prescribed to by the larger educational system.

In the U.S., the culture of education is ever evolving. The new norm has become that attending some kind of training or educational program will help advance one in an industrial
landscape. Furthermore, there is a deeply rooted expectation that everyone can and should attend college (preferably a four-year college) and these expectations are regardless of prior academic achievements (Goyette, 2008; Rosenbaum, 2011). Still, differences in expectations and future aspirations exist for students who are from varying racial, ethnic, or socioeconomic backgrounds. Some individuals, such as those who are racial/ethnic minorities and low-income, might not expect their children to attend college. Others may want their children to attend college, but do not think it is within reach, such as low-income or Black and Latino families. In fact, low-income students are less likely to enroll in college (Institute for Higher Education Policy, 2010) and Latino adults have the lowest educational attainment compared to all other racial/ethnic groups (U.S. Census Bureau, 2003). These data suggest that low-income and racial/ethnic minority students may not expect to attend college, thus they may be less likely to utilize TOPS Tech.

First-generation college students, as well as their parents, are also likely to have unrealistic expectations about college and lack knowledge of the emerging industry landscape and one’s potential earning potential. Low-income parents are more likely to view a high school diploma as the norm for their children than high SES parents, to whom a bachelor’s degree is considered the norm (Walpole, 2003) and are more likely to define success as securing a full-time job after graduating from high school. For parents of students coming from higher SES, success is associated with four years of college attendance, particularly at a reputable college (McDonough, 1997; McDonough, Korn, & Yamasaki, 1997).

In Louisiana, education may or may not be a norm for certain families. For families that expect some type of PSE, a two-year degree program or training might not fit their expectations of PSE. Louisiana is in a unique position for higher education because a sizeable portion of the
state’s population has never attended college and has historically worked in manufacturing jobs (Lumina Foundation, 2012). These jobs now require a greater amount of skill and knowledge, yet the expectations for higher education among low-income and racial and ethnic minority families remains the same. This could point to one potential barrier related to TOPS Tech utilization throughout the state. There are also other related factors, such as gender, race, and SES that can help explain why TOPS Tech is underutilized.

**Demographics.** Demographics, such as race and SES, largely influence educational outcomes. Community college students tend to be older and more racially and ethnically diverse than students in four year institutions, and more likely to exhibit a range of characteristics that place them at risk of not meeting their educational goals (National Governors Association, 2011). In many ways, the makeup of the community college population is due to the historical development of this sector of higher education. There is little research on the demographics of students who attend vocational and technical schools. It is likely that race and ethnicity and SES are related to TOPS Tech utilization. It also is likely that these demographic factors intersect to influence the ways in which students participate in this program.

Race, ethnicity, and SES. Enrollment rates in postsecondary education are generally lower for students from various racial or ethnic groups (e.g., Black and Latino when compared to Caucasian and Asian students; Aud, Hussar, Plany, & Snyder, 2010). This is not the case with TOPS, as the utilization rates of TOPS are proportionate to the national population (U.S. Census Bureau, 2010). Still, no research has been conducted to determine the ways in which racial/ethnic minorities utilize TOPS Tech. Studies on community colleges may highlight how race and ethnicity relate to TOPS Tech. Only one-fourth of community colleges, nationally, have
at least 40 percent of their students from racial/ethnic minority groups. Because community colleges have open-door admissions and attract local students, fully 75 percent of the variation in racial composition in the two-year sector is directly attributable to the racial composition of their surrounding geographic locales (Goldrick-Rab & Kinsley, 2013).

Similar to race/ethnicity, low SES students have historically experienced limited access to higher education. One’s SES is an important factor in determining whether one will attend a two- or four-year institution, as well as if one will obtain any postsecondary education at all. Furthermore, the rate of enrollment growth for lower-income students is quickly outpacing the rates of their higher-income counterparts (Kalogrides & Grodsky, 2011).

Community colleges are more accessible to students from low SES families who want to gain skills and an education to build a better life, yet it can be challenging to enroll, participate, and complete coursework while also focusing on other needs such as paying bills and meeting family demands (American Federation of Teachers, 2011). Students from low-income families are at a greater risk of failure in a college setting; however policy makers are pushing students to attend four-year universities (Kalogrides & Grodsky, 2011).

To date, much of this research does not fully examine the intersection of race/ethnicity and SES. Intersectionality allows researchers to consider social identities, such as race/ethnicity and SES, simultaneously (Cole, 2009; Crenshaw, 1994). In addition, intersectionality can be used to better understand how one’s multiple group memberships influence the treatment they may receive (Griffin, 2009). For example, a Black student with low SES may be discriminated against because he or she belongs to multiple disadvantaged groups (i.e. race and SES minority groups) compared to a Caucasian student from a high SES. Orfield (1994) states that race and SES are highly correlated within education. For example, Caucasian students received more than three times as much in merit-based grants and private scholarship funds as racial/ethnic minority
students (Kantrowitz, 2011). Furthermore, low SES is systematically linked to educational inequality, and inequality of racially and economically disadvantaged minority students.

Intersectionality relates to this study in many ways and is important to consider as one explores TOPS Tech utilization. Intersectionality not only affects one individual, but it impacts a culture too (Collins, 2000); economic and social inequities are mediated by the social locations and lived experiences of people in the community (Murphy et al., 2009). It is vital to understand how intersectionality and social injustice operate in education so that social workers may effectively intervene on behalf of oppressed groups (Murphy, Hunt, Zajicek, Norris, & Hamilton, 2009). This study will explore both race/ethnicity and SES as they relate to TOPS Tech utilization.

**Current Study**

Both the state and federal governments have increased their efforts to develop and implement social welfare policy regarding K-12 education as well as PSE. Beginning in the 1990s, states created merit scholarships to prevent students from leaving the state. In Louisiana, TOPS was established to help qualifying high school graduates pay for PSE. A small number of studies have examined TOPS outcomes (Droddy, 2009; Theriot, 2009; Thurber, 2008); however, almost no research has been conducted on the utilization of TOPS Tech. More research is needed to understand the underlying factors related to TOPS Tech utilization so that the intent of the policy may be fully realized. To fill this void, this study will attempt to determine why students may utilize or underutilize the scholarship program.

Research examining utilization of TOPS Tech is useful in understanding students’ access to PSE, particularly students who are from minority groups and are often underrepresented in institutions of higher education. This research may inform social welfare policies aimed at
improving access to higher education by identifying various barriers and facilitators related to
the use of a state-funded merit-based scholarship program. This research could also inform
administrative practices by examining why certain students or populations from certain areas of
the state utilize TOPS Tech. The findings of this study also may provide greater insight into the
barriers and facilitators related to PSE generally.

The purpose of this study is to explore the systemic barriers and facilitators in Louisiana
that restrict or enhance the access to technical schools and community colleges for students who
are TOPS Tech eligible. Specifically, this descriptive study will address the following research
questions:

1) What are the systemic barriers that restrict access to technical schools for
   students who are TOPS Tech eligible?
2) What are the systemic facilitators that enhance access to technical schools
   for students who are TOPS Tech eligible?
Chapter 3
Methods

This study used a qualitative design to explore the barriers and facilitators to utilization of TOPS Tech in Louisiana. This chapter will describe the research design and techniques, explain the collection and treatment of data, and establish the framework for analyzing the data. All procedures were determined exempt from review by the LSU Institutional Review Board.

Context and Setting

Louisiana’s geographical boundaries include a total population of 4,601,893 people. In 2012, 63 percent were White, 34 percent were Black, four percent were Latino, and nearly two percent were Asian (U.S. Census Bureau, 2012). There are 44 post-secondary institutions in Louisiana: 13 (29.5%) community and technical colleges, 18 (40.9%) public colleges and universities, 10 (22.7%) independent colleges universities, and three (6.8%) additional learning centers (LSUS, 2013). Appendix C provides a full list of institutions relevant for TOPS Tech. In Louisiana, 34.9% of the state’s 2.4 million working-age adults hold a high school degree, 22.6% have some college with no degree, 5.5% percent hold a two-year degree; 15% hold a Bachelor’s degree; and 6.5% hold a graduate or professional degree (U.S Census Bureau, 2010).

Sample and Sampling Procedures

The sample for this study was composed of individuals from the following policy-making organizations in Louisiana: BoR, Louisiana Community and Technological College System (LCTCS), Louisiana Department of Education (LDOE), the Louisiana State Legislature, Louisiana Board of Elementary and Secondary Education (BESE), and Louisiana Counseling Association (LCA). Individuals from these organizations were selected because of their knowledge of PSE in Louisiana and knowledge of TOPS Tech. The inclusion criteria for potential participants were: (1) at least two years of experience in their current job role; (2)
employed by one of the above mentioned organizations; and, (3) age 18 or older. A total of 153 potential participants meeting these criteria were identified through the organizations’ websites. Upon identifying the pool of possible participants, the researcher sent recruitment emails to the identified potential participants in intervals of 60 per week. Follow-up phone calls were made at the one-week point following initial contact until ten participants agreed to participate in interviews. Seventy-eight potential participants never responded, sixty-five declined, and 10 emails bounced back and were never correctly delivered.

In the end, the sample was composed of 10 individuals, four of which were female and six of which were male. Nine of the participants identified as Caucasian and one identified as African American. In addition, one person was employed with BESE, one served on multiple state education boards, one was a member of the Louisiana House of Representatives (HoR), one was employed with Louisiana Economic Development (LED), two were employed with LSCTCS, two were employed with LCA, and two were employed by the BoR. Demographic details for the study’s sample are summarized in Table 2.

<table>
<thead>
<tr>
<th>Employment</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BoR</td>
<td>Male 6</td>
<td>Caucasian 9</td>
</tr>
<tr>
<td>BESE</td>
<td>Female 4</td>
<td>Bi-Racial 1</td>
</tr>
<tr>
<td>LHoR</td>
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<td></td>
</tr>
<tr>
<td>LED</td>
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</tr>
<tr>
<td>LCA</td>
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<tr>
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<td></td>
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<tr>
<td>MSB</td>
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</tr>
</tbody>
</table>

**Interviews**

Data were collected through three individual face-to-face interviews and seven phone interviews. The researcher decided whether to conduct face-to-face interviews or phone
interviews based on the availability of the researcher and the participant, as well as the participant’s geographical location. In addition, interviews were chosen for data collection because this allowed the researcher to gain insight into phenomena that could not be easily observed, as the process of utilizing TOPS Tech occurs over a long period of time (Darlington & Scott, 2002).

