# Using Internet Polls to Understand <br> Student Perspectives for School Improvement: <br> An Exploration of Adolescents' Views on Tutoring <br> by <br> Katy Elizabeth Hisrich <br> A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree <br> Doctor of Philosophy 

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#### Abstract

Meeting state and federal standards is a consistent challenge for schools and their students. Although states were mandated under the No Child Left Behind Act to provide Supplemental Educational Services, such as tutoring, to underperforming schools, the current education policy under the Obama administration does not specifically address the issue of tutoring. Rather, the Recovery Act implemented in 2009, asks states to reform and improve their education systems and schools to increase success and achievement for all students. One method for increasing student achievement and decreasing the gap between groups-thereby meeting the standards mandated by local, state, and federal governments-is tutoring. Obtaining information about and seeking views on tutoring is crucial before it can be applied to school reform. The present study utilized an online poll about tutoring to obtain students' views and to examine meaningful outcomes with regard to demographic variables. Results indicated that the polls' response items had more significant relationships with the variables of age, grade, and school than with those of gender and ethnicity. The response rate for items exhibited the most differences within ethnic groups and age, grade, and school. Each question provided insights to help inform school decision-making and improvement plans; for example, students in younger grades needed more support in spelling and math, whereas adolescents in upper grades reported more difficulty with science and math.


Using the results of the present study, schools and districts can tailor and implement changes accordingly; for example, they can develop the best method for a particular demographic group to relay information about tutoring. In this way, strategies can be created and applied for individualized subgroups, thereby maximizing success for all students. The insights gained about tutoring from the ones who have the most at stake-the students-will provide the basis for designing and implementing effective tutoring programs in the schools. Electronic polls are an effective method for gathering student perceptions, providing the foundation for successful school reform and student success, in addition to building a learning community for all stakeholders.

## DEDICATION

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My sister, Kary, has endured my countless problems and stresses with me. She is the glue that holds me together and the paint that fills my world with color. She is the one who advises me and is the steadfast role model to whom I have looked up ever since I was born. Thank you for always looking out for me and supporting me. You are not just my sister, but my best friend.

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## CHAPTER 1

## INTRODUCTION

Schools must continually help students to achieve their state's learning objectives. Struggling students and underperforming schools, however, may need additional support to reach that goal. One of the best modes of remediation is tutoring. Tutoring is defined as the additional support in helping someone learn that is provided by peers, mentors, professionals, or teachers; this can occur individually or in small groups. Research spanned over time (Bloom, 1984; Cohen, Cohen, \& Kulik, 1982; Gordon, 2006, 2009; MacDonald \& Figueredo, 2010; O' Donnel, Reeves, \& Smith, 2007; Topping, 2000; Topping, Kearney, McGee, \& Pugh, 2004; Wasik \& Slavin, 2004) indicates that tutoring can be highly effective and, in terms of its place in schools, can improve student achievement levels. Several research studies on Experience Corps-a tutoring company that trains elderly persons to help students with reading-have shown that tutoring can be a very cost-effective way of raising achievement levels (Bell, 2009; Experience Corps, 2010; Gewertz, 2008, 2009b; Kolodner, 2009; MorrowHowell, Jonson-Reid, McCrary, Lee, \& Spitznagal, 2009). In another study that was conducted recently in the Pittsburgh Public Schools, researchers found that students who participated in two tutoring programs improved their achievement scores in math (Zimmer, Hamilton, \& Christina, 2010).

Under the No Child Left Behind Act of 2001 (NCLB; U.S. Department of Education, Office of Elementary Education, 2001), Supplemental Educational

Services (SES) must offer low-income students free tutoring and after-school instruction if the school has not met its achievement goals for 3 years running. The secretary of education for the Bush administration, Margaret Spellings (2007), states:
[T] oday, more than 500,000 children receive tutoring through SES, part of the No Child Left Behind Act. A new U.S. Department of Education study found significant improvements in reading and math for African-American and Hispanic students in the districts surveyed. Students who received the tutoring for longer than a year made even greater academic gains. Parents have told me they credited the SES program with helping their child learn to read-proof that a little help goes a long way. Our only regret is that more students have not benefited. (p. 12a)

Although states were mandated under NCLB to provide tutoring to underperforming schools, less than $15 \%$ of qualifying children have actually received any services (Spellings, 2007). The problems are many and complicated, but essentially the various state programs share certain debilitating factors. "Many parents do not learn their child is eligible for free tutoring until it's too late. In some cases, a letter written in bureaucratic jargon and stuffed in a student's backpack is considered proper notification" (Spellings, 2007, p. 12a). There is not much coordination among tutors, teachers, and the school curriculum. Furthermore, Spellings (2007) indicates that the tutors have little to no training in offering support to students, and are sometimes not even knowledgeable in the subject matter. Other problems associated with tutoring include not holding enough sessions during the week and having a large number of students in each group. In addition, tutoring programs are usually not research-based, so the results are not as compelling as they could be. Even though the SES provision of

NCLB states that children in underperforming schools must receive tutoring, it restricts free tutoring to low-income families (U.S. Department of Education, Office of Elementary Education, 2001; U.S. Department of Education, Office of Innovation and Improvement, 2004). As a result, private tutoring companies have expanded. However, they cater only to the middle class because of the high cost involved; this leaves students from low-income families lacking much needed support (Munoz, Potter, \& Ross, 2008; Spellings, 2007; Stover \& Hardy, 2008).

The Recovery Act of 2009 (Recovery.gov, 2009) -the new education policy, a reauthorization of the NCLB act, implemented by President Obamaasks states and schools to make reforms so that all students can partake in a comprehensive education that ensures success for each individual. Additionally, the Race to the Top (Phase I of the Recovery Act) asks that states turn around the lowest achieving schools, and allows Title I schools to write grants requesting for funds that will help improve the school in specific areas (Obama, 2010b; Recovery.gov, 2009). Underperforming schools contain many students who need additional help and support. Tutoring is an effective method of helping these struggling students' progress.

The National Educational Technology Act of 2010 reports that:
[T]echnology-based programs and resources, including online learning, tutoring and mentoring, and social networks and participatory communities within and across educational institutions, can provide both [learning experiences and social interactions]. They can also give students guidance and information about their own learning progress and opportunities for the future. (U.S. Department of Education, Office of Educational Technology, 2010, p. 21)

Currently, educational policies state that all students are entitled to qualified teachers and that all children should attain important learning goals. Extra time for learning-in other words, tutoring- allows for additional reinforcement of the materials which can help accomplish these goals. According to one research study, programs that were designed to tutor (among others) gave students a "healthy boost" (Viadero, 2008, p. 16). In her article on the effectiveness of a tutoring company, Experience Corps, Gewertz (2008) said that "children in the Experience Corps group made 60 percent more progress during the year than those in the control group in two [literacy] areas, and 40 percent more progress than the control group in grade-specific reading skills" (p.1). Although tutoring can help struggling children to meet the achievement objectives of the school and state, the tutoring programs, according to research, need to be reformed (Gordon, 2006, 2009). To improve these programs, several aspects need to be restructured. First, tutors-both professional and volunteer-need to undergo continuous and intensive training. Also, coordination and communication between classroom teachers and the tutors must take place on a regular basis. More frequent tutoring, as well as tutoring in small groups or one-on-one, is a critical factor in effective programs. Additionally, research-based tutoring programs have proven to be the most successful. Tutoring must be deliberate and structured in order to be effective. Although no two programs are exactly alike, research has shown and experts agree that tutoring programs should
have these certain components in order to be most effective (Topping, 2000; Viadero, 2008).

## Statement of the Problem

Researchers need to determine how to make sure that students meet the standards expected of them, which is the main goal of the federal and state education system. Tutoring is one method that can aid in accomplishing this task. Therefore, there is a growing need for more definitive information on tutoring and on whether effective implementations can be executed in the schools. To do this, schools and boards of education across the country have acquired data from research studies, policy makers, teachers, principals, and sometimes even the parents. However, they have never gathered information from students-an illogical approach. Although adults may think that they have more experience and knowledge in general than adolescents, there is still unique insight to be gained from younger generations, as the issues each generation experiences differ (Gewertz, 2004; P. Strom \& R. Strom, 2009). Not only do students in today's society prove to be the best source of knowledge about their environment, they are also the most affected by the decisions made by adults. Students-not just adults-should be considered as stakeholders with valuable input. Consequently, it is vital that schools allow students to voice their opinions and thoughts (Black, 2005; Doucette, 2005; Lodge, 2005; P. Strom \& R. Strom, 2008, 2009; P. Strom, R. Strom, \& Wing, 2008; P. Strom, R. Strom, Wing, \& Beckert, 2009; R. Strom \& P. Strom, 2002, 2007).

To seek answers on how to provide insightful solutions for the schools, P . Strom and R. Strom (2009) and R. Strom and P. Strom (2002, 2007) started using online polls to determine what adolescents thought about certain topics, such as tutoring, cyberbullying, cheating, and stress. These perspectives from the adolescents would offer immediate interventions that policy makers and schools could implement, thus aiding the federal and state education systems' main objective of student achievement (Levin, 2000; Lodge, 2005)

## Rationale for the Present Study

In the Blueprint for Reform: Reauthorization of the Elementary and Secondary Education Recovery Act in 2010 (U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2010), President Obama states that in order to help our education system, we need to address "equity and opportunity for all students," and that we must "raise the bar and reward excellence" and "promote innovation and continuous improvement" (U.S. Department of Education, Office of Planning, Evaluation and Policy Development, 2010). This piece of legislation, however, also indicates that SES, such as tutoring, are no longer required to be provided by schools-rather, they are an option. This news was met by the chagrin of more than 500,000 lowincome families, $80 \%$ of whom were very satisfied with after-school tutoring programs, according to research conducted by National Center for Education Statistics (nces.ed.gov) in 2009 (Pines, 2010). According to Pines (2010), "By making SES an optional program for only the poorest-performing $5 \%$ of the
nation's schools, the Department will essentially cut off an education lifeline which has delivered educational equity and hope to more than one million students-a goal the Administration deems essential in other parts of its reform plan" (p. 1). Increasing participation in tutoring and providing it consistently to students has been a challenge for American educators, which is why more research in this area is needed.

Schools, especially those that are underperforming, are required to make changes to improve their learning conditions and student achievement. Assistance should be provided to help schools to find the best solutions. Adults-such as teachers, administration, school district officials, and policy makers-have usually counted on their own opinions and views to motivate and affect school reform. Relying on a single source, such as that of the adults, can be detrimental (P. Strom \& R. Strom, 2009). "Adults working to improve schools tend to rely on adult expertise, overlooking the unique input young people can offer. They can help us have insight, point out things we may not see" (Gewertz, 2004, p. 6).

Although students have an exclusive outlook on conditions in their schools, little has been done to include them in this process of decision-making. If, however, students are included, they feel more motivated, valued, and respected thereby increasing academic performance and learning (Bechtel \& Reed, 1998; Black, 2005; Bryk, 2010; Bueschel, 2008; Doucette, 2005; Gewertz, 2004; Levin, 2000; P. Strom \& R. Strom, 2009, "Stuck in the Middle," 2008; Zenkov, 2009). Student input proves to be valuable because they have a unique
perspective, and because they are from a completely different generation than their parents and other policy-making adults. By gathering the students' insights, adults will gain new ideas and perspectives that will present a more complete view of the adjustments that need to be made in the school to maximize student learning and increase school success. Since these improvement plans and modifications directly affect students in the local community, their perspectives should be obtained and considered. Knowing how students feel about tutoring specifically is vital in providing help that is effective (Burch, 2007; Levin, 2000).

Not only do schools need to gather input from their students, they also need to comprehend the differences in student perceptions on tutoring on the basis of variables such as gender and race/ethnicity. This is needed because the Adequate Yearly Progress (AYP) mandate required by NCLB is based on how particular subgroups perform (U.S. Department of Education, Office of Elementary Education, 2001). Thus, finding out how certain subgroups view tutoring is essential in creating an effective tutoring program. Do more boys or girls seek help when they are struggling in school? Do minority students view tutoring differently than majority students? The answers to these and other questions can further lead to more informed decisions regarding school reform in a particular area being made, since all communities have different issues and needs. However, acquiring student perceptions of their learning environment and school still poses some difficulty, since a researched procedure of doing this on a large scale and in an effective manner has yet to be developed.

Although attaining student viewpoints on tutoring may seem like a daunting task, R. Strom and P. Strom (2002) have proposed a model to quickly assess tutoring in the schools and the students' views on it.

Electronic polling can allow students to practice voting in the institution that is expected to teach them about adult obligations in a democratic society. Polling, more than other reforms, conveys a message that school boards, administrators, faculty, parents, and the community want to know how students feel about the quality of their education. (P. Strom, R. Strom, \& Wing, 2008, p. 293)

Using the data from polling, schools can then implement some of the ideas into practice. The results from the adolescents will inform adults, influencing decision-making in schools and executing changes to improve school learning conditions and programs, such as tutoring. In addition, schools can apply for funding and resources to implement more polling in schools (P. Strom et al., 2009).

The present research is being conducted to help develop and employ a system of acquiring the perspectives of adolescent students, particularly their viewpoints on tutoring. With this knowledge, schools can begin to implement change that enhances the quality of its education and relationship with its students.

## Statement of Purpose

The purpose of the present research study is to understand the importance of using student perceptions on issues in the schools, specifically focusing on the topic of tutoring among adolescents, therefore supplying the leaders in the education systems with innovative ideas for ameliorating their policies and
schools. In addition, the research examines differences within groups of suburban students using the variables of gender, ethnicity, age, grade, and school to explore the impact of these variables in developing plans for change.

## Definition of Terms

The following terms and definitions are used throughout this study:

- AYP: Adequate Yearly Progress
- Internet polling: electronic poll accessed by students via the Internet
- NCLB: No Child Left Behind Act of 2001, implemented to increase accountability of students' progress for all schools
- Recovery Act: Education Department—American Recovery and Reinvestment Act of 2009, implemented to expand educational opportunities and to help struggling schools
- School improvement plan: A documented plan to make improvements to a school. The plan differs from state to state, and it is mandated by either state or federal systems
- School growth plan: A plan to make improvements to a school; it is not mandated by the state or federal system
- SES: Supplemental Educational Services are programs and services, such as tutoring, that provide support to students and schools
- Suburban: in the suburbs of a southern city
- Title I schools: Schools that are eligible to receive federal money because at least $40 \%$ of their students are living in poverty
- Tutoring: any additional support in helping someone learn that is provided by peers, mentors, professionals, or teachers
- Tutoring poll: The electronic poll on the Internet consisting of multiple choice questions about tutoring, which was created by R. Strom and P. Strom (2002) and is taken via the Internet


## Research Questions

The following research questions were posed in the present research study:

1. How are student perceptions reported on the Tutoring Poll influenced by gender?
2. How are student perceptions reported on the Tutoring Poll influenced by ethnicity?
3. How are student perceptions reported on the Tutoring Poll influenced by age?
4. How are student perceptions reported on the Tutoring Poll influenced by grade?
5. How are student perceptions reported on the Tutoring Poll influenced by school?

## CHAPTER 2

## LITERATURE REVIEW

## Challenges and Reform in Schools

Schools face many challenges today; the future of the United States depends on improving the school system, because the students are the next generation of leaders. So far, there has not been a clear solution to the problems in our schools. One reason may be that there are such varied issues facing our youth. The challenges that schools encounter include the following: poor student achievement, safety, access to technology, student behavior, family involvement, quality instruction and learning conditions, effective school leadership, assessments, curriculum, mandated policies, and access to resources. In addition, these problems occur within our country's diverse population, which also can pose as a challenge due to the varying needs of each individual student, family and community. According to the research study performed by the Rand Corporation (Juvonen, Vi-Nhuan, Kaganoff, Augustine, \& Constant, 2004; see also National Center for Education Statistics, 2010) on the challenges that middle schools face, approximately $30 \%$ of the $8^{\text {th }}$ graders in the United States are proficient in the core subjects: math, science, and reading. Low student achievement has prompted a considerable amount of school reform plans to be developed and implemented quickly.

Another reason why there is not one perfect solution to America's schools could be due to the different viewpoints that each stakeholder (policy makers,
school districts, schools, principals, teachers, students, parents, and community members) has on how to improve the educational system. Proposed solutions, therefore, are designed away from the immediate environment and daily problems occurring in the school. "District-initiated change efforts are often so diluted by the time they reach the school level that they cannot leverage significant improvement without strong external pressure" (Fruchter, 2001, p. 1). In addition, each stakeholder usually views challenges only through one perspective-his or her own. Effective school reform, however, needs to encompass the opinions and ideas of all to create one shared vision and goal for the school; otherwise, reform will not be successful (Boyer, 1995; "Conducting a Comprehensive," 2009; Cripps \& Zyromski, 2009; Marzano, Waters, \& McNulty, 2005). Although districts may boast about their high rate of involvement from their Parent-Teacher Association (PTA) or school improvement committees, most reform does not utilize their influence or potential (Fruchter, 2001).

Educational reform efforts thus far, while well intended in nature, have employed more topical approaches to these problems, such as attaching extreme consequences to the outcomes of tests, also known as high-stakes testing. This method has proven to be ineffective, because schools are still failing (Sternberg, 2004). Educational policies have also used similar tactics. An inherent component of NCLB is the belief that "one size fits all;" that is, universal standards can be applied to everyone (Gazette Opinion, 2010; Viadero, 2009). President Obama recently created an initiative (Common Core Standards

Initiative, 2010) to create a set of common core standards that are the same for all schools and students across the country; this, still in the early stages, is being developed by the National Governors' Association (NGA) and the Council of Chief State School Officers (CCSSO). Rationale for these common core standards for all states includes global competitiveness and equity for all (Mathis, 2010). Although the President maintains that these new criteria and objectives are based on the most quality standards from all states, this plan still demonstrates a uniform approach to school reform. A candidate for the position of superintendent of education for the state of South Carolina, declared that "districts should design schools that best fit their needs...it is impossible to create blueprints usable in all parts of the state because of the variance in land conditions and topography" (Smith, 2010, p.1). He goes on to say that "it's only common sense that you do not build the same school in the historical center of Charleston as in suburban Lexington. Those are fundamentally different communities and you would expect them to build different schools" (Smith, 2010, p.1). Research indicates that centralized standards do not necessarily contribute to higher achievement in national test scores, as shown in a comparison of nations who implemented them with those who did not (Mathis, 2010).

Federal and state policies that are inflexible do not produce the most effective change (Fruchter, 2001; Hatch, 2009; Mathis, 2010). Officials and policy makers assert that individualized education is the only way to ensure success for all students; however, as educational researchers and experts would
say, their strategies do not reflect this value. Reform efforts that mask the problems in the schools will continue to disappoint. In order to improve our educational system and schools long term, solutions and strategies need to focus more on the core foundation and structure. President Obama (2010b) has enacted an approach to reform that calls for schools to compete against each other (see also Recovery.gov). Although this plan is favored by educational leaders, shortterm fixes, such as competition or penalties, usually do not yield lasting or favorable outcomes either (Stiggins, 2004). It is evident that several factors must occur for truly effective change to occur in schools. Evaluating schools and districts on their performance and challenges can provide significant information to inform school decision-making. Results, however, need to be examined across demographics such as ethnicity, gender, and age to assess the effects for individual subgroups, thus providing detailed knowledge to maximize school improvement and increase student success (Fruchter, 2001; Stiggins, 2004; Viadero, 2009).

Identifying the problems of each individual school or district is a crucial part of the improvement process. Just implementing any program in the school will not necessarily generate improvement, even if it is based in educational research. Each school has its own unique challenges that can be fixed only with corresponding strategies; effectual reform will not occur otherwise, as is evident in the abundant amount of failing schools today. In his commentary about the flaws of school reform, Hatch (2009) states:
[T]he ability to "scale up" a successful school or education program depends more on finding the right conditions than it does on developing the right practices, models, or other innovation. In the business world, start-ups need to find customers, suppliers, facilities...in order to spread across the country. Put the "right business" in the wrong place and it will founder, regardless of how good the basic idea might be. (p. 2)

Much research indicates that student achievement will increase when changes to the structures, environment, learning conditions, and processes of the school occur (Creemers et al., 1998; Dillon, 2009; Hallinger, 2003; Heck, 2000;

Hendricks, 2009; Kuhn, 2008).

## School Improvement

Educational leaders have a significant role in the school improvement process. They must build an effective learning community and positive school climate based on a shared vision that meets the needs of all stakeholders (Boyer, 1995; Bryk, 2010; "Conducting a Comprehensive," 2009; Creemers et al., 1998; Cripps \& Zyromski, 2009; "Developing a Positive School Climate," 2009; Hallinger, 2003; Ishaq \& Kritsonis, 2009; Meier, 2002). Several key factors are involved when developing this type of learning environment.

School leadership is one of the central components to any lasting school improvement and a successful school (Bryk, 2010; "District Support of School Improvement," 2009; "Seven Actions that Improve," 2006; "The Role of Principal Leadership," 2005; "Voices from the Field," 2009). Not only are the administrators directly involved in the design of the school improvement plan and its goals, they also have a significant impact on student engagement and motivation, school culture, stakeholder participation in decision-making,
connections to parents and the community, and the allocation of resources ("Designing Effective School Improvement Strategies," 2009). Educators and administrators can use assessments and surveys to gather data about the challenges in schools so they can create an effective school improvement plan. Using assessments to make decisions is a significant part of school improvement (Ishaq \& Kritsonis, 2009; see also National Middle School Association, 2010). Schools and teachers must use the assessment on a regular basis to monitor student progress, instructional practices, and school improvement plans ("Designing Effective School Improvement Strategies," 2009; "Seven Actions that Improve," 2006). For any school improvement plan to be successful schools must first identify the issues or problems at hand; then, they can devise appropriate strategies for change to occur. Assessments can then evaluate the progress of the implemented strategies and the effects of the school improvement plan. "The results obtained from an evaluation can suggest ways to modify the implementation of a practice to uncover a need for more professional development to support its implementation" ("Program Evaluation for the Practitioner," 2006, p. 2).

Parent involvement and support is directly linked to student performance, student engagement, and student motivation (Boyer, 1995; Bryk, 2010; Cripps \& Zyromski, 2009; "Designing Effective School Improvement Strategies," 2009;

Epstein, 2001; Ishaq \& Kritsonis, 2009; Korkmaz, 2007; "Meeting the Challenge," 2005; Meier, 2002; P. Strom \& R. Strom, 2002; Tomlinson \& Allan,

2000; "Using Positive Student Engagement," 2007). School reform cannot occur without the support and involvement of the parents and families (Creemers et al., 1998; Meier, 2002; P. Strom \& R. Strom, 2003). Since student and school success is highly correlated with family and parent engagement, schools need to implement strategies to encourage this. There are a variety of ways that parents, as well as members of the community, can get involved: supporting their children at home, volunteering at the school, communicating with the school, and participating in school decision-making (Epstein, 2001). However, each school environment is unique; the methods of communication and involvement must correlate to its environment so that they are effective and address the issues of the community. President Obama pointed out in his remarks to the Kalamazoo community at its high school graduation ceremony that they were successful because each member of the community was involved with the students and school; President Obama states "you've got community member who are stepping up as tutors and mentors and coaches. You got parents who are taking an active interest in their child's education..." (Obama, 2010C, p. 2)

Communication with and involvement of all stakeholders - parents, teachers, students, community - is critical to any school improvement process (Boyer, 1995; Epstein, 2001; Cripps \& Zyromski, 2009; Meier, 2002; Tomlinson \& Allan, 2000). Policy makers, school districts, and administrators must identify the most effective ways to communicate and relate information to all of its stakeholders (Ishaq \& Kritsonis, 2009). "School boards [are responsible for]
answering to the 'shareholders'...all of whom have a stake in the success of the school district" ("Defining the Role of School Boards," 2006, p. 2). Their job is to provide avenues for open communication to occur between the members of the community and the schools or school system, as well as establish positive relationships with and among the others stakeholders ("Voices from the Field," 2009). Effective communication between all stakeholders is important when it comes to reforming schools and meeting goals, as research has indicated (Bryk, 2010; Cripps \& Zyromski, 2009; Tomlinson \& Allan, 2000).

Not only is communicating with the various stakeholders and involving them in strategic efforts important, but seeking their input and views for the school goals are essential to school reform and success. Their viewpoints and ideas "can provide useful information about what is happening in the school and a strong, data-driven foundation for designing, implementing, and improving strategies that promote student achievement" ("Program Evaluation for the Practitioner," 2006, p. 2). Meier (2002) points out that obtaining stakeholder support is a crucial part to the foundation of any school improvement plan. Effective leaders "listen to the ideas of others and incorporate them into the [school] vision as appropriate" (Meier, 2002, p. 40).