**Interview guide.** The researcher developed a semi-structured interview guide that asked participants to speculate on the barriers and facilitators related to utilization of TOPS Tech in Louisiana (Appendix D). The interview guide focused on key theme areas in relation to barriers and facilitators to PSE in Louisiana, including public transportation, geographical location, affordability, cultural educational expectations, and demographical factors such as race, gender, and SES. The format of each guide allowed the researcher to reformulate the questions and ask the questions out of order to aid in the flow of the interview (Gibson & Brown, 2009). The interview guide was checked for content and clarity by experts in research on higher education in Louisiana prior to conducting the interviews. In addition, a pilot interview was conducted to refine and develop the instrument, reframe questions, and adapt research procedures (Sampson, 2004). The pilot interview was not included in the analyses.

**Interview procedures.** Ten interviews were conducted for this study. At the beginning of each interview, participants were provided a basic context for the study and information about confidentiality. Participants were first asked to provide verbal consent to participate in the study (script available in Appendix D). After the participants gave their consent, the researcher began the interview with broad, open-ended questions: “Tell me a little about your familiarity with the TOPS Tech program.” As participants responded to this broad prompt, the researcher used probing questions to gain a greater depth of understanding. Prompts were also used to gain an
understanding of the participant’s perception of the underlying impacts of the facilitators or barriers (e.g. “What is it about [the facilitator or barrier] that led to this?”). The researcher continued to ask the questions on the interview guide to explore the study’s research questions. The interviews were recorded and notes were taken throughout to document the participants’ responses.

After the interview guide questions were exhausted, participants were asked if they had anything else to share with the researcher that they had not yet shared. The researcher collected any additional comments. The participants were then thanked for their participation and the interview concluded. Interviews ranged from 20 to 50 minutes in length.

Data Analysis. The interviews were recorded with audio-recording technology and transcribed verbatim by the researcher. In order to protect the confidentiality of the participants, interviews were de-identified after they were transcribed, and participants were assigned a number. The data analysis process began with the researcher reading through the interview transcript in its entirety, which helped the researcher become familiar with the data. After the data were thoroughly reviewed, the researcher began the process of open coding (Corbin & Strauss, 2008). The researcher analyzed the data collectively for the two research questions of the study: 1) What are the systemic barriers that restrict access to technical schools for students who are TOPS Tech eligible? and 2) What are the systemic facilitators that enhance access to technical schools for students who are TOPS Tech eligible?

During this process, the researcher pulled raw data from the transcripts and labeled the chunks of data with codes. Chunks of raw data that represented similar concepts were given the same code name. Memos were kept to provide a written record of the coding process and were used to identify the codes. Memos were also kept as a record of ideas and guesses as the
researcher worked with the data, and to track any methodological concerns or questions (Corbin & Strauss, 2008).

Focused coding and axial coding were used to analyze the data in this study. The focused coding was used to narrow down open codes with similar properties and dimensions. Axial coding was used to begin to develop a hierarchy of codes and concepts. During this process, the codes identified during open coding were organized into different higher-order themes, sub-themes, and lower-order themes (Corbin & Strauss, 2008). Higher-order themes began to emerge as codes were grouped into each of the broader categories. The data analysis process employed both deductive and inductive methods. Constant comparison was also used to compare new data with data that was already analyzed to expand and refine categories and codes (Corbin & Strauss, 2008). In this particular study, EST and research around facilitators and barriers of PSE utilization were used to provide a beginning framework for data analysis as well.

**Trustworthiness.** Two strategies were utilized to ensure the trustworthiness of this study. First, *negative case analysis* guarded against researcher bias. The researcher refined the hypothesis until it addressed all cases within the data, and helped the researcher explore any personal bias. Second, the researcher kept an *audit trail*. Data collection and analysis procedures and methods were outlined in detail for the purposes of another researcher replicating this research. The researcher used codes and memos to justify and document decisions that were made during the analysis.
Chapter 4
Results

Upon analysis, 460 raw data quotes representing barriers and facilitators related to TOPS Tech utilization emerged from the data. These quotes were organized into 9 higher-order themes, 28 sub-themes, and 142 lower-order themes. Themes and subthemes are presented in Table 3, along with indicators of whether participants discussed the sub-themes as barriers or facilitators to TOPS Tech utilization.

The following section provides an outline of higher-order themes, sub-themes, and lower-order themes. Direct quotes are provided in the text to help illustrate the individual concepts, along with discussion of why each theme represented a barrier or facilitator to TOPS Tech utilization.

Community Factors

One theme that emerged from participants was community factors. Sub-themes included: community and technical college program availability; demographics; proximity; and personal issues. Seventy-nine quotes were grouped into five sub-themes and 29 lower-order-themes.

Community and technical college program availability. Nine participants identified statements regarding community and technical college program availability. Examples of lower-level themes that emerged were: a need to create more satellite campuses; variability in technical programs throughout the state and, the geographical location of community and technical colleges. Specifically, participants indicated that only certain programs are offered in certain areas of the state and, most often, the programs are related to the industries located near those areas. One participant noted,

It goes very much hand in hand geographically. Our state is very different…there’s a lot of diversity…a lot of different things going on in different parts of the state…. different
types of industry that really make the community college experience really unique to the area…

A second participant stated,

To offer all the different industries that we have going on in our state. It’s a huge huge [sic] deal…one thing that students should be aware of instead of just going to the technical school in our hometown [is] explore other options because there are schools out there with different opportunities and options.

This participant illustrated that students might be interested in careers that are available in different parts of the state. Participants indicated that technical and community college students often attend schools that are located nearest to them because of limited mobility due to finances and transportation. Participants also noted finances and transportation as factors to consider in relation to the utilization of TOPS Tech. These findings are discussed later in this chapter.

**Culture.** Five of the participants mentioned the culture specific to Louisiana as a potential factor in access to PSE. As one participant illustrated:

You know, Louisiana’s a …I would call it a homeboy state. People kind of live or work and go to school in their area, and don’t move around a lot. We’re not really mobile. It’s just not necessarily because …it’s our culture. It’s how we grow up. If you ask anybody in Louisiana where they went to school, they’ll tell you their high school, they’re not going to tell your their college. So, I mean, that’s where their roots are.

Another participant discussed how it is not just a cultural issue, but also a generational issue,

I think, and this is generational, and I don’t know how many generations this is going to take… Louisiana was so late to the community college movement…. the community college system in Florida was well-developed 50…60…70 years. People expect to go to community colleges. Over half the students in Florida began in community college. In Louisiana, all we had was Delgado, really. So, we’re very late, we’re still trying to catch up 30 years ago, you just went to Morgan City, and jumped on a boat or jumped on a helicopter and worked on the oil rigs, and those jobs are not plentiful any longer.

These participants illustrated how there is a cultural barrier in Louisiana that has been slowly passed down from generation to generation. As one participant also indicated, community and technical colleges developed later in Louisiana compared to other states, and as a state, we have a long way to go to “catch up”. He also indicated that formal education is needed for these
Table 3
Themes and Sub-Themes

<table>
<thead>
<tr>
<th>Themes/Sub-Themes (# raw data)</th>
<th>Facilitator</th>
<th>Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community factors (79)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community and technical college program availability</td>
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<td>X</td>
</tr>
<tr>
<td>Culture</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Demographics</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Proximity</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Personal issues</td>
<td>-</td>
<td>X</td>
</tr>
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<td><strong>Societal perceptions (58)</strong></td>
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<td></td>
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<tr>
<td>Emphasis on four-year schools</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Stigma</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Values</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td><strong>School, parent, school-parent collaborative relationships (22)</strong></td>
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</tr>
<tr>
<td>Schools</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Parents</td>
<td>X</td>
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<td>Connection between K-12 and PSE</td>
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<td>Lack of information</td>
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<td><strong>Policy Context (41)</strong></td>
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<td>-Talk!</td>
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<td>Other related programs</td>
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industry jobs, and you could no longer simply “jump” on a job and begin working without
training. Another participant discussed how it is not just a cultural issue, but also a generational
issue,

I think, and this is generational, and I don’t know how many generations this is going to
take… Louisiana was so late to the community college movement…. the community
college system in Florida was well-developed 50…60…70 years. People expect to go to
community colleges. Over half the students in Florida began in community college. In
Louisiana, all we had was Deladgo, really. So, we’re very late, we’re still trying to catch
up 30 years ago, you just went to Morgan City, and jumped on a boat or jumped on a
helicopter and worked on the oil rigs, and those jobs are not plentiful any longer.

These participants illustrated how there is a cultural barrier in Louisiana that has been slowly
passed down from generation to generation. As one participant also indicated, community and
technical colleges developed later in Louisiana compared to other states, and as a state, “we
have a long way to go to catch up. He also indicated that formal education is needed for these
industry jobs, and you could no longer simply jump on a job and begin working without
training.”

Demographics. Race, SES, and gender were lower-level themes related to demographics
that emerged from the participant interviews. One participant illustrated how TOPS Tech and
PSE utilization are affected by race: “Race certainly poses an issue because we still have all the
desegregation cases that are still active in Louisiana and I think that is sort of critical.” Another
participant illustrated how SES and gender affect TOPS Tech:

Um, I think it’s more the guys. If they’re from a lower income, they see things like
mechanics, and see things that can help them like that. For the girls, they can do nursing
…but they don’t see a lot for them to do.

A third participant also illustrated how SES affects students:

...lower income always puts people at a disadvantage…we say it doesn’t, and that
everyone can make it, but it puts people further back…they have to start further back than
people with higher income. They’re at a disadvantage, there’s no doubt. It’s not that they
can’t succeed, it’s that they’ve got to jump through more hoops than someone in the middle class or higher income.

Further, a fourth participant stated how there is a need to market technical industry jobs and education to women:

I would imagine more males are focusing on the type of careers that are paid for by TOPS Tech…. any construction contractor that you talk to will tell you that women make better welders than men because of the fine motor skills and control. So we need to actively be recruiting females into these high paying careers that are paid for by TOPS Tech, and we will not meet our demand if we’re leaving 50% of our population out.