School boards can directly involve the community to help increase students' academic performance, as evident when the Board of Education of Lincoln Public Schools in Nebraska asked the community to participate in process of developing a plan for the school which addresses its specific needs ("Defining
the Role of School Boards," 2006). Another example of engaging the community in the school improvement plan and process can be seen in Anne Arundel County Schools in Maryland, as well as in the Lima City Schools in Ohio as part of the Ohio Improvement Program ("District Support of School Improvement," 2009) Specifically, stakeholders can share their opinions regarding the allocation of resources, as one elementary school did in Arlington, Virginia ("Reallocating Resources to Support," 2009). Sharing the decision-making and empowering others to make significant decisions can help increase academic performance and build a strong learning community (Barth, 1990; Meier, 2002; "The Role of Principal Leadership," 2005; Tomlinson \& Allan, 2000; "Voices from the Field," 2009). Involving all stakeholders and and allowing them to be represented and share in the decision-making process is one of the quality indicators of both an effective school improvement plan and a successful school ("Conducting a Comprehensive," 2009).

## Student Perspectives

Policy makers and school leaders believe that they have the best knowledge on what needs to be reformed in the school. Elected officials develop programs off-site without any awareness of the problems that a particular school may be experiencing; school administrators tend to rely only on their own views, maybe incorporating the views of teachers and parents at times. This adultcentered thinking, however, will produce ineffective decision-making and school reform (Stiggins, 2004). All of the stakeholders involved in the reform process
need to express their views, since a variety of perspectives will produce optimal changes in schools. Each one of the stakeholders can supply unique insight about the strengths and weaknesses of the school. Students are the most affected by the conditions in the school and have the most at stake with school success. Therefore, all of the adult stakeholders need to be utilizing the vital information and perspectives that students possess. Although students are a crucial part of the decision-making process, they are consistently overlooked (Darling \& Price, 2004; Girod, Pardales, Cavanaugh, \& Wadsworth, 2005; Zenkov, 2009; P. Strom \& R. Strom, 2009). One research study by Konings, van Zundert, Brand-Gruwel, \& van Merrienboer (2007) states:

In fact, students are often seen as consumers who do not have any influence on the design of the learning environment and teaching practices. This is remarkable and seems rather problematic especially regarding the fact that students' perceptions of a learning environment determine their learning behavior. (p. 1)

School administrations that tend to employ the suggestions of students have fewer problems in the school and higher student achievement. Additionally, "schools that genuinely seek and appreciate students' ideas are more likely to see their school improvement plans succeed" (Black, 2005, p. 39).

Since humans to want to be valued, the value creation can occur when students are respected and their views are taken into account. Trust also develops when people's voices are heard. Adults can not only listen to the voices of children, but also actually use their opinions and skills to make school improvements. This strategy could be applied to the decision-making process of
school reform or even instructional practices as a factor in school improvement. Listening to students' perspectives and ideas is critical to aid in the innovation process for our educational system (Bueschel, 2010). It not only provides creative ideas that can ameliorate school conditions, but also reinforces the value of students and their feedback in addition to demonstrating the importance of the student-teacher-school partnership. In her report, Bueschel states: "it was clear [students] could not only benefit from having someone with whom to share their thoughts on learning, but also that their insights could help identify what's going right (or wrong) in their education, and suggest new directions for innovation and reform. The pay can be large..." (Bueschel, 2008, p. 16). Additional literature by Strom and Strom suggests that "inviting adolescent opinion reveals interpretations, promotes reciprocal learning, and allows practice in democratic decision-making" (P. Strom \& R. Strom, 2009, p. xviii; see also "Stuck in the Middle," 2008).

Adults have not always viewed adolescents as having skills or knowledge that can contribute to education and society. On the contrary, teenagers have a variety of skills that adults may not have, such as a high proficiency with technology (P. Strom \& R. Strom, 2009). In reciprocal learning, students and adults both teach each other and learn from each other. This type of learning strengthens the rapport across generations and provides for an interdependent relationship that exudes respect from both sides (P. Strom \& R. Strom, 2008; P. Strom \& R. Strom, 2009). Intergenerational communication can also have
pronounced effects on the motivation and achievement of children and teenagers (Gibson, 2009; R. Strom \& S. Strom, 1995b).

While research demonstrates the importance of listening to students, valuing their ideas and skills, and involving them in the education process, this has not always occurred; in fact, it seldom happens today. The majority of the youth feel that adults do not understand them or their issues (Black, 2005; Gewertz, 2004; Girod et al., 2005; P. Strom \& R. Strom, 2009; "Stuck in the Middle," 2008). A little more than half of the students in one survey stated that faculty and staff didn't value what they had to say; a higher percentage revealed that they didn't have an adult to talk to nor did the adults in the school communicate individually with students (Gewertz, 2004). "Adolescent learners sometimes experience a world of rules and regulations imposed on them by adults who seem not to understand their world. The physical and emotional changes they experience are a further source of feelings that they have no control over their lives ("Stuck in the Middle," 2008, p. 4). Adults cannot fully identify with the environment children face today (Gibson, 2009; P. Strom \& R. Strom, 2009). Learning about the new issues in their lives and listening to the teenagers will not only strengthen the relationship but provide a foundation of respect and understanding as well.

Several studies indicate that adults have started to listen to teenagers more. The Center for Applied Research and Educational Improvement at the University of Minnesota—Twin Cities conducts research on the problem of sleep deprivation
among teenagers, since sleep has a tremendous effect on students' attention in school. The Minneapolis school system, as well as others across the U.S., used research-based results on this topic to inform their decision regarding the school start times for teenagers. As a result, there was a significant increase in student attendance, learning, and the satisfaction of parents, because of decreased grumpiness at home (Tonn, 2006).

Another study ("Conducting a Comprehensive," 2009) was conducted in five major cities across the U.S. In this study, surveys designed by students were used to ask their peers about learning conditions in the schools. The results revealed that students felt that they were not being heard by adults; after the study, however, students reported in a follow up that they felt more valued and that they were an integral part of the school. "Empowering students to be researchers and bring about change in their schools builds a sense of ownership that sparks engagement, a necessary condition of high achievement" (Gewertz, 2004, p. 6). Giving students some choices and opportunities to make decisions and offer their opinions creates a feeling of respect that empowers students and facilitates involvement ("Stuck in the Middle, 2008). Teachers and administrators also noticed the change in student behavior as a result of seeking student input; teenagers were more confident and interested in school. Research (O'Donnell, Reeves, \& Smith, 2007) in the field of educational psychology illustrates the importance of interest in student achievement, since without it, learning will not transpire.

Additionally, students were also reported being more connected to the institution and more engaged in classes and other activities when schools elicited their suggestions. "Listening to students talk about learning can help them become more active partners in their own education, more engaged in the classroom, and better positioned to succeed" (Bueschel, 2008, p. 4). Bueschel continues stating that "students really care about their educational experiences. "Students will get more involved in learning, spend more time learning, and in turn learn more when they are placed in supportive educational settings that hold high expectations for their learning, provide frequent feedback about their learning, and require them to actively share learning with others" (Bueschel, 2008, p. 9).

There is tremendous value in listening to students and involving them in the decision-making process, as much research indicates (Bechtel \& Reed, 1998; Black, 2005; Bueschel, 2008; Darling \& Price, 2004; Levin, 2000; P. Strom \& R. Strom, 2009; P. Strom, R. Strom, \& Wing, 2008). In one study, a principal from St. Louis stated, "to be the best principal I can be, I need their input" (Gewertz, 2004, p. 3). In doing this, policy makers, districts, administrators, and teachers can have a more significant impact on student learning, achievement, affinity for learning, and overall success. Therefore, if schools want to be successful, then they need to obtain student perspectives on a variety of topics to get them interested and engaged in their own learning; this will provide insight on ways to overcome obstacles and improve school conditions. The question remains, then,
how do we know what specific issues to address for each school and how do we gain the perspectives of the stakeholders?

## Internet Polls and Surveys

One specific way to gather the viewpoints of people is through polling or surveys. These "perception data" are a common and efficient approach in obtaining and assessing perspectives of various stakeholders in an organization, such as parents, administrators, and students in a school system ("Conducting a Comprehensive," 2009; "Developing a Positive School Climate," 2009). Polls and surveys allow individuals to offer valuable information about the strengths and weaknesses of a program or organization, allowing each stakeholder to reflect on their own skills so they can be developed.

The concept of polling, which is a survey that gathers information about how people view or feel about particular issues, has been around for some time now. It plays a key role in providing the public with information about its society and people. Polls can comprise many issues, such as health, environment, and government policies. Businesses also use survey and polling methods to discover information about the opinions and views of their targeted audience in order to customize marketing and thus increase sales (Asher, 1998). A challenge that the polls face is obtaining participation from the public; polling on topics that are relevant to the audience helps to increase participation rate (Groves, Presser, \& Dipko, 2004). When people are allowed to vote and express their views on issues that interest them, they become more actively involved rather than passively
observe (Bueschel, 2008; Gewertz, 2004; Liu, 2005). Feedback from surveys has proven to be an effective systematic method to implement positive changes in an organization or company (Nadler, 1976).

Because polls and surveys can cover a variety of topics, they can also be administered in a several ways. One of the most effective ways is via computer or the Internet. Over a decade ago, the Internet was not commonly used. Now, 160 million access the Web for shopping, communication, and media purposes. Westen's (2000) study revealed that $33 \%$ of people believed online voting would increase participation; additionally, $51 \%-60 \%$ of people who were polled thought that online voting would bring about enhanced reform in the government and in businesses. Polls conducted on computers and on the Web allow for more flexibility in design and decreased cost (Caffray \& Chatterji, 2009). One of the reasons why people do not partake in polls includes the time variable. Online polls minimize this problem. Although they increase participation in general, computer-based polls limit their reach to certain subgroups of the population, since not everyone has access to technological devices. Electronic surveys, whether computer or Internet-based, enable data to be collected more efficiently without comprising their quality (Schonlau, Fricker, \& Elliot, 2002; Shannon, Johnson, Searcy, \& Lott, 2002).

Much research has compared the various aspects of computer-based polls and traditional paper-and-pencil polls. The outcomes divulge the profound advantages that polls and computers and the Internet have (Cook, Heath, \&

Thompson, 2000; Idleman, 2003; Kaplowitz, Hadlock, \& Levine, 2004; Kiernan, Kiernan, Oyler, \& Gilles, 2005; McCabe, 2004; Shannon \& Bradshaw, 2002; Sun \& McClanahan, 2003). Two issues to address when conducting polls on the Internet are anonymity and confidentiality. Although Web-based surveys have significantly more benefits than paper-and-pencil ones, they also can skew the data, participants may report personal information differently depending on the setting (Beebe, Harrison, McCrae, Anderson, \& Fulkerson, 1998; Sax, Gillmartin, \& Bryant, 2003).

Adolescents prefer the use of technology, as it plays a dominant role in almost every aspect of their life (Livingstone, 2003; Livingstone \& Bober, 2004). A survey conducted by the Pew Internet \& American Life Project in 2005 (http://www.pewinternet.org), reported that $87 \%$ of teenagers ages 12-17 in the U.S. use the Internet, compared with $66 \%$ of adults. Out of the $87 \%, 51 \%$ of adolescents use the Internet every day (Lenhart, Madden, \& Hitlin, 2005). A similar study conducted in 2010 by the Kaiser Family Foundation examined the amount and the nature of media use among the children ages 8-18 in America, showing statistics from 1999-2009. According to this study, 8-18 year olds spend on average 1:29 hours on the computer each day in comparison to $0: 38$ hours using print sources. In addition, $93 \%$ of the youth population has a computer in the home and 94\% have Internet access (Rideout, Foehr, \& Roberts, 2010). Adolescents use a variety of technological devices, such as cell phones, iPods, computers, and Internet. Along with the devices come a variety of capabilities
and activities (Gross, 2004). A survey discovered the following uses of the Internet by adolescents: shopping (43\%), communication/instant messaging (73\%), games (81\%), music listening, obtaining news (76\%), and information seeking, especially health (31\%), and general learning (Lenhart, Madden, \& Hitlin, 2005). This research on adolescents' use of and affinity for technology explains why using the Internet can be a great tool to engage students. "Learning on the Internet may trigger greater motivation because it provides a fun environment" (P. Strom \& R. Strom, 2009, p. 208). Using students' intrinsic motivations, such as technology, is one of the most effective methods to involve them in their education. Not only do adolescents favor any activity that is technology-based, our educational policy on technology states the importance of its use in education, instructional practices, communication avenues, assessment and data gathering, and the development of student creativity (Bitter \& Legacy, 2006, 2008).

One of the most famous polls today is the PDK/Gallup poll that began in the 1960s (Rose, 2006). The poll was established by Phi Delta Kappan, an education journal, and focuses on issues in education (see http://www.pdkintl.org/ for more information on this poll). In conjunction with Phi Delta Kappan and another magazine called The Chronicle of Higher Education, the Gallup Organization has administered many surveys on achievement gaps and other educational topics to the public, or to other targeted populations. The Gallup Organization summarizes the results of the study and then gives the report to the
magazines so that they can publish the significant outcomes for public viewing. Educational leaders and people in the community can then obtain information to help understand the issues, to improve the schools, and to inform policy makers (Blumenstyk, 2008; Hallfors, Watson, Khatapoush, Kadushim, \& Saxe, 2000; Rose, 2006). Online evaluations of schools and teacher instruction are becoming more popular with students because of their advantages and this generation's preoccupation with technology (Avery, Bryant, Matbios, Kang, \& Bell, 2006; Carini, Hayek, Kuh, Kennedy, \& Ouimet, 2003; Leung \& Kember, 2005). Collecting student evaluations and opinions is beneficial in schooling as changes are being implemented for improvement. Several companies have even entered this expanding market, such as AdvancedSurvey and Zoomerang (Baggaley, Kane, \& Wade, 2002).

Polls are continually being administered to children and young adults for three main purposes: "1) formative—as a feedback mechanism to faculty for instructional purposes, 2) summative-as an evaluation of faculty, and 3) informative-to assist students in selecting future courses" (Nevo, McClean, \& Nevo, 2010, p. 99). Feedback is critical in the process of reform; nothing can improve without data and reflection. These electronic polls provide an efficient means for students to express ideas and opinions, as well as allow policy makers, school districts, administrators, teachers, and parents gain an understanding of the issues that concern the students and suggestions for improvement.

Several districts and schools are beginning to implement surveys and polls to gain student, parent, teacher, and community perceptions and input. In Wisconsin, Learning Point Associates developed a "Student School Climate Survey" and a "Staff School Climate Survey" for the Department of Public Instruction ("Developing a Positive School Climate," 2009). In addition, the Western Alliance for the Study of School Climate at California State University created a survey to assess classroom climate and school climate, which focuses on learning environment, physical space, leadership, discipline, culture, and community relations. Another survey was designed by The Center for the Study of School Climate called "American School Climate Survey." Teachers, students, administrators, and community members can complete the survey to offer their perspectives and ideas. Questions cover topics such as learning climate, bullying, and race ("Developing a Positive School Climate," 2009; see also schoolclimatesurvey.com/html/surveys.htm). The literature (Black, 2005; Blumenstyk, 2008; Girod, Pardales, Cavanaugh, \& Wadsworth, 2005; Hallfors et al., 2000; Stiggins, 2004; P. Strom \& R. Strom, 2009; Strom, Strom \& Wing, 2008; R. Strom \& P. Strom, 2002) suggests that the implementation of Internet polls and surveys, like the examples described above, to assess student perceptions, as well as other stakeholders, can significantly facilitate school improvement.

## Tutoring

Strom and Strom (R. Strom \& P. Strom, 2002) created several polls on topics that are important to adolescents to see whether they could produce valuable insight to help schools improve. The polls focused on a variety of issues that would be important in school reform: conditions of learning, time management, cyberbullying, and tutoring. These topics were chosen because they were the most salient to the administrators, teachers, and students in the schools.

When students complete the Tutoring Poll, their perceptions can provide understanding of their views and opinions on tutoring in a variety of categories: types of tutoring, help-seeking approaches, obstacles to seeking help, viewpoints on what tutoring portrays, reasons to get tutoring, subjects that need support, times and location of tutoring, and explanations of why students may fail in school. These factors are crucial in the development and/or provision of effective tutoring services and program implementation. Adolescents' perspectives on these issues will assist in guiding educators with this critical aspect of student achievement.

According to Gordon, Morgan, Ponticell, \& O' Malley (2004), "tutoring offers a powerful technique for enhancing student learning across a wide sample of different types of students and content areas" (p. 62). Studies on Experience Corps (Experience Corps, 2010), a tutoring company which operates across the country using local retirees as volunteers (some of them are paid volunteers and receive a small stipend), state similar beliefs about the effects on all students, no matter their demographic category (Experience Corps, 2010; Morrow-Howell et
al., 2009). In fact, Experience Corps consistently demonstrates positive effects in helping hundreds of struggling students in math, reading and writing. In one school year, the students from a city in New York who were tutored by adults from Experience Corps improved $60 \%$ more than their classmates who were not tutored (Experience Corps; Kolodner, 2009; Relerford, 2009). Furthermore, in Tempe and Mesa, Arizona, tutors from Experience Corps have helped the third and fourth graders with their reading and writing skills (Parker, 2009).

Almost all of the research and literature indicate that tutoring, especially when it is effective and one-on-one, directly affects student learning and increases student achievement (Bloom, 1984; Gordon, 2009; MacDonald \& Figueredo, 2010; Kolodner, 2009; Morrow-Howell et al., 2009; Topping, 2000; Wasik \& Slavin, 2004; Zimmer, Hamilton, \& Christina, 2010). In fact, "a review of contemporary research related to tutoring revealed more than 300 books and 7,000 articles that indicated the benefits of tutoring are clear" and has positive effects on both tutor and tutee (Gordon et al., 2004, p. 62). Cohen, Kulik, \& Kulik (1982) conducted many studies examining the effects of tutoring; the results indicated that over $75 \%$ of the studies had positive effects for the tutee. Specifically, there was a considerable difference in achievement gained between the students who received one-on-one tutoring and those that did not (Bloom, 1994). Studies also revealed that after spending time with a tutor individually students were more motivated, worked faster, and understood the content more (Gordon et al., 2004; MacDonald \& Figueredo, 2010; Wasik \& Slavin, 2004).

Tutoring can also have a positive impact on students' social and emotional issues (Bailey \& Thompson, 2008; Naidu, 2006). Parents, in the study conducted by MacDonald and Figueredo (2010), stated that they found "the tutoring program has improved our child's self-esteem and overall confidence. She is noticeably less shy. Our daughter looks forward to reading... Overall this tutoring program has been a positive experience for our family" (p. 416).

As a pioneer in learning and instruction, Bloom (1984) stated in his research that tutoring creates an environment which produces the most gain, citing that increased learning time played an important role in that. A significant amount of educators believe that extended learning time is fundamental with mastery learning (Gewertz, 2008). Tutoring is similar to scaffolding, a concept first coined by psychologist Lev Vygotsky in 1978 (O’Donnell, Reeves, \& Smith, 2007).The prompts that the tutor gives during scaffolding allow for more in depth conversations. Both scaffolding and additional learning time assist students in achieving the mastery of certain skills and knowledge (Dzubak, 2009).

Tutors and tutoring services can vary in format, types, quality, and cost. "Adult volunteers, homework hotlines, peer tutors, individual teachers, franchised learning centers, university clinics, and private professional agencies are among the different types of tutoring services" (Gordon et al., 2004, p. 61). The many types of tutoring produce varying results; the type chosen depends on the individual and their needs, which range from general support to remediation. For example, "structured tutoring in particular is most effective in improving
learning" (O'Donnell, Reeves, \& Smith, 2007, p. 402). Other research by Gordon (2009), Topping (2000), and Truschel (2006) also supports this finding. In addition, tutors can be highly effective when they customize the material to meet the needs of each individual student (Truschel, 2006). To produce optimal results for the tutee, tutors need to provide quality instruction; therefore, being trained in effective research-based strategies and communication styles is critical to the success of any tutoring session (Truschel, 2006; Zimmer et al., 2010). Many organizations can provide this training and certification to individual tutors, such as the National Tutoring Association (www.ntatutor.com), the American Tutoring Association (www.americantutoringassociation.org), and The Association for the Tutoring Profession (www.myatp.org).

Peers can serve as tutors, and many studies on peer tutoring have yielded positive results (Cohen, Cohen, \& Kulik, 1982; De Smet, Van Keer, Wever, \& Valcke, 2010; Dzubak, 2009; Gordon, 2009; Gordon et al., 2004; Heller \& Fantuzzo, 1993; McDuffie, Mastropieri, \& Scruggs, 2009; Paterson \& Eliot, 2006; Toppings, 1995, 2000, 2005; Veerkamp \& Kamps, 2007). Peers can have a dialogue in a manner they both understand. Peer tutoring can often be confused with cooperative learning; while they are both forms of peer learning, they are vastly different (Topping, 2005). Peers can support each other's learning by providing help, tips, and prompts, which demonstrates the standard form of peer tutoring. A high-ability student who serves as a tutor can help promote the understanding of basic concepts and higher level thinking skills; this is extremely
beneficial for diverse learners and low-ability students (O'Donnell, Reeves, \& Smith, 2007). Peer tutoring can also be reciprocal which can enhance both of the students' motivation, behavior, and learning (O'Donnell, Reeves, \& Smith, 2007; Topping, 2005). The mission of Leech Lake Tribal College in Minnesota, (LeClaire, 2010), was peer mentoring and student leadership which created a network of support for the students. They found it built a sense of community and found it beneficial to help other students, as well as themselves, succeed (LeClaire, 2010).

Volunteers in the community can also serve as great tutors; using these volunteers involves the community in the schools and helps increase student achievement. Because of the number of parents who work during the day has increased, grandparents are a great source to serve as volunteers in the schools (R. Strom \& S. Strom, 1994; R. Strom \& S. Strom, 1995a). Having students work with older volunteers also promotes intergenerational communication and reciprocal learning (P. Strom \& R. Strom, 2009; R. Strom \& S. Strom, 1995b). "Students who were tutored by elderly volunteers made significantly greater gains than their peers who did not receive assistance" (R. Strom \& S. Strom, 1994, p. 3). Not only can tutoring have a positive impact on the tutee, it can also influence the tutor, as several studies have shown (Gewertz, 2009b; Topping, 2000, 2004). One example of this phenomenon in particular can be throughout the entire Experience Corps program (Bell, 2009; Bowie, 2009; Crary, 2010; Experience Corps, 2010; Morrow-Howell et al., 2009; Parker, 2009). Strom and Strom (1994)
suggested that one benefit for grandparents includes mental stimulation. Other literature on the effects of elderly persons serving as tutors in the school has indicated positive health outcomes for this population, such as decreased depression and reduced loneliness (Bell, 2009; Bowie, 2009; Crary, 2010; R. Strom \& S. Strom, 1994). All tutors can benefit as well from a greater understanding of the material covered in a tutoring session.

Additionally, tutoring can be conducted through the use of technology, either with a tutor, like conferencing, or by itself with the tutee, such as computer software or Web-based systems. It is evident in the literature (Bitter \& Legacy, 2008; Giordan, 2004; Gordon, 2009; Gordon et al., 2004; Houge, 2009; Liu, 2005; Naidu, 2006; O’Donnell, Reeves, \& Smith, 2007; Reeves, 1998; Schmid, Miodrag, \& Di Francesco, 2008; Zenanko \& Burrows, 2006) that there are many positive benefits of using technology for reinforcing material and practicing skills. Technology provides a means for tutors to interact with their tutees, create engaging activities, and differentiate plans based on each student's needs (Zenanko \& Burrows, 2006). The various programs and formats that technology can provide are more vast and rich than those that a single individual person can offer in a one-on-one tutoring session. "Research has shown a strong association between the use of computer software and student achievement" (Naidu, 2006, p. 5; see also Zenanko \& Burrows, 2006). Technology can be used as both a motivator for the students and a means for instruction. It can allow tutors and teachers to monitor student progress and activities, as well as promote student
choice of content. In Giordan's study (2005), the results indicated that the structured exchanges that transpired over the Internet between the tutor and students enabled students to master the content and construct meaning. Another study, conducted by Houge (2009) used distance technology, specifically videoconferencing, as a means to provide one-on-one tutoring instruction to students who were deficient in literacy areas. Results indicated that this method of providing support was very effective.

Growing Stars (2010) is business that provides online tutoring via mentors from all over the world (P. Strom \& R. Strom, 2009). It is an interactive session on the computer where both parties are working on the same document, which is displayed on both of their screens. A company called the Virtual Nerd (2010), a subscription service that uses videos on the Internet which demonstrate math and science concepts, has proven to be very successful, as one teacher stated that her students' grades improved significantly after working with the program (The Associated Press, 2010). It points out that students use technology more now and enjoy it more as well. Kaplan Tutoring (2010), which operates in an online environment, conducts evaluations to assess each student's needs and designs customized lessons accordingly. Students then interact with programs via the Internet to practice specific skills. Employing technology for tutoring can reduce the cost in comparison to a private tutor; a subscription to Virtual Nerd costs about $\$ 40$ each month, while the rate for a typical one-on-one tutoring session can range from \$30-\$40 for about an hour (The Associated Press, 2010).