Collectively, these participants stated how race, gender, and SES might impact students’ utilization of TOPS Tech and PSE in Louisiana. Participants indicated that persons from lower incomes, females, and racial and ethnic minorities are put at a disadvantage and must work harder than their counterparts to achieve the same goals. Likewise, individuals from various minority groups may be unaware of the opportunities available for them, and many institutions seem to miss opportunities to market their PSE programs to them as well.

**Proximity.** One participant, who is a leader in the state’s school counselor association, stated, “I was looking for a kid the other day for a program he wanted, and there used to be one at the tech school in Crowley, but they stopped the program, it was eliminated because they didn’t have the enrollment numbers.” She also went on to say, “We don’t have a vocational school here, and the biggest problem kids have is that they have to drive an hour to either Alexandria or somewhere else to get the education they’re interested in”. Another participant stated, “I think that’s probably one of the biggest barriers, and also how close the high school is relative to the institution. You know, what opportunities present themselves”. A third participant stated, “…in Louisiana unless you’re in one of the major cities and happen to live on one of the lines somewhere…if you don’t have a car to get to school, you’re not going in Louisiana”. Proximity was described as major potential barriers for the majority of students who wish to
attend a community or technical school that is close to them. Many students do not or cannot move around the state for technical training. The issue of public transportation is also highlighted here, and was mentioned by seven of the participants as being a major barrier, as it is unreliable or non-existent in Louisiana.

**Personal issues.** Four participants discussed how there are personal issues that block students from PSE. Such personal issues could be marriage or children or other unspecified personal issues that inhibit someone from an education after high school. According to one participant,

> It’s an issue for the one who has to raise a family…the one who has kids…the average age of our community college is 27. So, how far can they depart and go someplace. There are childcare and transportation issues in play.

This quote illustrates how some students might have children and other issues that block them from going from high school to PSE, noting that community college students are often older than more traditional four-year college students.

Participants indicated in these interviews that the community factors mentioned above are barriers to TOPS Tech utilization. Community and technical college program availability was indicated as a barrier because programs are limited to specific areas of the state based on industry availability. Students who may be interested in industries outside of their native areas may be less likely to move to receive formal training. Culture was also indicated as a barrier by the participants. It is possible that the culture in Louisiana may suggest that community colleges are a fall back option, and only students who are not deemed –good enough– for four-year schools attend them.

Demographics were also identified as a barrier by the interview participants. The participants identified race, SES, and gender as lower-order themes related to demographics.
Race/ethnicity was identified as being a barrier in Louisiana, especially in relation to the state’s specific history regarding institutional racism and ongoing desegregation cases. SES was also identified as a sub-theme that affects PSE. One participant indicated that lower SES always puts students at a farther place on the starting line of education. Therefore, students from lower SES have to work twice as hard to catch up as students from higher SES. Gender was also indicated as a barrier because technical industry jobs are rarely marketed to females. Participants mentioned proximity as a barrier as well because the state lacks public transportation that would help students attend schools that are farther from their homes. Lastly, personal issues were identified as a barrier to PSE, such as having a family and children. These additional personal issues may prevent individuals from attending a post-secondary institution within one year after high school.

**Societal Perceptions**

Another theme that emerged was societal perceptions. A majority of the participants identified such sub-themes as emphasis on four-year schools, stigma, and values. Fifty-eight quotes were grouped into three sub-themes and 15 lower-order-themes.

**Emphasis on four-year schools.** Nine out of the ten participants mentioned society’s trend of emphasizing four-year schools while devaluing technical and community college education. One participant mentioned, “We need to focus on better career and technical education at the high school level, and holding it at the same esteem as we hold other types of education.” This quote implies that technical and career education has not been as highly valued in Louisiana as other types of education. Another participant stated,

> We associate any less than that as going to the vo-tech school or do something *sic* less than a real diploma or a real high end education…and that’s not…the argument could have been made years ago, but not in today’s community college system or the technical system.
There is an emphasis on four-year universities and degrees because four-year schools are considered more desirable because of the increased income a four-year degree offers. This is not always the case as many technical jobs are high paying.

**Stigma.** There were two lower-level themes that participants mentioned in regard to stigma. Nine participants mentioned negative stigma associated with utilizing TOPS Tech or technical education. One participant stated:

I think there’s an incredible stigma attached to career and technical education that we just have to get rid of and the idea that every kid must have a college education, that’s terrific, but a college education doesn’t just have to mean a bachelor’s degree.

Another participant stated, “There’s a stigma about a technical degree or education…it’s still post-secondary…but they think it’s not glamorous or that it doesn’t pay, and that couldn’t be further from the truth.” Seven participants discussed changing the stigma about a technical or community college education. One participant said,

We’ve got to get away from thinking it’s because you didn’t make it. Historically, community colleges were fallback options; it was the option for students who couldn’t make it at 4-year schools, who weren’t smart enough. Now, it’s not just a fall back option. It’s a viable option.

As illustrated in the quote above, the participant indicated that technical or community college represents a fallback option for students who could not attend four-year schools for various reasons. The participant also suggested this is becoming an option that more students are considering in their educational choices.

**Values.** Four participants mentioned the current value that the nation and the state place on education and technical workforce development. For example, one participant stated,

“Workforce development has not nearly been as critically prioritized as it should have been in the last few years…. we have a lot to do to catch up.” Another participant stated, “So again, the culture change is oh…leaving school after 10th grade doesn’t work; the way it might have
worked in the 40’s. Um, so that’s another cultural change…the need for post-secondary
education.” Participants indicated that societal perceptions (i.e., emphasis on four-year schools,
 stigma, and values) pose as barriers in the utilization of TOPS Tech. Currently, it seems that the
state’s population does not emphasize or value technical education and workforce development.
Thus, if technical industries are perceived as a negative or unworthy career path, then students
may be less likely to pursue them.

**School, Parent, and School-Parent Collaborative Relationships**

Participants identified many ways in which schools, parents, and collaboration between
schools and parents support students in their utilization of TOPS Tech. Twenty-two quotes were
grouped into three sub-themes and 5 lower-order-themes.

**School Support.** All ten participants discussed the role that school employees play in
helping to support students in their educational and life goals. All of the participants indicated
that high school counselors are integral in students’ educational decisions, along with high
school principals and teachers. One participant said,

> So I would think that if I would have our high schools rise to the challenge for preparing
> kids to be college and career ready and this is part of that…they’re helping them to make
> good choices and not making the choices for them…

Another participant stated, “For other students, it comes down in some cases to the counselors
being able to make them aware of the opportunities and also faculty members.” A third
participant stated it was strictly the schools that were responsible for students’ educational
choices: “Um, that’s probably strictly a high school issue…for high school guidance counselors
to know about the opportunities.” As illustrated in these quotes, participants reported that schools
play an integral part in supporting students’ post-secondary aspirations.
**Parent Support.** Five participants stated that families, specifically parents, play an important role in guiding students’ educational decisions. One participant stated, “I think parent involvement always matters...if your kids want to go to college...most kids’ parents are going to be involved and support them.” Another participant said, “I think the strongest facilitator would be having a strong support system coming from their own lives...part of their family or part of the community, so it’s there to help them be successful…”

**School-Parent Collaborative Support.** Four participants discussed how schools and parents often must work together in helping students to make important educational decisions. “You know, if you get the best and brightest in our high school students today, most of them go by what the school and the parents say when applying for TOPS.” Another participant stated, “We need to encourage schools, parents, and our young people to start looking at those career options together.”

Participants indicated that parents, schools, and school-parent collaboration could facilitate students’ use of TOPS Tech, primarily in the sense that students who have supportive schools or families in their lives may be more likely to have the knowledge of the benefits of TOPS Tech or post-secondary technical education. Further, school-parent collaboration is important because it assists schools in getting the information to students who are interested in using it.

**Workforce Development**

The next higher-order theme that emerged was workforce development. Forty-one quotes were grouped into three sub-themes and 23 lower-order-themes. Participants identified the connection between K-12 and PSE, aligning education with workforce needs, and the lack of workforce to fill industry jobs.
Connection between K-12 and PSE. One participant who was involved with LCTCS stated, “Louisiana, probably statewide, has a 90-plus percent graduation rate once the student gets to be a junior or senior. And we’re proud of that. The problem is, we’re losing them much earlier. Seventh or eighth grade is where a large dropout rate is.” The same participant also mentioned:

I don’t think that there’s enough done to start positioning young people even as early as middle school with what’s needed. We need to pull from K-12 and push them into higher education. That’s our mission…along with connecting this to the workforce in Louisiana. This participant suggested that if we can help kids identify interest in technical jobs at an early age, while also provide them with an education that will prepare them to enter the industrial workforce, then a change will take place that will greatly benefit Louisiana and its citizens. Also the participant noted, this change must happen earlier, such as in middle school, for there to be a noticeable effect.

Aligning education with workforce needs. The participant from LED stated: “We look at the educational systems on all levels to try and make sure what they’re doing is aligned with the workforce needs of the state and particularly those that affect economic development.” A second participant discussed the effort needed to bridge high school curriculum with community and technical education. She stated, “So we’re trying to align the courses and programs…along with the high schools and we do that with articulation agreements with two- and four-year schools.” Another participant discussed the alignment that already exists between technical and community colleges and existing industries. He stated, “Technical colleges look at high wage high demand fields and anything that helps the local economy in terms of oil and gas …welding…process technology…a lot of industrial maintenance.” These quotes help to illustrate the need for aligning education with workforce needs. If students are receiving
technical education, but are not prepared for realistic real-world jobs in their area, then the
technical education may not have adequately prepared them for gainful employment.

**Lack of workforce to fill industry jobs.** One participant stated, “We don’t necessarily
have the kids, we don’t have people skilled to take those jobs.” Another participant stated, “I
think the TOPS Tech jobs are dying to lead a high demand field. We need talents to continue…in
the next two to three years, [this] will help us out significantly in the emerging industries in
Louisiana.” These quotes illustrated the need to fill jobs in the technical industry in Louisiana to
help develop and grow the economy.

Participants identified the connection between K-12 and PSE and the alignment of
education with workforce needs as a barrier to the use of TOPS Tech. The connection between
K-12 and PSE was discussed as a facilitator in that if we can retain and provide a higher quality
of education to K-12 students, then more students may be better prepared for a PSE. Thus, more
students will be better educated for the workforce needs within Louisiana.

The second sub-theme, aligning education with workforce, may facilitate the use of
TOPS Tech as well. If educational institutions align their curriculum with local workforce needs,
students may be better prepared to meet the needs of the local industry workforce. Participants
also identified the lack of workforce to fill industry jobs as a barrier to the use of TOPS Tech
because, if there are not enough workers, the economy cannot grow.

**Eligibility**

Eligibility was also identified as a higher-order theme, which included two sub-themes
and 12 lower-order-themes representing 24 quotes. Participants identified how initial eligibility
and continuous enrollment requirements were barriers for students in the utilization of TOPS
Tech.
**Initial Eligibility.** Nine participants indicated that the initial eligibility requirements are problematic for students accessing TOPS Tech. One participant stated, “And, the example that were used are the academic requirements, and the ACT score and a certain grade point average and the number of classroom hours that make students eligible for TOPS Tech, it doesn’t necessarily fall in line to what these colleges require.” This quote illustrates how the academic requirements that TOPS Tech requires are not aligned with the rigors of a technical education. This theme was also illustrated with a statement from another participant, “I think there needs to be a realignment of the requirements… especially with the ACT.” A third participant stated, “Some kids just don’t want to take the ACT a million times…some people just aren’t good test takers…” These quotes illustrate one reason why students may not qualify for TOPS Tech as they cannot meet the requirement of a standardized test score. Such academic requirements are not aligned in areas at which these students might excel, and it is unlikely that these academic eligibility requirements are indicators of students’ future success in technical education.

**Continuous Enrollment Requirements.** Eight participants discussed the continuous enrollment requirement in TOPS Tech. Currently, students who utilize TOPS Tech must enroll full time as a first time freshman by the first semester following the first anniversary of high school graduation. Failure to enroll full time, maintain continuous enrollment, or earn 24 hours per year results in the cancellation of a TOPS Tech award. One participant stated, “I do think there is a major issue with the continuing eligibility requirement for TOPS Tech.” Another participant stated,

I personally really would like to see us relax the whole continuous enrollment requirement and go to a say 8 hour a semester requirement, and I think it goes annually, so 16 credits…a year requirement and expand the window in which they can use their TOPS.
Another participant stated that the timing in which you have to use the scholarship is a barrier, while a second participant stated, “I think that, well for instance, LTCTS will probably tell you that the average age of the student at the technical colleges and the community colleges is probably 25-30. Well if you’re 25, you’re not going to be eligible for TOPS Tech. You’re too old.” Three other participants stated that full-time enrollment is not a feasible expectation for this cohort as many students are employed at least part-time, with a majority enrolled full-time.

In summary, participants discussed initial and continuous enrollment requirements as barriers to the utilization of TOPS Tech. Participants indicated that these academic requirements are not aligned to the needs of a post-secondary technical education. Also, many students may not plan to attend PSE within this one-year time period. Participants indicated that many students choose or need to work part or full-time to support their families, and lose the scholarship money because they cannot enroll full-time.

Cost associated with PSE

The cost associated with PSE was identified as another higher-order theme, which included two sub-themes and 16 lower-order-themes representing 32 quotes. Participants identified many ways in which students’ utilization of PSE may be affected by costs, such as increased funding for technical and community colleges. In particular, participants discussed the high costs associated with PSE and the need for increased funding support for technical and community colleges from the state level.

Post-secondary affordability. Five participants discussed the affordability of PSE in Louisiana. Participants discussed such items as: the cost of out-of-pocket expenses, the economic climate in Louisiana, the tuition rate (overall and in comparison to four-year universities), and the costs to acquire and maintain technical educational equipment.
Three participants discussed the effects post-secondary expenses have on families helping to pay out-of-pocket expenses. Participants also mentioned the personal struggle to help finance school costs such as tuition and other education resources and supplies, as well as the loss of income that students experience while in school, “The family don’t *sic* have access to the income that the potential family member could be bringing in…” Participants also mentioned that the affordability of PSE was particularly troubling because high costs may prevent students from moving into the middle class,

We also know that career and technical education is the pathway to the middle class…and if we can provide relatively affordable education then we know we’re going to be able to move the needle on the number of families being able to move into the middle class.

**Increased funding for technical and community colleges.** Seven participants indicated that state funding has decreased over time, however, tuition and other fees have risen. One participant stated, “Funding will need to be addressed and increased and made more available to students.” Another participant stated, “Well, I think most scholarships are for four-year colleges, TOPS Tech is one of the few that helps students pay for technical schools.” This quote illustrated how there is a need for TOPS Tech to support students at the same level that TOPS supports students. Thus, increased funding for TOPS Tech is needed to help support technical students.

Participants indicated that, while post-secondary institutions in Louisiana are relatively affordable, the costs associated with them are a barrier to many students. Also, participants indicated they felt that a lack of state and institutional funds are a barrier as this effects potential enrollment, graduation outcomes, and quality of education.

**Exposure**

Two participants identified how visibility and exposure to resources influenced students’ access to TOPS Tech. Three quotes were grouped into two sub-themes and four lower-order-
themes. The lower-order themes that emerged discussed how students’ exposure to technical workers in their community and students’ access to qualified and knowledgeable faculty at the high school level facilitated access to TOPS Tech and a technical education.

**Visibility.** One participant, who is a leader in the state’s school counselor association, discussed how students are influenced by proximity to someone who works in the technical field, and thus seeing how one can make a successful living in that industry. She stated, “My students see more people working in the technical field and so it’s not such an out there degree as compared to some places”. This was the only participant to mention this issue of visibility.

**Access to resources.** Two participants discussed how access to resources such as qualified or knowledgeable faculty influence students. One participant stated, “I think sometimes it’s just resources...general resources...either at the post-secondary level or high school level...sometimes it’s the access to qualified faculty”. A second participant stated, “Even for the high school counselors, TOPS is pushed toward us. When I go every year to my counseling meetings, very little is talked about TOPS Tech. It’s an afterthought. It’s a thought at the end of the presentation. Everything is about TOPS...” This quote illustrates how even the high school counselors potentially have little knowledge or education regarding TOPS Tech.

Participants indicated that exposure to examples of technical workers in their community and access to qualified and knowledgeable faculty at the high school level were both facilitators and barriers. High school students may be more likely to become interested or pursue a technical education or career if they see positive examples of others in their community pursuing successful careers with a livable wage and good quality of life. However, if students do not know anyone who works in a technical industry, they might never be exposed to the opportunity to positively view a technical career. Also, students who have access to resources like qualified or
knowledgeable faculty who can educate them about the benefits of TOPS Tech and a technical education and career may be more likely to pursue it. This would be considered a barrier if students do not have knowledge or information regarding all of their educational or career options, they cannot fully be expected to wisely choose which option fits them best.

**Communication**

Another higher-order theme that participants identified was communication; education about opportunities and lack of information were identified as sub-themes. Forty-one quotes were grouped into two sub-themes and 16 lower-order-themes.

**Education about opportunities.** Nine participants stated that educating students about opportunities plays an important role in students’ educational decisions. One participant stated, “I think the thing we can do to help them is educate them about the possibilities that exist…. you know, educating them about not only about the scholarship program but beyond that…here are the jobs that are paying money…” Another participant stated,

Again, it’s how you sell TOPS Tech to kids that matters, and starting it early and letting them know about the different options. I start educating them around 8th grade before the high school curriculum starts, and before it’s too late, letting them know how their grades will affect their future.

**Lack of information.** Five participants mentioned a lack of information when it comes to the opportunities TOPS Tech or a technical education offer to students. One participant stated, “….TOPS is all over the place, there’s probably not a high school in the state that doesn’t have a bulletin board with TOPS flyers all over it. I’m just not sure TOPS Tech gets that same billing… the same attention.” In regards to lack of information about technical training opportunities, one participant stated:

It’s the lack of information…that in 2 years I can start achieving my goal…versus 4 years…which is something a student that is going to earn that 4 year degree that if they knew they could do it at that 2 year school or that it’s even an available option.
Education about students’ options was discussed as a facilitator in this study. For instance, it was noted that students who are aware of their options, such as what TOPS Tech is or what a technical education can do for them, are better able to make an educated decision about their future. A lack of information, then, was a barrier to using TOPS Tech because students who are not aware that this program or opportunity exists may be less likely to utilize the option.

**Policy Context**

Forty-two quotes were grouped into six sub-themes and 25 lower-order-themes. Participants identified themes such as reexamining TOPS Tech, prioritizing TOPS Tech and workforce development, “talk” growth and investment, solution to workforce issues, and other related programs.

**Reexamining TOPS Tech.** Four participants indicated that TOPS Tech needs to be reexamined by LOSFA and the state legislature. One participant indicated, “I guess one of the things that rule-makers in the legislature will have to look at TOPS Tech is that does it serve the state best restricted to full time enrollment. And that’s a question they need to answer. I mean they need to make those decisions.” Another participant stated, “If the state, gives a thorough examination of TOPS Tech, I think it would conclude that requirement really doesn’t fit that award for those students and they may want to do that.” A third participant stated, “I’m guessing that with Superintendent White’s visits around the state recently around reframing career-tech curriculum and he’s reshaping that.” These three quotes illustrate how policy makers are aware that TOPS Tech needs to be reexamined and reshaped.

**Prioritizing TOPS Tech and workforce development.** One participant mentioned, “workforce development has not nearly been as critical as prioritized [sic] as it should have been the last few years with the struggling economy, now we don’t have a choice but to make it a
priority.” Another discussed, “hopefully TOPS Tech will start to gain some momentum. And there’s different ways to do that, we need to discuss them.” A third participant mentioned, “With my knowledge that the effort that LOSFA is putting into these programs, all the way down from the governor… it’s a priority in this state.” A forth participant discussed the importance of prioritizing technical education standards; “We must provide the same rigor standards to excellence for career and technical education as we do with other types of education.”