The tutoring industry "[is growing rapidly], which is estimated by some measures to exceed $\$ 3.4$ billion each year" (The Associated Press, 2010, p. 1); Gordon (2006) and Gordon et al. (2004) state that it ranges from $\$ 5$ billion to $\$ 8$ billion each year. While some companies provide tutoring services online, others provide tutoring in-person. Sylvan Learning Center (2010), which provides a service that assesses and creates an individualized plan for each student, costs about $\$ 40$ each hour to work with a trained tutor and 2 other students. Similarly, the company Huntington Learning Center (2010) supplies students with one-onone tutoring from professionals and activities that are tailored to each individual. Experience Corps provides a small stipend for their paid volunteers' work, lunch, and transportation (Experience Corps, 2010; Kolodner, 2009).

Many students are continuing to struggle and fall behind in school. With the demands of administrators and districts, as well as the constraints of the curriculum and time in school, teachers face the daunting challenge of supporting these students. A blog posted on Tutor Our Children, (2010e), stated: "A student from Mamaroneck, New York commented, 'The quality of the education in public schools continues to go down and the standards have risen. Classes have gotten bigger and individual student to teacher time decreases every year'" (p. 1). Tutoring can provide the necessary assistance to help students improve their academic performance allowing them to keep up with their peers and increasing their motivation to succeed. "Designing effective supports for struggling students relies on frequent formative assessment and is a key to improving educational
outcomes ("Designing Effective School Improvement Strategies," 2009, p. 5).
According to Gordon et al. (2004), "A 2000 Newsweek poll found that $42 \%$ of Americans believe there is a great need for children to receive private, outside tutoring" (p.61). Private tutoring is expensive and therefore caters to the middle and upper class students. Most of the students who are struggling in school the most happen to be in the middle to lower classes of society; these families do not have the means to pay for the costly tutoring services. Because tutoring is an essential part to a student's academic learning, schools, districts, and policy makers should be implementing it as a consistent part of instruction and a means of free support for all students, regardless of school status, family socioeconomic status, or student achievement.

## Educational Policy

Under the Bush administration, NCLB provided federal funds for supplemental services such as tutoring. According to Hoff (2008a):

The rules will require schools to work with community groups to advertise the supplemental services, which districts underwrite with money available under the NCLB law. The rules also specify information about SES that districts must post on their Web sites. Students are eligible for services if their school misses AYP for three years. (p. 16)

The Department of Education reported an increase in tutoring under NCLB (Hoff, 2008a). Research on tutoring programs under this policy suggests that tutoring was effective in producing student gains in overall achievement and math (Zimmer, Hamilton, \& Christina, 2010). A recent poll yielded results showing
that $80 \%$ of parents whose children received Supplemental Educational Services saw benefits in the various programs (Tutor our Children, 2010c).

In his speech entitled Obama Vows Education Reform (Obama, 2010a), the President explains what is necessary for schools, districts, teachers, parents, and students to do for effective change to occur in our educational system. The new education act, however, does not call for the provision of funds for school use on supplemental services such as tutoring (Gewertz, 2009a). "Margaret Spellings, Duncan's predecessor as education secretary...said she disagrees with Obama's scrapping of the provisions that provided free tutoring" (EducationNews, 2010, p. 1). In the Blueprint for Reform: Reauthorization of the Elementary and Secondary Education Act in 2010 (U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, 2010), President Obama proposed to eliminate after-school tutoring programs for more than 500,000 low-income families (EducationNews, 2010). This generated much criticism from the public, because many felt that this action would not aid in school improvement. Tutor Our Children (2010d) conducted a poll in September of 2010 which indicated the the majority of voters supported the SES programs, which contradicts President Obama's plan to eliminate them:

- Strong Voter Support: $69 \%$ of likely voters support current law that requires tutoring to be offered to low-income children who attend a school that fails to meet grade level standards for three years in a row.
- Voters Want Tutoring for Students: 78\% of likely voters support parents with students in low-performing schools having the option to enroll their student in after school tutoring.
- Tutoring Supports Extended Learning: 61\% of likely voters see tutoring as a way of achieving President Obama's goal of providing extended learning time.
- Voters Don't Want to See Tutoring Funds Cut: 60\% of likely voters would be concerned if the Federal government stopped funding tutoring programs that parents could choose.
- Seen As A Help For Students, Not Penalty For Schools: 53\% of likely voters see schools using a portion of their federal funds to pay for tutoring as providing help to students, not penalizing schools. (p. 1)

In fact, the many people were outraged by President Obama's plan to reduce the amount of supplemental resources and programs because they felt these were not only beneficial for a lot of students, but it also contradicted the President's proposal for additional resources for low-achieving schools and families (Tutor Our Children, 2010b).

Schools and districts have flexibility in the way they allocate their funds towards helping student performance. A blog on Tutor Our Vista indicates that thousands of children are on waiting lists to receive SES, but that districts are spending their already limited funds on other issues (Tutor Our Children, 2010a). While spending resources on other priorities can limit funding towards tutoring and other SES, a general lack of funds, which is all too common in most educational systems, can pose as an obstacle as well. A city in New York spent $\$ 400,000.00$ for tutors from Experience Corps; the money lasted for half of the 2008-2009 school year (Kolodner, 2009). The Department of Education, however, cut the program due to lack of funds. The New York City Schools Chancellor Joel Klein commented that if there was evidence that tutoring helped increase student achievement, the problem of funding for the program might be
solved. Research (Bloom, 1984; Cohen, Kulik, \& Kulik, 1982; Gordon et al., 2004; MacDonald \& Figueredo, 2010; Morrow-Howell et al., 2009; O’Donnell, Reeves, \& Smith, 2007; P. Strom \& R. Strom, 2009; Topping, 2000; Wasik \& Slavin, 2004), however, does indicate that tutoring improves student academic performance. To close the gap and increase student achievement, federal and state funding, therefore, need to be allocated to supplying schools with tutoring services.

Supplemental instruction and tutoring can be effective through various means of technology, as much research has indicated (Bitter \& Legacy, 2008; Giordan, 2004; Gordon, 2009; Gordon et al., 2004; Houge, 2009; Liu, 2005; Naidu, 2006; O’Donnell, Reeves, \& Smith, 2007; Reeves, 1998; Schmid, Miodrag, \& Di Francesco, 2008; Zenanko \& Burrows, 2006). "The use of technology to supplement academic pursuits has become a part of the educational paradigm" (Zenanko \& Burrows, 2006, p. 3; see also U.S. Department of Education, Office of Elementary Education, 2001). President Obama has incorporated a new plan for the implementation of technology in education, called Science Technology Engineering Mathematics (STEM; http://nstacommunities.org/stemedcoalition/) (Obama, 2009a, 2009b, 2009c; U.S. Department of Education, Office of Educational Technology, 2010). Effective instruction and meaningful learning emerge through the use of technology. Students and teachers can enhance their problem-solving skills, creative thinking, and decision-making abilities when they are integrated into the curriculum in
profound and appropriate ways (Bitter \& Legacy, 2006, 2008; Oliver, 1998; Reeves, 1998).

Not only does technology enhance student learning, it can also serve as a catalyst and strategy for change (Davidson, 2003; Vail, 2006; Venezky, 2004). The National Educational Technology Standards developed by the International Society for Technology Education (ISTE; http://www.iste.org) mandate that schools and districts use "technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning" (Bitter \& Legacy, 2006, p. 12). School reform and technology integration, however, have not been effective because educators do not utilize the students' perspectives and opinions as a determining factor in improvement (P. Strom \& R. Strom, 2009). Data and strategies that produce the most successful and long-term results come from those who have the most at stake: the students.

## Summary

Educational researchers have provided our nation's policy makers with an abundant amount of information to use in school reform; however, our schools have yet to see the effects. Policy makers, districts, and administrators have chosen to ignore their most fundamental, as well as the cheapest, factor necessary for school improvement - student perspectives and input (R. Strom \& P. Strom, 2007; P. Strom \& R. Strom, 2009). Not only does listening to students provide the most optimal context in and foundation on which change can occur, it also is
the most cost effective. Schools need to begin employing their best asset in order to instill successful and lasting change (Konings et al., 2007).

Utilizing students' opinions will assist in effective reform, as well as allow an increase in the students' personal interest and achievement in school. In giving students a voice, they can begin to take ownership of their learning and become more involved in the school process. Through the numerous factors that this method affects, such as increased student engagement and motivation, it has a direct impact on student achievement, which is the main goal of school improvement and reform plans. "In education, even the most successful school networks and model programs only work in some places, under some circumstances" (Hatch, 2009). Effective change will occur only when the challenges of each individual school are identified and students' perceptions are taken into account.

Polls serve an important role in school reform, because the evaluation of school conditions and programs is necessary for effective change ("Conducting a Comprehensive," 2009; "Developing a Positive School Climate," 2009). These polls can help generate change and inform our nation's policy makers and leaders in education to create meaningful and effective programs, laws, and models of reform. To determine whether online polling is an effective measure of students' perspectives as well as its influence on school improvement, researchers can gather feedback from the principals, students, and teachers to see what, if any, change was implemented as a result of the online student polling.

Student input on topics that help increase their academic performance, such as tutoring, is critical. Students today are continuing to struggle in school and are not getting the help they desperately deserve. "When students fall behind, tutoring is the best form of remediation" (P. Strom \& R. Strom, 2009, p. 67). Education reform plans should encompass tutoring as a prominent component in schools to improve student performance. Providing support for struggling students is an essential part of any school improvement plan ("Designing Effective School Improvement Strategies," 2009).

## CHAPTER 3

## METHOD

The present study examined how adolescent students view tutoring in their schools, as well as the effects of using Internet polls to gather these data. The research conducted used quantitative methods gathering data through an online poll. This data had been previously acquired as part of a larger study which collected data from three middle schools on several topics, including conditions of learning, cyberbullying, and tutoring. School reports of the polls were generated and given to the school principals for further examination. The purpose of this broad study was to acquire information from the students so that schools could use these data to modify and enhance their school improvement plans, as well as to determine the usability of online polling in gathering students' perceptions of issues at school and in school decision-making.

In this research study, the online poll consisted of 16 questions about tutoring and the students' experiences with it. Students in three middle schools were selected to complete this Tutoring Poll using the electronic polling process that could be accessed by the Internet. A chi-square, cross-tabulation method was performed on the aggregated data to examine the relationships between the student variables (gender, ethnicity, age, grade level, local school) and the question responses.

## Setting and Overall School Population

This research study was conducted in a southern suburban town in the U.S. In the selected district, only three of the 10 schools were asked to participate: an elementary school, a middle school, and a junior high school. The selection of these schools was made on the basis of several factors that would enable research studies to be conducted in an efficient and timely manner, such as classification in terms of excelling and high achievement. At the time of the study, all of these schools met the federal mandate of NCLB, attaining their AYP status. Additionally, the demographics across all of the school populations were similar. Boys and girls were equally distributed for each school. The largest ethnicity for the populations of all of the schools was White, followed by Black, Other, Hispanic, Asian, and Native American. However, the grade levels and ages of the students across the total population for each school varied because the types of schools were different.

Elementary school. Located in an affluent neighborhood, this school performs above standard each year. It consists of 1,245 students in Grades 1-6; the percentage of students on free/reduced lunch is $25 \%$. The overall demographics of this school include: 3\% Asian, $18 \%$ Black, $4 \%$ Hispanic, $0.5 \%$ Native American, 74\% White, and 1\% missing/no response. On staff, there are 82 certified adults and 16 support staff.

Middle school. This middle school, containing mostly $5^{\text {th }}$ and $6^{\text {th }}$ graders, has 646 total students with $40.4 \%$ of them on free/reduced lunch status, which qualifies them as a Title 1 school. The overall demographics of the students are
0.5\% Asian, 22\% Black, 2\% Hispanic, $0.5 \%$ Native American, $74 \%$ White, and $1 \%$ missing/no response. The total number of certified staff is 39 , in addition to 10 support staff members.

Junior high school. For the past 8 years, this school is the highest achieving in the district. Its population is 1,152 , making it one of the largest twograde junior high schools in the state; $32 \%$ of its students are on free/reduced lunch. Of this population, the following ethnicities are represented: $1 \%$ Asian, 24\% Black, 2\% Hispanic, 0.5\% Native American, and 73\% White. There are 65 certified staff members and 16 support staff members.

## Participants and Sample Population

Students from each school were asked to participate in this study, except for the students in the elementary school who were not in Grades 5 or 6 . Not all of the students chose to participate in this study, although the majority didabove $68 \%$ of the total school populations. These students (the participants) completed the online Tutoring Poll. The number of students who participated in each school include the following: 585 students in Grades 5 and 6 in the elementary school (percentage not available due to the lack of information for the total number of students in $5^{\text {th }}$ and $6^{\text {th }}$ grades); 441 out of $646(68 \%)$ in the middle school; and 934 out of 1,152 ( $81 \%$ ) in the junior high school. The sample ( $N=$ 1,960 ) from all three schools consists of about $49 \%$ boys and $51 \%$ girls, which accurately reflects each school's sample. The participants come from a variety of ethnic backgrounds, with the majority (above 65\%) being White, followed by

Black, Other, Hispanic, Asian, and Native American; the distribution of ethnic groups across the samples for each school differs only by a few percentage points, indicating the similarity among them. The participants ranged from 10 to 15 years of age and from Grade 5 to Grade 8 .

These aforementioned demographics are representative of suburban towns across the southern part of the country. Even though this sample may not be representative of a larger population, the need to generalize the results of this small sample can be reduced because the results of the polling are specific to each individual school and its plan for reform. It is assumed that students who participated in the poll answered the demographic questions correctly. The demographics and distributions of the sample population are displayed in Tables 1-5. The demographics of the sample participants segregated by each school are described below and are presented in Table 1.

Elementary school. Of the 585 students in the sample, $51 \%$ are male and $48 \%$ are female, with $1 \%$ missing/no response. The distribution of ethnicities includes: 3\% Asian, 15\% Black, 4\% Hispanic, 2\% Native American, 72\% White, $4 \%$ Other, and $1 \%$ missing/no response. The sample $(n=585)$ contains mostly 10 - to 12 -year-olds. Of these, $36 \%$ are age $10,33 \%$ are age 11 , and $27 \%$ are age 12. The majority of participants in this school are in Grades 5 (64\%) and 6 (35\%).

Middle school. In this school, 441 students participated in this study. There is an equal distribution of males (49\%) and females (49\%); 2\% are
missing/no response. The allocation of ethnic groups is as follows: $1 \%$ Asian, 24\% Black, 3\% Hispanic, 1\% Native American, 67\% White, 3\% Other, and 1\% missing/no response. More than three quarters of the participants are ages 11 $(47 \%)$ and $12(33 \%)$; the remaining are age $10(10 \%)$, age $13(7 \%)$, and age 14 (2\%). Just like those in the elementary school, the majority of students in this sample are in Grades $5(59 \%)$ and $6(39 \%) ; 2 \%$ are in Grades 7 or 8.

Junior high school. There are 934 students in this school who participated in this study. Unlike those in the other two schools, the majority of participants here are female (53\%); the males are the minority (46\%). Ethnic percentages are as follows: 3\% Asian, 24\% Black, 3\% Hispanic, 2\% Native American, $65 \%$ White, $3 \%$ Other, and $0.50 \%$ missing/no response. Thirteen yearolds ( $42 \%$ ) and fourteen year-olds ( $37 \%$ ) compose of three quarters of this sample; $10 \%$ are twelve-year-olds, $8 \%$ are fifteen-year-olds, and $2 \%$ are missing/no response. Because this is a junior high school, the bulk of students are in Grades $7(48 \%)$ and $8(50 \%)$, with the remaining $2 \%$ in Grades 5 and 6 or missing/no response.

Table 1
Demographic Characteristics of the Participants for Each School

| Demographic Category |  | Elementary$(n=585)$ |  | $\begin{aligned} & \text { Middle } \\ & (n=441) \end{aligned}$ |  | Junior High$(n=934)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $n$ | \% | $n$ | \% | $n$ | \% |
| Gender |  |  |  |  |  |  |  |
| Male |  | 299 | 51.11 | 216 | 48.97 | 433 | 46.35 |
| Female |  | 281 | 48.03 | 218 | 49.43 | 495 | 52.99 |
| Missing |  | 5 | 0.85 | 7 | 1.58 | 6 | 0.64 |
|  | Total | 585 | 100.00 | 441 | 100.00 | 934 | 100.00 |
| Ethnicity |  |  |  |  |  |  |  |
| Asian |  | 15 | 2.56 | 3 | 0.68 | 27 | 2.89 |
| Black |  | 88 | 15.04 | 106 | 24.03 | 220 | 23.55 |
| Hispanic |  | 22 | 3.76 | 13 | 2.94 | 32 | 3.42 |
| Native Am. |  | 9 | 1.53 | 4 | 0.90 | 17 | 1.82 |
| White |  | 421 | 71.90 | 297 | 67.34 | 604 | 64.66 |
| Other |  | 25 | 4.27 | 15 | 2.56 | 30 | 3.21 |
| Missing |  | 5 | 0.85 | 3 | 0.68 | 4 | 0.42 |
|  | Total | 585 | 100.00 | 441 | 100.00 | 934 | 100.00 |
| Age |  |  |  |  |  |  |  |
| 10 |  | 212 | 36.23 | 45 | 10.20 | 0 | 0.00 |
| 11 |  | 192 | 32.82 | 208 | 47.16 | 1 | 0.10 |
| 12 |  | 157 | 26.83 | 148 | 33.56 | 95 | 10.17 |
| 13 |  | 20 | 3.41 | 31 | 7.02 | 393 | 42.07 |
| 14 |  | 0 | 0.00 | 7 | 1.58 | 347 | 37.15 |
| 15 |  | 1 | 0.17 | 0 | 0.00 | 75 | 8.02 |
| Missing |  | 3 | 0.51 | 2 | 0.45 | 23 | 2.46 |
|  | Total | 585 | 100.00 | 441 | 100.00 | 934 | 100.00 |
| Grade |  |  |  |  |  |  |  |
| 5 |  | 376 | 64.27 | 261 | 59.18 | 5 | 0.53 |
| 6 |  | 203 | 34.70 | 170 | 38.54 | 4 | 0.42 |
| 7 |  | 2 | 0.34 | 4 | 0.90 | 448 | 47.90 |
| 8 |  | 0 | 0.00 | 4 | 0.90 | 471 | 50.42 |
| Missing |  | 4 | 0.68 | 2 | 0.45 | 6 | 0.64 |
|  | Total | 585 | 100.00 | 441 | 100.00 | 934 | 100.00 |

An in-depth analysis for each of the demographic variables is outlined below. Tables 2-5 compare the distribution of a particular demographic variable for each school to provide a clear picture of the demographics of the sample and population

Gender of participants. In the sample for this research study ( $N=$ 1,960), which includes all three schools, there are 948 (49\%) boys and 994 (50\%) girls, with 18 (1\%) who are missing data. The elementary and middle schools both had slightly more boys than girls participate; however, the junior high school had significantly more girls than boys participate. The percentages of the sample in each school, however, are relatively similar to those in their respective school populations. Table 2 shows the distribution of males and females by school. There are two columns for percentages: One is based on the total for each gender, and the other on the total for the sample.

Ethnicity of participants. The percentages shown in Table 3 present the distribution of ethnic groups by school. They are based on the total for each ethnicity and on the total for the sample. The following depicts the percentage of each ethnicity represented in this study: 2\% Asian, 21\% Black, 3\% Hispanic, 2\% Native American, 67\% White, 4\% Other, and 1\% missing/no response. These percentages are reasonably representative of each school's sample and total population.

Age of participants. In terms of age, the sample consists of students who were age 10 (13\%), age 11 (20\%), age 12 (20\%), age 13 (23\%), age 14 (18\%),
age 15 (4\%), and missing/no response (1\%). Ages differ for each school because each one had different grade levels. Table 4 shows the distribution of age by school. The percentages shown are based on the total for each age group and on the total for the sample.

Grade level of participants. Participants in this study are in Grades 5-8. There are $32.76 \%$ in Grade $5,19.23 \%$ in Grade $6,23.16 \%$ in Grade $7,24.23 \%$ in Grade 8 , and $0.61 \%$ missing/no response. Table 5 shows the distribution of grade level by school. The percentages shown are based on the total for each grade level and on the total for the sample.
Table 2
Gender Distribution of the Participants

| School |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  |  | $\begin{aligned} & \text { Female } \\ & (n=994) \end{aligned}$ |  |  | $\begin{aligned} & \text { Missing } \\ & (n=18) \end{aligned}$ |  |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $n$ | \% | $\begin{gathered} \% \text { of } \\ \operatorname{total} N \end{gathered}$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \operatorname{total} N \end{gathered}$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \operatorname{total} N \end{gathered}$ | $n$ | $\begin{gathered} \% \text { of } \\ \operatorname{total} N \end{gathered}$ |
| Elementary |  | 299 | 31.54 | 15.26 | 281 | 28.27 | 14.34 | 5 | 27.78 | 0.26 | 585 | 29.85 |
| Middle |  | 216 | 22.78 | 11.02 | 218 | 21.93 | 11.12 | 7 | 38.89 | 0.36 | 441 | 22.50 |
| Junior High |  | 433 | 45.68 | 22.09 | 495 | 49.80 | 25.26 | 6 | 33.33 | 0.31 | 934 | 47.65 |
|  | Total | 948 | 100.00 | 48.37 | 994 | 100.00 | 50.71 | 18 | 100.00 | 0.92 | 1960 | 100.00 |

Ethnic Distribution of the Participants

|  |  | $\begin{aligned} & \text { Asian } \\ & (n=45) \end{aligned}$ |  |  | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  |  | $\begin{aligned} & \text { Hispanic } \\ & (n=67) \end{aligned}$ |  |  | Native American$(n=30)$ |  |  | $\begin{gathered} \text { White } \\ (n=1322) \end{gathered}$ |  |  | $\begin{aligned} & \text { Other } \\ & (n=70) \end{aligned}$ |  |  | Missing$(n=12)$ |  |  | $\begin{gathered} \text { Total } \\ (N=1,60) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School |  | $n$ | \% | \% of <br> total $N$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ | n | \% | $\%$ of total $N$ | $n$ | \% | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ | $n$ | \% of <br> total $N$ |
| Elementary |  | 15 | 33.33 | 0.77 | 88 | 21.26 | 4.49 | 22 | 32.84 | 1.12 |  | 930.00 | 0.46 | 421 | 31.85 | 21.48 | 25 | 35.71 | 1.28 |  | 541.67 | 0.26 | 585 | 29.85 |
| Middle |  | 3 | 6.67 | 0.15 | 106 | 25.60 | 5.41 | 13 | 19.40 | 0.66 |  | 413.33 | 0.20 | 297 | 22.47 | 15.15 | 15 | 21.43 | 0.77 |  | 25.00 | 0.15 | 41 | 22.50 |
| Junior High |  | 27 | 60.00 | 1.38 | 220 | 53.14 | 11.22 | 32 | 47.76 | 1.63 |  | 756.67 | 0.87 | 604 | 45.69 | 30.82 | 30 | 42.86 | 1.53 |  | 33.33 | 0.20 | 934 | 47.65 |
|  | Total |  | 100.00 | 2.30 | 414 | 100.00 | 21.12 |  | 100.00 | 3.42 |  | 100.00 | 1.53 | 1322 | 100.00 | 67.45 |  | 100.00 | 3.57 |  | 12100.00 | 0.61 | 1,960 | 100.00 |

## Instruments

Polling instruments. Polling is an effective method for gathering information and data on various topics. Much of the literature suggests that using online polls or surveys is an effective means of conducting investigations on and obtaining information about student perceptions (Baggaley et al., 2002; Nevo et al., 2010; Supple, Aquilino, \& Wright, 1999). Polls conducted on the Internet are appealing to adolescents because of the technological features that they utilize (Stock, Davies, \& Wehmeyer, 2004; Supple et al., 1999). Furthermore, Internet polls allow data to be transferred and calculated more easily than do traditional, paper-based surveys, therefore minimizing any miscalculation, missteps, and missing data (Caffray \& Chatterji, 2009; Hallfors et al., 2000; Stock et al., 2004). "Using technology can also reduce non-sampling errors that are sometimes related to tabulation and clerical mistakes" (P. Strom, R. Strom, \& Wing, 2008, p. 296). Web-based or computer-assisted surveys and polls can improve the quality of the data analysis. Paper-based surveys produce more errors and can be time intensive when organizing the data; in addition, these types of surveys do not provide flexibility in the design, and they cost more money (Caffray \& Chatterji, 2009; Schonlau et al., 2002). Generally, surveys and polls conducted on the Web are more effective and efficient in acquiring people's viewpoints.