“Talk.” Six participants mentioned conversations that have taken place on the macro level regarding educational and workforce needs in Louisiana. These raw data quotes were collectively labeled “talk” to represent the participants’ direct usage of this term throughout their discussions. To illustrate this, a participant mentioned, “I think it needs to come from the top down… from our superintendents… the department of education… our high school principals… we’ve got to do a good job of showcasing why this is a good thing for our students… why this can help them achieve success.”. Another participant stated, “There are conversations I’ve had with other policymakers in Louisiana. And working with others, that’s the most important thing, understanding workforce needs.”. A third participant stated, “Our litigators and our governor… our legislatures talk about this all the time… there’s a need for a skilled workforce.”

Two participants also mentioned that there is a noticeable effect increased PSE costs have on the state budget. For example,

But really it’s TOPS as a whole that has just become so expensive… there needs to be reform or otherwise our state won’t be able to maintain the program at such a high level. That’s one thing that’s been talked about at length… some say TOPS has become too expensive.

**Growth and investment.** Two participants indicated that there is an approaching boom in growth and investment of community and technical education that is emerging in the state.
One participant indicated, “You’re going to see new and improved community colleges being built across the state. It’s an investment in the growth about to take place.” Another participant stated, “So we’re catching up. Other states went through the community college transformation and growth 50 years ago…we started through it 10 years ago…there’s continued growth that’s taking place.”

**Solution to workforce issues.** Another participant indicated –I think expanding usage is going to be a major part of the solution to what is absolutely unquestionably a problem. The participant indicated here how expanding the number of students who utilize TOPS Tech will help to enroll more students in a technical education and therefore help to solve the lack of educated and qualified industry workers that are available in Louisiana. A third participant stated “If we wanted to target the workforce problem, we’d probably have to structure it a little differently.”

**Other related programs.** A few participants mentioned other educational programs gaining momentum in Louisiana. Project Jumpstart is a new program that is collaboration between schools, colleges, and businesses to provide career and workplace experiences to high school students that will link them to high-wage jobs (LDOE, 2014). One participant stated, –I think the biggest thing as a facilitator is education and promotion from the state level for TOPS Tech. I think that’s really what the jumpstart program that’s being introduced…jumpstart is going to do a lot for that and really break down those barriers and really help promote TOPS Tech. The Go-Grant is a needs-based financial assistance program for Louisiana residents (LOSFA, 2014). One participant described how it differs from the TOPS program,

One thing that the state has responded with is the go-grant program and it’s a needs based grant program. And all you have to do is be PELL eligible, and whatever post-secondary institution you are enrolled in. But the good thing about the go-grant is you can be enrolled part-time.
Participants identified the above macro policy themes to be facilitators. These issues were identified as facilitators because they focus on the theme of reexamining and bringing reform and attention to the underutilized program through conversations with policy-makers, examining workforce issues, and other related programs gaining momentum in Louisiana. These are related because they bring attention and focus to the problems post-secondary and workforce issues that Louisiana is facing.
Chapter 5
Discussion

This study explored the potential factors contributing to the utilization (or underutilization) of TOPS Tech, and was guided by EST. Several key findings emerged from this study. Consistent with EST (Brofenbrenner, 1979), participants indicated that barriers and facilitators impacted TOPS Tech at the individual, family, and environmental levels. Facilitators and barriers included: Community Factors; Societal Perceptions; School, Parent, and School-Parent Collaborative Relationships; Eligibility; Costs Associated with PSE; Exposure; Communication; and, Policy Context.

Barriers of TOPS Tech Utilization

Multiple insights emerged from the participant interviews. Participants discussed a majority of the higher order themes as barriers. These barriers are discussed below.

Community Factors. Six sub-themes were identified as Community Factors: Community and Technical College Program Availability, Culture, Demographics, Proximity, and Personal Issues. All six of the factors related to communities were identified as barriers to TOPS Tech utilization. Community and Technical College Program Availability was indicated as a barrier because programs are limited to specific areas of the state based on industry availability. While 90 percent of the general U.S. population lives within 25 miles of a community college (American Association of Community Colleges, 2012), this is not the case in Louisiana. Louisiana is a large state but has relatively low population density. Specifically, in 2012, 50.7% of Louisiana’s population lived in 10 parishes, while the other half of the population lived in the remaining 54 parishes (U.S. Census Bureau, 2012). Additionally, it is possible that community and technical colleges in Louisiana are located near students but they do not offer programs of interest to students. In that case, students might not utilize TOPS Tech or may forgo attending
PSE all together because they are not interested in attending another program or attending another school farther away.

Community and Technical College Program Availability is related to Proximity as well. This study found that the Proximity of PSE and the availability of public transportation pose as barriers to the utilization of TOPS Tech. Goldrick-Rab and Kinsely (2013) found that 75% of the student populations of two-year colleges were composed of their surrounding geographic locales. Louisiana is still largely rural, as its population is spread out and lacks public transportation that would help students attend schools that are farther from their homes (ASCE, 2013). Also, students from lower SES might have limited access to personal transportation or funds to travel. Louisiana citizens cannot access public transportation that is nonexistent, unreliable, or unaffordable (ASCE, 2013). Therefore, this identified barrier is especially concerning for low-income and rural residents of Louisiana.

Participants also indicated Culture as a barrier. Research shows that first-generation college students and their parents are likely to have unrealistic expectations about college and lack knowledge of the emerging industry landscape and one’s potential earning potential (Walpole, 2003). This study’s findings are consistent with previous research; however, there are some notable differences. Participants in this study indicated that culture is more about the expectation that kids go to four-year colleges or immediately enter the workforce. However, the workforce can no longer support immediate entry, and requires PSE. Previous research has shown that people expect their children to attend four-year colleges and that low-income and racial/ethnic minority kids may not understand college or their families may not place high value on it (Kalogrides & Grodsky, 2011; National Governors Association, 2011). Participants in this
study only mentioned the expectation of four-year college attendance, but they did not mention any relationships between SES, race/ethnicity, and culture.

Still, Demographics, such as race, SES, and gender were also found to be barriers to TOPS Tech utilization. In states like Louisiana, where there is a long history of institutional and individual racial discrimination, it is unsurprising that students who belong to racial minority groups face additional barriers to education, such as cost, transportation, and the challenges of personal issues, such as raising a family.

Similar to race/ethnicity, low-income students have historically experienced limited access to PSE. One’s SES is an important factor in determining whether one will attend a two- or four-year institution, as well as if one will obtain any PSE at all (Kalogrides & Grodsky, 2011). Data suggest that low-income and racial/ethnic minority students may not expect to attend college (Walpole, 2003), thus they may be less likely to utilize TOPS Tech. This is unfortunate as they are the ones who could gain the most benefit from technical training to move into a higher SES through high-paying technical industry jobs. The participants indicated that race/ethnicity, SES, and gender were substantial challenges to the students who are eligible for TOPS Tech.

Participants also identified Personal Issues as a barrier. Several participants mentioned having a family and children as one specific personal barrier because it may prevent individuals from attending a post-secondary institution within one year after high school. Intersectionality plays into these challenges that families face due to the fact that many of the students who could utilize TOPS Tech often belong to various disadvantaged groups, and affects cultures as well as individuals. Single mothers, for example, may have lower SES and face gender discrimination in addition to the stressors of single parenthood. Research shows that community colleges are
more accessible to students from low SES families, yet it can be challenging to enroll and graduate while also focusing on other family demands (American Federation of Teachers, 2011). The participants indicated that students who faced discrimination on several levels had increasing difficulty in their ability to take advantage of the educational support that Louisiana offers. Intersectionality may substantially influence how students look toward the future, choose careers, and utilize government assistance to do so.

**Societal Perceptions.** This study found that Societal Perceptions also are a barrier to TOPS Tech utilization. Participants included an *Emphasis on Four-Year Schools, Stigma,* and *Values* as Societal Perceptions that may be related to the utilization of TOPS Tech. This is evident in existing research as well. Kalogrides & Grodsky (2011) identified that policy-makers are pushing students to attend four-year universities. Additionally, students who are from higher-income families tend to associate success with four year PSE, particularly at a reputable college (McDonough, 1997; McDonough, Korn, & Yamasaki, 1997). There is an expectation in our national culture that everyone can and should attend college, and it should be a four-year college (Goyette, 2008; Rosenbaum, 2011). Participants in this study discussed a stigma attached to technical and community college attendance and indicated that society views technical training as a fallback option for students who are not deemed “good enough” for a four-year school. The findings of this study suggest that state policymakers perceive that Louisiana residents may place little emphasis or value on technical education and workforce development.

**Eligibility.** Participants identified *Initial* and *Continuous Eligibility* requirements as barriers to the utilization of TOPS Tech. Initial enrollment requires 17 or 19 core course units, a score of 17 on the ACT, and enrollment within one year of high school graduation. This study found that policy-makers in Louisiana noted that the requirement of initial enrollment is not
aligned to the needs of a post-secondary technical education. Specifically, the ACT score and enrollment within one year of high school graduation are barriers for potential TOPS Tech students. One participant indicated that the ACT does not test technical ability, and a test such as COMPASS, a college placement test that connects students to resources and class courses, may be more appropriate because it helps to identify appropriate course work in which students might excel. In addition, continuous enrollment has significant GPA requirements, such as a minimum GPA of 2.50 at the end of each spring semester and a minimum 2.00 GPA at the end of each semester (LOSFA, 2013). Additionally, continuous enrollment requires students to be enrolled full-time and earn a minimum of 24 hours for the academic year (LOSFA, 2013). Many students may not plan to attend PSE within one-year of high school graduation. Participants in this study indicated that students often choose to work or need to work part- or full-time to support their families. Thus, they lose the scholarship money because they cannot enroll full-time. This is a barrier because students’ ability to utilize TOPS Tech is directly affected by the program’s eligibility requirements.

Cost Associated with PSE. Participants indicated that, while post-secondary institutions in Louisiana are relatively affordable (Post-Secondary Affordability), the costs associated with them are a barrier to many students. These costs are a barrier to PSE as it may effect potential enrollment, graduation outcomes, and the quality of education.

While TOPS Tech covers tuition, it does not, in most cases, pay for the associated fees (e.g. books, school fees, etc.). If these fees are more than students can afford, then cost would still be a barrier to TOPS Tech utilization. Increased Funding for Technical and Community Colleges seems important as well, as PSE funding in Louisiana has declined since 2008, and costs for students and their families have continued to rise every year (Oliff, Palacios, Johnson, &
Leachman, 2013). These barriers are important to consider because families may still struggle to cover these relatively low fees. It is important to note that students typically choose an affordable school that is physically close to him/her, and the alignment between the affordable school’s curriculum offerings and a student’s career goals must match, or the student will most likely forgo PSE even if they qualify for a scholarship program such as TOPS Tech.

These barriers exist in all levels of EST. Individuals are effected in the microsystem, for example, by a program’s proximity to their homes, their personal demographics, and their personal issues such as family demands. Additionally, unaligned initial and continuous academic requirements with technical education and costs of PSE to the family are barriers at the microsystem as well. In the macrosystem, all of the subthemes occur and interact in various ways to effect TOPS Tech utilization, such as access to technical and community colleges, societal forces and inequality of minorities, and TOPS requirements that conflict with potential technical students’ personal issues. Groups such as policymakers, LOSFA, and the TOPS program as a whole also exist on this level. The findings of this study highlight the ways in which multiple systems intersect and pose barriers for individuals’ use of TOPS Tech.

**Facilitators of TOPS Tech Utilization**

Several factors were discussed as facilitators to TOPS Tech utilization. These factors assist students in utilizing the state’s scholarship program. Facilitators include education about opportunities and schools, parents, and school-parent collaborative relationships.

**Schools, Parents, and School-Parent Collaborative Relationships.** Participants indicated that *Schools, Parents, and School-Parent Collaborative Relationships* could facilitate students’ use of TOPS Tech. Statements from participants revealed that students who have supportive schools or families in their lives may be more likely to have the knowledge of the
benefits of TOPS Tech or post-secondary technical education. School-Parent Collaborative Relationships are important because they assist schools in getting the information to families and students who are interested in TOPS Tech. If students are not aware of their options, it is unlikely that they will utilize state programs that the schools or parents know little about. Participants indicated that one of the most vital influences on students’ utilization of these educational programs was not what the policy-makers said about it, but rather what their teachers and parents communicated. If the teachers and parents informed the students of these programs, the participants suggested that the students were more likely to use them. This would indicate that these micro-level supports for students have a substantial impact on program utilization. Additionally, participants claimed that higher utilization of these programs would happen when teachers and parents became more aware of it.

**Communication.** Participants indicated that communication was a facilitator to TOPS Tech in regards to *Education about Opportunities*. Education about students’ options was discussed as a facilitator in this study. Participants indicated that students who are aware that technical education is an option for PSE, such as what TOPS Tech is or what a technical education can do for them, are better able to make an educated decision about their future. Communication and education about opportunities are critical as schools and parents need to work together to stay informed and form school-parent collaborative relationships to look out for the student’s needs and goals.

These identified facilitators collectively inform our understanding of TOPS Tech utilization from an EST perspective. All of the facilitators occur in the microsystem (e.g. students) and macrosystem (e.g. the state). These micro-level facilitators inform both students and policy makers’ understanding of TOPS Tech utilization because they give support to
students throughout K-12 education. Facilitators such as Schools, Parents, and School-Parent Collaborative Relationships and Communication can improve a student’s likelihood of utilizing PSE when other barriers would normally keep him or her from advancing to PSE. Environmental systems such as a student’s home and school experience are invaluable in shaping the student’s trajectory following K-12. This is just one example of how multi-systems must work together to help facilitate a student’s educational choices.

**Barriers and Facilitators of TOPS Tech Utilization**

Some factors were discussed as both barriers and facilitators to TOPS Tech utilization. These factors were: Workforce Development, Exposure, and Policy Context. The identified barriers and facilitators collectively inform our understanding from an EST perspective.

**Workforce Development.** Participants identified the *Connection between K-12 and PSE* and the *Alignment of Education with Workforce Needs* as both barriers and facilitators to the utilization of TOPS Tech. The Connection between K-12 and PSE was discussed as a facilitator in that if we can retain and provide a higher quality of education to K-12 students, then more students may be better prepared for a PSE. Still, participants noted that this Connection between K-12 and PSE has not been realized in Louisiana. Thus, this factor currently serves as a barrier to TOPS Tech utilization. In 2000, 56 percent of workers nationwide needed some college participation for their jobs (ETS, 2000). If students in Louisiana cannot obtain a high school degree, then they cannot utilize TOPS Tech, access PSE, and, ultimately, access many new jobs in Louisiana. Participants noted the need for the state to formally connect K-12 and PSE. This will help to facilitate a more skilled workforce.

Similarly, Aligning Education with Workforce Needs was identified as a barrier and a facilitator. This alignment, however, may facilitate the use of TOPS Tech as well. If K-12
education was more closely aligned with Louisiana’s workforce needs, more might students see the value in a technical education, and may pursue it. Also, students may be better prepared to meet the needs of the local industry workforce if educational institutions aligned their curriculum with workforce needs. Obtaining PSE has become more critical and specialized as the economy has grown (ETS, 2003). This is currently a barrier as education is not closely aligned with workforce needs in Louisiana.

Participants also identified the Lack of Workforce to Fill Industry Jobs as a barrier to the use of TOPS Tech because, if there are not enough workers, then the economy cannot grow. Students might be more inclined to use TOPS Tech if they see the value and job opportunities they can gain through the program. Training more students in science, technology, engineering and mathematics fields may assist in filling the more than 600,000 unfilled manufacturing jobs (Information Technology and Innovation Foundation, 2010). The economy could grow exponentially and attract more companies and employees if there is an educated and qualified workforce. PSE and training for the workforce is the key to creating or attracting high-paying and high-skilled jobs (ETS, 2012).

Communication. Participants indicated that communication was a barrier in regards to Lack of Information. A lack of information was indicated as a barrier to utilizing TOPS Tech because students who are not aware that this program or opportunity exists may be less likely to utilize the option. Therefore, it is possible that if students become aware of this monetary resource and the employment openings within the state’s industries, then they may be more apt to utilize TOPS Tech. On the other hand, if students are unaware of the state’s industrial needs
And the opportunities within TOPS Tech, then they may not utilize this program to assist in their training. As such, lack of information serves as a barrier, yet addressing this barrier would create a facilitator for students’ use of TOPS Tech.

**Exposure.** Students’ *Exposure* to examples of technical workers in their communities and access to qualified and knowledgeable faculty at the high school level were both discussed as facilitators and barriers. High school students may be more likely to become interested or pursue a technical education or career if they see positive examples in their community pursuing who are successful careers with a livable wage and good quality of life. However, if students do not know anyone who works in a technical industry, they might never be exposed to the opportunity to see the opportunity first-hand. One participant mentioned lack of exposure as a barrier. If students do not have knowledge or information regarding all of their educational or career options, they cannot fully be expected to wisely choose which option fits them best. Participants mentioned access to resources and education. There is a possibility that all three, including visibility, are needed to facilitate and market TOPS Tech to students. If students don’t have visible positive examples and access to resources in their community, they might not be inclined to utilize TOPS Tech because they do not see a benefit to utilizing the program or a technical education.

Collectively, the findings of this study point to the need for education in Louisiana to focus on technical education and workforce development. This is a controversial suggestion among education scholars. Labaree (1997), for instance, argues that schools are in an “awkward position” between what “we hope society will become and what we think it really is” (p. 41). Social efficiency is one potential purpose of education, suggesting that education exists to meet workforce demands and promote economic development (Allen-Meares, 2010). Participants in this study largely reported that realigning K-12 education to meet workforce needs and
emphasizing jobs in industries important to Louisiana would serve as a facilitator to TOPS Tech usage. Still, other proposed purposes of education exist, such as social justice and social mobility. Social justice is of particular interest to social workers, as it suggests that education exists to promote equity and democracy in the United States. This argument counters ideas of social efficiency by noting that education does not exist to serve the workforce and, further, that designing education to meet workforce needs is undemocratic (Allen-Meares, 2010). While policy-makers and leaders in Louisiana noted the importance of focusing on workforce needs in designing education, it will be important to consider the potential implications of this focus in the future.

**Policy context.** Policy context emerged as an unexpected theme from the participant interviews. Sub-themes that emerged were *Re-examining TOPS Tech, Prioritizing TOPS Tech and Workforce Development, “Talk”, Growth and Investment, Solution to Workforce Issues,* and Other Related Programs as facilitators. Policy context is significant as a theme because it discusses the proposed options that policymakers are considering for the future of TOPS Tech. These issues are also significant because they bring attention and focus to the problems of workforce issues and PSE that Louisiana is currently facing. The policies and laws that the state and policymakers create have real world consequences that send ripple effects from the top to the bottom of the system (e.g. changes made by policymakers at the macro level effect students in the micro system). Policy context is organic, and thus is ever changing. Change does not occur at once, but evolves over time, and as one participant stated, over generations (Rotmans, Kemp, & Van Asselt, 2001). Thus, changes to TOPS Tech would not happen suddenly and all at once, but, rather, over time to adapt to the system’s needs and interests.
It is significant that policy-makers discussed the policy context for TOPS Tech. They emphasized that changes will not occur in PSE unless the policy context is supportive of these changes. Moreover, policy-makers in this study were keenly aware of the talk among leaders in the state in relation to TOPS and TOPS Tech.

According to EST, the facilitators and barriers listed above occur in all systems (e.g. microsystem, mesosystem, etc.). These different facilitators and barriers collectively influence individuals and policy. For example, policymakers can create as many policies as they wish, however if individuals lack information and exposure the program will still be underutilized. There are many implications for policy as these barriers and facilitators occur in all levels and systems.

**Implications for Policy**

TOPS Tech is a policy solution that provides students in Louisiana with the needed education to be employed within local manufacturing industries. As such, the program holds the potential to promote the growth of Louisiana’s industrial landscape. Additionally, the program has the potential to increase enrollment in PSE and also diversify the industrial economy in Louisiana.