Tutoring Poll. R. Strom and P. Strom (2002) developed several online polls to gather data on adolescent perceptions about various conditions or issues in the schools. Topics included conditions of learning, cyberbullying, and time
management, as well as tutoring which was used in the present research study. This poll consists of 16 questions about tutoring, with three to seven responses for each one, and four questions about the participants' demographic characteristics (see Appendix A for complete wording of the questions and responses for the Tutoring Poll). Most of the responses provided reflected the students' views and opinions; however, each question also included a selection of "other" that allowed students to type in their own open-ended responses if the ones provided did not accurately portray their views. This is a semi-closed-ended (or semi-open-ended) question format. With these types of questions, one part of the response is predetermined, but the respondent may also give further details in the space provided. Using semi-closed-ended questions helps to suggest possibilities for an answer while allowing freedom of response (Chatterji, 2003; Creswell, 2002). Although the responses to each question are presented in a multiple-choice format, students select more than one option for the majority of the items. An indication of this can be seen in the total frequency of all responses for each question (see Appendices E-I); there are more responses than participants. For example, in Question 1, the frequency of total responses $(f=2,849)$ is much larger than the sample size $(n=1,960)$. This allows participants a less restricted range of selection so that their responses more accurately describe their views. On the last four questions of the poll, however, students could not choose more than one response item, nor could they type in their own answer; these questions, 17-20, on the poll were demographic queries. Here, students indicated their gender,
ethnicity, age, and grade level; a question about school was not included to preserve anonymity and confidentiality. The demographic responses helped to disaggregate the data for statistical analyses.

These online polling instruments, created by R. Strom and P. Strom (2002), cover topics and questions that are relevant to adolescents and can have an impact on their conditions of learning (P. Strom and R. Strom, 2009; R. Strom and P. Strom, 2007). The topic of any survey can impact the participation of the subjects (Groves et al., 2004). The polling questions, which are written in English, underwent careful review and testing to determine their readability. This is important since the participants vary in grade level and reading ability, as well as in their English-speaking skills. Furthermore, the polls were field tested on representatives of the targeted respondents for feedback in the process of constructing and revising questions and response items. The open-ended "other" option, which was available for each question, provided students with the option to type in a view that may not have been depicted. Including this option helped to address content validity-a test's ability to represent all of the content in a particular domain (Cresswell, 2002; Gay \& Airasian, 1992; Rourke \& Kanuka, 2009). General validity-the extent to which a test measures what it is supposed to measure-is reduced when using self-reports; this can be obtained by ensuring that all questions in the survey are not ambiguous in nature. Conducting principal interviews to determine the usefulness and significance of the data from the polls in school improvement and decision-making can also increase the construct
validity or representativeness of the measurement. The measurement used portrays the entire scope of a variable, such as item response (Chatterji, 2003; Rourke \& Kanuka, 2009).

## Procedures

Polling process. The principal of each school used a standardized letter to provide students (and their parents) with information regarding this poll. First, it explained the importance and purpose of this research study, demonstrating how their participation in the poll could have an impact on and improve their school. In addition, it described the procedures for completing this poll, along with the timeline for completion and possible accommodations for English Language Learners. The principals of each school gave the letter to each student. Since this was an informational letter and a voluntary activity, students could decide whether or not they wanted to participate. Those who did choose to participate completed the electronic poll about tutoring via the Internet. The students were given two weeks to complete the Tutoring Poll online, as was stated in the informational letter. The progress of the poll was monitored regularly so that the principal could encourage more students to participate. Principals and teachers also provided time during the school day for students to take the poll in the computer lab or during computer class.

Codes and anonymity. Polling procedures included school codes and individual participant codes that were included with the procedures in the letter; this guaranteed that students could not take the poll more than once, which Nevo
et al. (2010) point out is an important aspect of anonymity. Moreover, all responses were anonymous and confidential, because each student had his or her own password. Much research on surveys, either paper-and-pencil or Web-based, has indicated that the privacy of responses and confidentiality are key factors for students in choosing to participate; these factors can also affect the accuracy of the students' responses (Eaton, Brener, Kann, Denniston, McManus, Kyle, Roberts, Flint, \& Ross, 2010; Greenlaw \& Brown-Welty, 2010; Nevo et al., 2010; Supple et al., 1999; Wright, Aquilino, \& Supple, 1998). Although there was no question about the participants' school on the Tutoring Poll, schools had their own code; this helped with the data analysis and assisted in generating the reports of the poll results for each school.

School reports. When polling was complete, a simple report of the data from each school was generated and given to each principal. Each report contained the Tutoring Poll questions and responses, and the percentage of students who chose that item was neatly displayed in a pictorial bar graph. Responses to the "other" option were listed under each question. Demographics of the student participants (age, gender, ethnicity, and grade level) were also incorporated in the report. The school could then use this valuable information to inform their decision-making and school improvement plans. Principals were encouraged to share the results with its stakeholders, including the students, faculty, parents, community, school district, and school boards.

## Design and Analysis

The quantitative design methods used in this study included both Excel and SPSS computer software. The raw data of the sample $(N=1,960)$ from the online poll were aggregated and transmitted into an Excel file. Subsequently, the data were imported into SPSS for statistical analysis.

The data were then carefully examined for errors, of which a very small percentage was indicated. A few of the students did not complete fields such as gender or ethnicity; these were categorized as missing data in the statistical analyses and tables. Other students reported being 18 or 19 years old or in Grades $9,10,11$, or 12 , which was not accurate, since none of the schools contained students in these groups. Due to the fact that each poll had a date stamp of when the students took the poll, these errors were easily corrected. In addition, there were some typographical errors in the "other" responses; the misspelled words were fixed before running any tests. The demographic categories were represented in SPSS according to their particular label.

While completing this poll, students were able to select multiple responses for each question. The selected answers showed up as a " 1 " in the cells in the Excel file; a " 0 " denoted responses that were not chosen by the participants. The open-ended responses in the "other" option conveyed the students' actual typed answers. Because these types of data are not quantitative, it could not be run through SPSS. Therefore, codes were established for certain general categories contained in each question. Each response was then assigned to a particular code, to represent the category that best fit the nature of the response. Since the "other"
responses were now quantified, the frequencies and percentages could be determined by using a descriptive statistics test in SPSS. The percentages of each category were depicted in a bar graph for each question (see Appendix D).

Through the SPSS program, descriptive statistics and the Pearson chisquare test were performed on the raw data. Descriptive statistics supplied the frequencies and percentages for each response item in each demographic category, as well as the demographic characteristics of the participants in the sample $(N=1960)$, (see Appendices E-I). Since this study uses nominal (categorical) variables such as gender, ethnicity, and age, nonparametric tests must be performed on the data. The chi-square test, which is commonly used for nonparametric statistics, determined whether there was a significant relationship between the two nominal variables: item responses and each of the categorical variables-gender, ethnicity, age, grade, and school (see Table 6). The test uses crosstabs to determine whether the "observed" frequencies are sufficiently different from the "expected" frequencies. When this is the case, then the two variables are significantly related or associated. In other words, there is a statistically significant difference between the two nominal variables (Coldarci, Cobb, Minium, \& Clark, 2008; Creswell, 2002).

## CHAPTER 4

## RESULTS

This study examined the effects of gender, ethnicity, age, grade, and school on a particular response item on a survey. Quantitative measures were used to evaluate the data. First, frequencies and percentages for both the demographics and the item response were explored. Second, the data were analyzed to determine whether a relationship exists between the following variables: response item and each of the demographic categories (gender, ethnicity, age, grade, and school).

## Data Analysis

Descriptive statistics (i.e., mean, frequencies, and standard deviations) were run to illustrate the numbers and percentages of the participants' demographic characteristics, in addition to the frequencies and percentages of each response item on the survey, which are categorized by demographic variable. This helped provide information about the distribution and variation among responses. The descriptive statistics paved the way to the next step in the statistical analysis.

Because the Pearson chi-square test of independence analyzes whether the frequency distributions for two nominal (or categorical) variables are related to each other, it was used in the present study to determine whether the relationship between the nominal independent variables (gender, ethnicity, age, grade, and school) and the nominal dependent variable (response item on the survey) was
significant. In other words, the chi-square test can determine whether there is a significant difference between the effects of nominal independent variables (in this case gender, ethnicity, age, grade, and school) on a nominal dependent variable (response item on the survey). Using the chi-square statistic ( $\chi^{2}$ ) and its associated degrees of freedom ( $d f$ ), the results indicate the probability that the difference between the observed and expected frequencies occurred by chance alone. If the chi-square statistic has a probability ( $p$ value) less than .05 , the difference between the two variables is considered to be significant. In other words, there is less than a $5 \%$ probability that the difference or relationship we observed happened by chance (Coldarci et al., 2008).

The Pearson chi-square test was used because the cells have a frequency of more than five (if one or more of the cells had an expected frequency of five or less, then the Fisher's exact test would be used). Other assumptions of the chisquare test include the following: The data consist of categorical (nominal) variables, and the data consist of the entire population or are randomly sampled from the population (Gay \& Airasian, 1992).

Table 6 displays the chi-square statistics of the data and shows which groups differ by some categorical variable. This analysis used a two-sided chisquare test with the following $p$ values: $p<.05, p<.01$, and $p<.001$. All chisquare statistics displayed indicate significant differences in frequencies (or percentages) of participants in a certain category who selected a response. In other words, the responses by certain groups are independent of each other; there
is a significant relationship between response item and demographic category. Cells without a number represent no significant differences using the two-sided test and the given $p$ values.

Table 6
Differences in Tutoring Poll Responses by Gender, Ethnicity, Age, Grade, and School

| Questions and Responses | Pearson $\chi 2$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gender (1df) | Ethnicity (5df) | $\begin{gathered} \text { Age } \\ (4 d f) \end{gathered}$ | Grade (3df) | School (2df) |
| 1. Most students I know who need tutoring |  |  |  |  |  |
| A. recognize their need and will ask for help |  | 11.19* |  | 10.22* | 16.99*** |
| B. deny they have a problem with the subject | 12.17*** |  | 18.83** | 22.79*** | 16.82*** |
| C. feel embarrassed and refuse to ask for help | 9.47** |  | 22.16*** | 15.12*** | 8.66** |
| D. blame their difficulties on poor teachers |  |  | 107.07*** | 126.02*** | 98.65*** |
| E. other | 8.62** |  | 23.47*** | 17.51*** | 11.84** |
| 2. More students would seek tutoring if |  |  |  |  |  |
| A. it was more convenient and available |  |  | 61.10*** | 63.25*** | 64.19*** |
| B. teachers would offer them this option |  |  |  |  |  |
| C. they cared more about academic success |  | 11.68* | 49.29*** | 53.07*** | 41.18*** |
| D. parents were aware that they needed it | 11.51*** |  |  |  |  |
| E. other | 5.63* |  | 12.52* | 13.94** | 12.49** |
| 3. Seeking help from a tutor |  |  |  |  |  |
| A. shows that I recognize a need for help | 11.18*** |  | 42.01*** | 50.32*** | 46.63*** |
| B. would embarrass me in front of friends |  | 19.61*** |  |  |  |
| C. reflects my desire to learn and succeed | 27.44*** | 12.26* | 30.90*** | 46.58*** | 40.80*** |
| D. helps meet requirements for graduation |  | 15.33** | 14.73* | 10.49* | 8.27** |
| E. other |  |  |  |  |  |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |
| A. automatically be assigned a tutor | 11.57*** |  | 32.10*** | 39.77*** | 48.58*** |
| B. take monthly practice tests | 4.92* | 17.24** | 21.35*** | 23.50*** | $22.31^{* * *}$ |
| C. go to summer school | 6.58* |  | 19.14** | 23.27*** | 7.806* |
| D. access a computer program for help |  | 11.39* | 14.35* | 13.81** | 14.39*** |
| E. other | 5.45* | 13.88* | 27.31*** | 32.31 *** | 40.52*** |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |
| A. right after school | 11.84*** | 17.39** |  |  |  |
| B. during the evening |  |  |  |  |  |
| C. on weekends |  |  |  |  |  |
| D. at lunchtime |  |  | 22.86*** | 21.47*** | 27.06*** |
| E. before school |  |  | 33.45*** | 19.67*** | 53.35*** |
| F. other |  | 17.72** |  |  | 10.05** |

Note. $N=1,960$. Pearson chi-square statistic was used to test the significance levels.
*p <.05. **p <.01. *** $p<.001$.

Table 6 continued

| Questions and Responses |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note. $N=1,960$. Pearson chi-square statistic was used to test the significance levels.
${ }^{*} p<.05$. ${ }^{* *} p<.01$. ***p $<.001$.