Currently, President Obama is leading the charge in supporting college readiness and college for all through traditional four-year PSE; however, this has recently been expanded to include two-year PSE as well (White House, 2013). The emphasis on workforce development is especially notable in Louisiana as State Superintendent of Education John White and Governor Jindal are currently emphasizing the need for workforce development (Office of the Governor, 2014; LDOE, 2014). The current policy climate in Louisiana echoes the findings of this study. Many participants noted that there is an approaching boom in growth and investment of
community and technical education that is emerging in the state. Participants identified the need for workforce development and its connection to education that has been lacking state prioritization in the last few years. They suggested that the state prioritize workforce development, as it has recently begun doing. In turn, this re-prioritization should further the state’s technical industry needs. Participants reported that this emphasize on workforce development should come from the top down, from the LDOE to superintendents, and lastly, to high school principals and counselors to assist students in being successful.

Programs like TOPS Tech, which expands the workforce and increases the number of students with a technical education, has similar goals as the college prep policy that the Obama administration is pushing. However, as participants in this study noted, the barriers in the current system still prevent many students from taking advantage of these educational opportunities. Due the these barriers, it seems clear that changing the academic requirements for TOPS Tech to reflect the current technical education needs would help to facilitate growth in the enrollment of TOPS Tech, and thus grow the highly skilled technical workforce. Realignment of these educational requirements with the actual needs of a technical worker, as one participant suggested, could mean eliminating the ACT in favor of the COMPASS test, while also expanding the initial and continuous enrollment timeframes. Participants also discussed how it is difficult for students at the technical level to enroll full time, maintain continuous enrollment, and earn 24 credit hours per year in order to keep their TOPS Tech award. If the rigorous requirements were expanded to encompass the needs of more students, more of the state’s population could qualify and receive higher levels of education. Counselors in Louisiana need to be required to have knowledge of all of the TOPS programs, as participants indicated that schools have great influence on educating and communicating information to students.
Participants also mentioned programs such as Project Jumpstart and the Go-Grant. At this time, it is unclear if these programs will facilitate the usage of TOPS Tech or if they will compete for funding at the state level. At times of decreased state funding for PSE and increased costs, there may not be enough money to fund all of these programs. One of the key aspects of the TOPS program is that it is a merit-based program available to any academically qualified Louisiana high school graduate who wishes to achieve a PSE in Louisiana. Operating a program that is uncapped is an expensive endeavor. Kalogrides and Grodsky’s (2011) research suggests the rate of enrollment growth for lower-income students is quickly outpacing the rates of their higher-income counterparts. This research points to the potential importance of TOPS Tech because low-income students increasingly may begin to apply for it if some of the barriers identified in this study are addressed.

It is important to note that if attention and reform is brought to TOPS Tech, it is possible that the program’s use will increase and, ultimately, make it unaffordable for the state. This is important as TOPS is currently escalating in costs each year. However, it is important to note that the TOPS Tech awards are less costly to Louisiana than other award amounts (LOSFA, 2013). If the student population were to shift their enrollment numbers to two-year schools, this could help to decrease overall TOPS costs. This savings in program costs might be tempting to policymakers who often look for the largest return on investment while minimizing expenditures.

Also, minority inequality is an issue that is significant and should be addressed in order to further TOPS Tech utilization. In this study, minority inequality was found to include race/ethnicity, SES, and gender. Participants indicated that students from these minorities face more challenges than non-minorities when utilizing TOPS Tech. If this issue is not addressed, a significant portion of the population (34% of Louisiana’s population is black, 51% female, and
18% is below the poverty line, U.S. Census Bureau, 2012) will continue to be left behind, and the achievement and opportunity gaps will continue to grow. One way this inequality can be addressed is through increasing educational options by changing the location of schools (e.g. establishing more programs, moving them to high need areas, utilizing online learning, etc.) or improving the state’s public transportation system to allow access to better schools including PSE to more minorities.

To effectively intervene using Bronfrenner’s theory, interventions must take place throughout all systems. For example, designing a childcare program at a two-year school will not address the broader issue that there is not public transportation available or that it takes one hour to get to the school. Likewise, strategizing with an individual client about the potential value of a two-year school will not help to address the structural racism that occurs in PSE. Policy must address the barriers found in this study by targeting the issues through a multi-systemic perspective such as changing negative stigma towards technical education, as well as realigning K-12 education with workforce needs. In addition, policies can build upon the facilitators found in this study by increasing education and resources about the positive effects of a technical education to schools, parents and students.

It must be noted the while workforce development makes sense for the economy, policymakers must consider whether it makes sense for the educational system. Policymakers will have to consider how aligning education with workforce needs will affect education as a whole throughout the state and nation. As it is important to meet the needs of the economy, it is also important to teach students more than science or math, but to teach them to be citizens of a democratic society that also have knowledge of English literature, History, Philosophy, etc.
(Labarree, 1997). Participants in this study did not note this concern, however, it is an unintended consequence policymakers will have to weigh.

**Implications for Social Work Practice**

**Micro practice.** Social workers are uniquely qualified to take on this task of empowering the education system because of the history of school social workers advocating for change on behalf of students who face higher levels of discrimination. Social workers’ skill sets include problem solving and communication with the diverse populations found in the American school system. This study discovered that school faculty as well as parents might play an important role in students’ lives and educational decisions. It is important for students to have access to informed and knowledgeable supports to help make critical decisions related to education. Students who have access to qualified or knowledgeable faculty, such as those who can educate them about the benefits of TOPS Tech and a technical education and career, may be more likely to pursue it once they are encouraged to do so. The skills of school social workers can translate to supporting students who may be interested in technical schools, and could assist in advocating to increase the visibility of TOPS Tech in schools.

Social workers could also assist in facilitating school-community partnerships to increase students’ exposure to industry jobs. For example, social workers could help to identify positive examples of female technical workers in communities to help recruit more female technical workers. Similarly, they could help to facilitate communication with parents about how TOPS Tech might be beneficial for their children. Community-based social workers can work with individuals, groups, and families by helping to develop and facilitate community and educational resources such as school-industries collaborations. For example, school social workers can help create partnerships between K-12 students and PSE by exposing students to positive examples of
technical workers by organizing technical career days or guest lectures. School social workers could advocate and market dual enrollment in technical or community colleges while in high school. Lastly, social workers could develop and facilitate teacher consultation programs such as professional development or continuing education with school faculty to grow their knowledge of TOPS Tech as well as alternative pathways to PSE and available educational and workforce opportunities in their communities.

**Macro practice.** Social workers at the macro-level of practice can assist in bringing attention to the newly identified barriers and facilitators related to TOPS Tech. This will ultimately help to address educational disparities at multiple educational levels. Participants of this study indicated the necessity of beginning student support at the middle school level to address both educational opportunities and dropout rates. Social workers could help to minimize the dropout rate by identifying systemic problems at-risk students are having at school and at home.

By supporting students starting at the middle school level, social workers, in collaboration with LDOE and school systems, could potentially improve high school graduation rates, thus giving students access to higher education. Research has found that higher levels of education increases individuals’ access to jobs that provide further training and higher wages (ETS, 2010). Employee wages could increase three to 11 percent through education and training (Altonji & Spletzer, 1991). Social workers can assist in advocating for resources and funding that improve quality of life, such as education, higher livable wages, and inclusion and empowerment of all discriminated minorities. They can also help to realign programs across communities to encourage visibility or exposure, create special programs to target minority groups, and lobby for
workforce development reform. Also, social workers can help to analyze any intended and unintended consequences that reform of TOPS Tech might bring to Louisiana’s citizens.

As the people who often work most intimately with the disadvantaged populations who could utilize these educational programs, it is important for social workers to understand educational policy on a federal and state level to better advocate and assist others. The more social workers are educated about the resources available to their clients and the barriers to clients receiving those resources, the more they can advocate for policy change in a purposeful way. By advocating for funding and changes to educational programs, social workers can work to correct social injustices by capitalizing on this —talk— and advocating to improve TOPS Tech, revise eligibility requirements, and align K-12 to technical PSE options.

Limitations

Although these findings establish additional research in barriers and facilitators in PSE in Louisiana, there are several limitations that should be acknowledged. First, only ten individuals were interviewed for this study. While saturation was almost met, a few more interviews with different types of participants (i.e. in varying fields of employment) would be necessary to reach saturation. Also, these findings only represent the voice of a few select participants. The participants who were interviewed all took the initiative to respond to the researcher’s request for interviews, which may have skewed the results. Also, this study only provided a voice to the post-secondary leaders and policymakers in Louisiana. While these participants provided a unique perspective, they did not experience the day-to-day structure of participating in the program.

A limitation and strength of this study is the use of qualitative methods to assess the barriers and facilitators to the use of TOPS Tech. The methodology may have limited the number
of voices that could be heard in this study; however, the researcher was able to gain a depth of knowledge that would not be achieved through quantitative measure. Unique perspectives were illustrated qualitatively in ways number cannot express with the same depth.

**Future Research**

Both the findings of this study and limitations highlighted the need for future research in this area. This study laid the groundwork for the development of a theory around the barriers and facilitators to PSE in Louisiana. It also led to questions regarding state-funded merit-based scholarships, eligibility requirements, and public policy implications. The next step could include researchers further investigating the barriers and facilitators to TOPS Tech, and how to implement real-world solutions to these barriers. Also, longitudinal studies would be needed to track students who utilize TOPS Tech in order to assess how many students complete a technical or community college degree while using the program and how many drop out. This type of study could add to the breadth of research on TOPS Tech, especially since this study mainly focused on the initial barriers and facilitators to TOPS Tech utilization, not the continuous utilization of the program. Researchers could also study other merit-based scholarships that help aid technical students to improve their understanding of the underutilization of TOPS Tech.

Future studies should also include the voice of TOPS Tech participants, as well as high school students who are interested in applying for TOPS Tech. This would lead to an extended viewpoint from those who have experienced firsthand the barriers and facilitators in the TOPS program. Future studies could also include the viewpoint from families of students who are enrolled in technical or community colleges who receive TOPS Tech. This may help to illustrate the financial struggle as well as the family involvement. This would provide several viewpoints and a more comprehensive view of the program, as they would have a different view of barriers
and facilitators. Lastly, future studies on TOPS Tech could examine students who are the
exceptions to barriers discussed in this study (e.g. students who leave their communities to gain
an education in another part of the state). This future research could help lead to a more
comprehensive understanding of the utilization of TOPS Tech.

Conclusion

Overall, the range of themes that emerged through the analysis extends the understanding
of the impact of barriers and facilitators related to the utilization of TOPS Tech. The nine higher-
order themes and 23 sub-themes previously discussed exist at every level of EST. It is important
to note that while interventions at different levels were mentioned throughout, change at any part
of the system could have ripple effects that cause unintended consequences, which is always a
concern for policymakers. This new knowledge can be used to enhance merit-based scholarships
in Louisiana as well as PSE.

In order for educational leaders and policymakers in Louisiana to improve participation
in the TOPS Tech program, they must first understand the barriers and facilitators faced by
students who want to utilize it. Greater utilization of TOPS Tech may lead to increased
employment and higher wages for a wider proportion of the population, however unintended
consequences must be thought-out as well. In conclusion, this study provides preliminary
information, which can be used to inform policymakers as well as Louisiana’s citizens who fund
PSE and the TOPS Tech program.
References


# APPENDIX A

## State-Funded Merit-Based Tuition Programs & Eligibility Components

### State-Funded Merit-Based Tuition Programs & Eligibility Components

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<thead>
<tr>
<th>State</th>
<th>Program</th>
<th>Eligibility Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK</td>
<td>Alaska Performance Scholarship</td>
<td>Academic and GPA requirements; Enrolled in a postsecondary training at a college or approved career and technical program in Alaska</td>
</tr>
<tr>
<td>AR</td>
<td>Arkansas Academic Challenge Scholarship</td>
<td>Incoming Freshman, Current Achievers, and Nontraditional students; Program of study that leads to a baccalaureate degree, associate degree, qualified certificate</td>
</tr>
<tr>
<td>D.C.</td>
<td>DCTAG</td>
<td>Academic and GPA requirements; D.C. residents whose Taxable Income does not exceed $1 million annually</td>
</tr>
<tr>
<td>FL</td>
<td>Florida Bright Future Scholarship</td>
<td>Academic and GPA requirements; Not owe a repayment or be in default under any state or federal grant, loan, or scholarship program unless satisfactory arrangements to repay have been made.</td>
</tr>
<tr>
<td>GA</td>
<td>Georgia HOPE</td>
<td>Academic and GPA requirements; Enrolled in degree, diploma, and certificate programs at public and private colleges and universities, and public technical colleges in GA</td>
</tr>
<tr>
<td>KY</td>
<td>KEES</td>
<td>Academic and GPA requirements</td>
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<tr>
<td>LA</td>
<td>TOPS</td>
<td>Academic and GPA requirements; Enrolled in Louisiana Public Colleges and Universities, Community and Technical College System, Proprietary and Cosmetology Schools or Independent Colleges and Universities.</td>
</tr>
<tr>
<td>MS</td>
<td>Mississippi Eminent Scholars Grant</td>
<td>Academic and GPA requirements; Enrolled in state approved public and nonprofit two-year and four-year eligible colleges and universities; Must be pursuing first certificate, first associate or first bachelor’s degree</td>
</tr>
<tr>
<td>MO</td>
<td>Missouri Bright Flight Scholars Grant</td>
<td>Academic and GPA requirements</td>
</tr>
<tr>
<td>NY</td>
<td>New York State Tuition Assistance Program</td>
<td>Academic and GPA requirements; Not be in default on a student loan guaranteed by HESC or on any repayment of state awards</td>
</tr>
<tr>
<td>NV</td>
<td>Nevada Millennium Scholars Grant</td>
<td>Academic and GPA requirements</td>
</tr>
<tr>
<td>NM</td>
<td>New Mexico Lottery Success</td>
<td>May be used at public colleges, junior colleges or universities in NM</td>
</tr>
<tr>
<td>SC</td>
<td>South Carolina LIFE</td>
<td>Students must be enrolled in their first one-year program or associate’s degree, two-year program leading to a baccalaureate degree, or professional degree.</td>
</tr>
<tr>
<td>TN</td>
<td>HOPE Scholarship</td>
<td>Enrolled in eligible four-year postsecondary institution or a two-year eligible postsecondary institution that offers on-campus housing</td>
</tr>
<tr>
<td>WV</td>
<td>West Virginia Promise</td>
<td>Academic and GPA requirements</td>
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### Appendix B

**Acronyms**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Title</th>
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<tbody>
<tr>
<td>APLU</td>
<td>Association of Public Land Grants</td>
</tr>
<tr>
<td>BESE</td>
<td>Louisiana Board of Elementary and Secondary</td>
</tr>
<tr>
<td>BoR</td>
<td>Louisiana Board of Regents</td>
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<tr>
<td>LDOE</td>
<td>Department of Education</td>
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<tr>
<td>ESEA</td>
<td>Elementary and Secondary Education Act</td>
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<tr>
<td>GI Bill</td>
<td>Servicemen's Readjustment Act</td>
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<tr>
<td>GPA</td>
<td>Grade Point Average</td>
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<tr>
<td>HEA</td>
<td>Higher Education Act</td>
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<tr>
<td>HoR</td>
<td>Louisiana House of Representatives</td>
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<tr>
<td>IASA</td>
<td>Improving America's Schools Act</td>
</tr>
<tr>
<td>LCA</td>
<td>Louisiana Counseling Association</td>
</tr>
<tr>
<td>LCTCS</td>
<td>Louisiana Community and Technical College System</td>
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<tr>
<td>LED</td>
<td>Louisiana Economic Development</td>
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<td>LOSFA</td>
<td>Louisiana Office of State Financial Assistance</td>
</tr>
<tr>
<td>LSU</td>
<td>Louisiana State University</td>
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<tr>
<td>LSUS</td>
<td>Louisiana State University System</td>
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<tr>
<td>NASW</td>
<td>National Association of Social Workers</td>
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<td>NCLB</td>
<td>No Child Left Behind</td>
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<td>NCES</td>
<td>National Center for Education Statistics</td>
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<td>PSE</td>
<td>Post-Secondary Education</td>
</tr>
<tr>
<td>SES</td>
<td>Socio-Economic Status</td>
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<tr>
<td>TOPS</td>
<td>Taylor Opportunity Program for Students</td>
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<tr>
<td>Community and Technical Colleges</td>
<td>Public four-year colleges</td>
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<td>----------------------------------</td>
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<tr>
<td>Baton Rouge Community College</td>
<td>Grambling State University</td>
</tr>
<tr>
<td>Bossier Parish Community College</td>
<td>Louisiana State University-Baton Rouge</td>
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<tr>
<td>Central Louisiana Technical Community College</td>
<td>Louisiana State University-Alexandria</td>
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<td>Delgado Community College</td>
<td>Louisiana State University- Eunice</td>
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<td>Fletcher Technical Community College</td>
<td>Louisiana State University-Shreveport</td>
</tr>
<tr>
<td>Louisiana Delta Community College</td>
<td>Louisiana State University- Health Sciences Center (New Orleans)</td>
</tr>
<tr>
<td>Northshore Delta Community College</td>
<td>Louisiana State University- Health Sciences Center (Shreveport)</td>
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<tr>
<td>Northshore Technical Community College</td>
<td>Louisiana Tech University</td>
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<td>Nunez Community College,</td>
<td>McNeese State University</td>
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<tr>
<td>River Parishes Community Colleges,</td>
<td>Nicholls State University</td>
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<td>South Central Technical College</td>
<td>Northwestern State University</td>
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<tr>
<td>South Louisiana Community College</td>
<td>Southeastern Louisiana University</td>
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<td>SOWELA Technical Community College</td>
<td>Southern University-Baton Rouge</td>
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<td>Southern University- New Orleans</td>
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<td>University of Louisiana at Lafayette</td>
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<td>University of Louisiana at Monroe</td>
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Appendix D
Interview Guide

TOPS Tech
Stakeholder Interview Questions

- Tell me a little about your familiarity with the TOPS Tech Program.
- What do you think influences students to use TOPS Tech?
  - Why do you think TOPS Tech is an option offered to students as a part of TOPS?
  - How do you think TOPS Tech is linked to Louisiana’s economy (manufacturing, oil, gas/etc. jobs/industry)?
- What do you think helps students in applying for TOPS Tech?
- What do you think prevents students from applying for TOPS Tech?

Barriers/Facilitators

- Among those students who qualify for TOPS Tech, what do you think might prevent them from actually using TOPS Tech to go to school?
- How do you think public transportation impacts students who are enrolled in vocational schools, community colleges, or technical schools?
- Why do you think public transportation plays that role [summarize his/her answer]?
- How do you think geographical location of vocational schools, community colleges, or technical schools effects students in relation to their enrollment in these schools?
- Why do you think geographical location plays that role [summarize his/her answer]?
- What role do you think affordability of tuition, fees, and other school related costs affect vocational schools, community colleges, or technical schools in Louisiana?
- Why do you think affordability plays that role [summarize his/her answer]?
- How do the expectations for education within Louisiana affect vocational schools, community colleges, or technical schools? What are some ways you think students in Louisiana think about their enrollment in college?
- Are there any demographic factors that you think might impact students in their use of TOPS Tech? Maybe things like race, gender, income? How might these impact students in our state?
Other Questions

- What other barriers or facilitators exist for students who wish to access vocational schools, community colleges, or technical schools?
- What ways can barriers to TOPS Tech be addressed? Are there solutions that you might put in place within your role?

Demographics

To finish, I would like to ask some general questions. Some of these may be sensitive questions. You do not have to provide answers if you do not feel comfortable, but any information you can provide will be helpful.

- What can you tell me more about your role in [organization name]?
- How long have you worked for [organization name]?
- What is your race or ethnicity?
- Could you tell me a little bit about your own educational background?
- Were you a recipient of TOPS? Has anyone in your immediate family received TOPS? TOPS Tech?
- Is there anything else you have not said that you would like to share?

Thank you so much for your time.
Vita

Melissa Ledoux was born and raised in Houma, Louisiana and graduated from Vanderbilt Catholic High School in 2008. Melissa graduated from the University of Louisiana-Lafayette in May 2012 with a Bachelor of Arts degree in Sociology with a double minor in psychology and child and family studies. Melissa was a recipient of the TOPS Opportunity Award from August 2008 to May 2012. She continued her studies at Louisiana State University to obtain a Master of Social Work degree. Melissa plans to fulfill the promise of the TOPS program by remaining in the state upon graduation in Baton Rouge, and working in the social policy and research arenas to improve Louisiana’s future.