Table 6 continued

| Questions and Responses | Pearson $\chi 2$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gender (1df) | $\begin{gathered} \text { Ethnicity } \\ (5 d f) \end{gathered}$ | $\begin{aligned} & \text { Age } \\ & (4 d f) \end{aligned}$ | Grade $(3 d f)$ | School (2df) |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |
| A. arrange for help without delay | 4.82* | 15.05** | 28.51*** | 43.93*** | 42.45*** |
| B. put me off and ignore my request |  | 17.27** | 42.94*** | 35.15*** | 22.08*** |
| C. suggest checking with a counselor |  | 17.37** |  |  | 6.02* |
| D. tell me I should try harder |  |  |  |  |  |
| E. other |  | 28.06*** | 21.69*** | 22.59*** | 28.27*** |
| 12. I prefer a tutor to be |  |  |  |  |  |
| A. my teacher whose class I am struggling in | 20.37*** |  |  | 18.11*** | 9.90** |
| B. another teacher in the same subject area |  |  |  |  | 9.25** |
| C. someone from a tutoring company |  |  |  |  |  |
| D. classmates who know the subject |  | 24.49*** | 20.15*** | 21.07*** |  |
| E. other |  |  | 13.61** | 9.98* | 7.95* |
| 13. My school should let students know about tutoring |  |  |  |  |  |
| A. at orientation and in the handbook | 20.24*** |  | 52.33*** | 60.58*** | 52.87*** |
| B. on the school Website |  | 19.43** |  |  | 11.66** |
| C. on daily announcements | 5.60* | 11.93* | 56.78*** | 52.79*** | 88.22*** |
| D. other | 13.68*** | 16.82** | 24.35*** | 23.51 *** | $19.91^{* * *}$ |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |
| A. mathematics | 13.67*** |  |  |  |  |
| B. English | 9.30** |  | 38.07*** | 58.98*** | 36.94*** |
| C. science | 21.28*** | 12.13* | 34.13*** | 47.18*** | 50.93*** |
| D. social studies | 5.28* | 11.52* | 22.12*** | 21.41 *** | 26.90*** |
| E. other | 13.16*** | 21.77*** | 75.77*** | 83.60*** | 85.01*** |
| 15. Students should receive school report cards showing |  |  |  |  |  |
| A. progress of students who receive tutoring | 4.56* |  |  | 12.74** | 6.96* |
| B. gains of tutored students in subjects |  |  | 28.98*** | 52.70*** | 25.15*** |
| C. number of drop outs \& if they had tutoring |  |  | 14.23** | 12.03** | $16.38^{* * *}$ |
| D. comments by students about tutoring | 10.47*** | 15.99** |  |  |  |
| E. other | 5.30* |  |  |  |  |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |
| A. in the subjects that I understand well | 23.83*** | 15.40** | 19.58*** | 13.72** |  |
| B. to help students who don't speak English |  | 23.38*** |  | 8.13* | 9.78** |
| C. to help students with learning disabilities | 17.74*** | 11.39* |  |  | 10.26** |
| D. for classmates in my cooperative group |  |  |  | 13.20** |  |
| E. other |  |  |  |  |  |

Note. $N=1,960$. Pearson chi-square statistic was used to test the significance levels.
*p<.05. **p<.01. ***p<.001.

Tables 7-11 portray the frequency and percentage totals for questions with high response rate (the majority picked that response) in relation to the particular categorical variable. For example, this would show how many girls, out of the total population of girls, chose a certain response (i.e., the proportion of girls who selected a response).

Appendices E-I display the data for the frequencies and percentages of each question by one of the categorical variables. Each factor within the variable contains a column with frequency count and percentage. The column, percent (\%), shows the percentage of frequency of the categorical variable out of the total frequency of responses for that question. For example, it represents the total number of boys, out of the total frequency of responses for that question, who picked that particular answer. These tables of frequencies and percentages best depict the data for each demographic or categorical variable. This method of reporting was chosen because it is an effective way to relate the data according to each of the variables to educators and to others in the field. Items with "other response" are organized and detailed in Appendix D. Similar responses were grouped together in a particular category; the percentages of responses are displayed for each category.

The significant results of the statistical analyses conducted in this study are explained and organized by research question and categorical variable. They will be discussed in terms of items with a high response rate and of items with significant chi-square values pertaining to the following $p$ values: $p<.05, p<.01$,
$p<.001$. When the chi-square value is significant, it means that there is a $95 \%$, $99 \%$, and over $99 \%$ probability that the relationship between the two variables did not happen by chance alone.

## Research Question 1: How are Student Perceptions Reported on the Tutoring Poll Influenced by Gender?

There were three responses that were statistically significant in Question 1 (Most students I know who need tutoring). For Item B (deny they have a problem with the subject), the difference in gender and response was significant, $\chi^{2}(1, N=$ $1,960)=12.17, p<.001$. There were more boys (26\%) than girls (19\%) who said that most students who need tutoring deny they have a problem. In Item C (feel embarrassed and refuse to ask for help), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=9.47, p<.01$. More girls $(27 \%)$ than boys ( $24 \%$ ) said that the majority of students feel embarrassed or refuse to ask for help even if they need it, which also depicts an item with a high response rate for this question. The difference in gender and response for Item E (other) was significant, $\chi^{2}(1, N=1,960)=8.62, p<.01$. There were more girls $(10 \%)$ than boys ( $7 \%$ ) who provided their own individual responses to the question. There was no significant difference in Item A (recognize their need and will ask for help). This item, however, had a high response rate; there were an equal number of boys ( $27 \%$ ) and girls ( $27 \%$ ) who said they would get tutoring if they cared more about their success in school.

For Question 2 (More students would seek tutoring if), there were two responses that were statistically significant. For Item D (parents were aware that they needed it), the difference in gender and response was significant, $\chi^{2}(1, N=$ $1,960)=11.51, p<.001$. There were more girls (27\%) than boys ( $25 \%$ ) who said that they would seek tutoring if their parents were aware of their struggles in school. In Item E (other response), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=5.63, p<.05$. More girls $(9 \%)$ than boys $(7 \%)$ provided individual responses to the question. There was no significant difference in Item C (they cared more about academic success). This item, however, had a high response rate: More boys (33\%) than girls (28\%) said that they would get tutoring if they cared more about their success in school.

For Question 3 (Seeking help from a tutor), there were two responses that were statistically significant. For Item A (shows that I recognize a need for help), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=11.18, p$ $<.001$. There were an equal number of girls ( $36 \%$ ) and of boys ( $36 \%$ ) who said that tutoring shows that an individual recognizes the need for help; this item also had a high response rate. In Item C (reflects my desire to learn and succeed), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=$ 27.44, $p<.001$. More girls (31\%) than boys ( $23 \%$ ) said that getting help from a tutor reflects their desire to learn and succeed.

Question 4 (When students fail a class or a test required to graduate, they should) had four responses that were statistically significant. For Item A
(automatically be assigned a tutor), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=11.57, p<.001$. There were more girls $(34 \%)$ than boys (31\%) who said that when students fail a class or test, they should automatically get a tutor. This item also had a response rate that was very high in comparison with the other options. In Item B (take monthly practice tests), there was a significant different in gender and response, $\chi^{2}(1, N=1,960)=4.92, p<$ .05. More girls (21\%) than boys (20\%) said that students should take monthly practice tests when they fail a class or a test.

In Question 5 (The most convenient time for me to attend tutoring sessions is), there was one response that was significant. For Item A (right after school), the difference in gender and response was statistically significant, $\chi^{2}(1, N=$ $1,960)=11.84, p<.001$. More girls (41\%) than boys (40\%) said that the best time for them to have a tutoring session was right after school.

In Question 6 (If I told my friends that I was going to get tutoring), there were four responses that were significant. For Item A (they would make fun of $m e)$, there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=$ 46.77, $p<.001$. More boys (23\%) than girls (13\%) said that their friends would make fun of them if they told them that they were meeting with a tutor. In Item B (they would try to talk me out of it), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=7.67, p<.01$. There were more boys $(12 \%)$ than girls ( $9 \%$ ) who said that their friends would try to talk them out of getting a tutor if they told them. For Item C (they would suggest I drop the course), there was a
significant difference in gender and response, $\chi^{2}(1, N=1,960)=7.48, p<.01$. More boys (8\%) than girls (5\%) said that if they told their friends that they were getting tutoring, then their friends would suggest to them that they drop the course. In Item D (they would encourage my efforts), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=64.22, p<.001$. There were more girls (52\%) than boys (39\%) who said that their friends would encourage their efforts if they told them that they were getting tutoring.

In Question 7 (If I told my parents that I was going to get tutoring), there were two responses that were significant. For Item C (they would allow me to make the decision), there was a significant difference in gender and response, $\chi^{2}$ $(1, N=1,960)=7.74, p<.01$. There were more girls (32\%) than boys (31\%) who said that their parents would allow them to make the decision for themselves about having a tutor. In Item E (other), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=12.81, p<.001$. More girls $(9 \%)$ than boys $(5 \%)$ said that their parents would react in a different, unlisted manner. There was no significant difference in Item B (they would encourage my efforts). This item, however, had a high response rate: More boys (45\%) than girls (44\%) said that they would get tutoring if they cared more about their success in school.

In Question 8 (The reasons I would seek a tutor are), there were five responses that were significant. For Item A (poor listening habits in class), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=4.49, p<$ .05. There were more boys ( $17 \%$ ) than girls ( $13 \%$ ) who said that they would seek
a tutor because they had poor listening habits in class. In Item C (difficulty focusing because of disruptions), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=5.71, p<.05$. There was an equal number of girls (22\%) and of boys ( $22 \%$ ) who said that they needed a tutor because of difficulty focusing due to disruptions. For Item D (my teacher doesn't explain material well), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)$ $=11.19, p<.001$. More girls $(16 \%)$ than boys $(14 \%)$ said that they needed a tutor because their teacher was not explaining the materials well enough. In Item E (trouble reading or remembering materials), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=4.32, p<.05$. There was an equal number of girls (19\%) and of boys (19\%) who said that they would seek a tutor because they had trouble reading or remembering the materials. For Item G (other), there was a significant difference in gender and response, $\chi^{2}(1, N=$ $1,960)=7.04, p<.01$. There were more girls (12\%) than boys ( $9 \%$ ) who said that there was a different reason that they would seek out a tutor.

In Question 9 (If I were to seek help, I would prefer), there were two responses that were significant. In Item B (one on one with a tutor), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=24.06, p<.001$. There were more girls (51\%) than boys (46\%) who said that they would like to have one-on-one sessions with a tutor if they did seek help. For Item D (video lessons to watch and repeat), the difference in gender and response was
significant, $\chi^{2}(1, N=1,960)=5.66, p<.05$. More boys ( $9 \%$ ) than girls ( $6 \%$ ) said that they would prefer video lessons that could be watched and repeated.

In Question 10 (If a subject is difficult to understand, I), there were five responses that were significant. For Item A (ask the teacher questions), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=8.78, p<.01$. There were equal amounts of girls (48\%) and of boys (48\%) who said that they ask their teacher questions if they find a subject difficult to understand. In Item B (meet with my counselor), the difference in gender and response was statistically significant, $\chi^{2}(1, N=1,960)=8.56, p<.01$. More boys (6\%) than girls (3\%) said that they met with their counselor if a subject was difficult. For Item C (ask classmates or friends for help), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=8.90, p<.01$. There were more girls $(35 \%)$ than boys (34\%) who said that they would ask a classmate for help if they had trouble understanding a subject. In Item D (seek no help even though I may fail), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=4.72, p<$ .05. More boys (7\%) than girls (4\%) said that they would not seek out any help with a difficult subject, even with the knowledge that they might fail. For Item E (other), there was a significant difference in gender and response, $\chi^{2}(1, N=$ $1,960)=17.08, p<.001$. There were more girls (10\%) than boys (6\%) who said that they would pursue other means than tutoring for a difficult subject.

In Question 11 (When I request tutoring, my teacher[s]), there was one response that was significant. In Item A (arrange for help without delay), there
was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=4.82, p<$ .05. More girls (39\%) than boys (37\%) said that their teachers help arrange for help when they request tutoring.

In Question 12 (I prefer a tutor to be), there was one response that was significant. For Item A (my teacher whose class I am struggling in), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=20.37, p<.001$. There were more girls (39\%) than boys (34\%) who that said they wanted their tutor to be their teacher from the class that they were having trouble with.

In Question 13 (My school should let students know about tutoring), there were three responses that were significant. In Item A (at orientation and in the handbook), there was a significant difference in gender and response, $\chi^{2}(1, N=$ $1,960)=20.24, p<.001$. There were more girls $(26 \%)$ than boys $(24 \%)$ who said that they would like to learn about tutoring from the handbook distributed at orientation. For Item C (on daily announcements), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=5.60, p<.05$. More boys $(37 \%)$ than girls (34\%) said that they would like learn about tutoring on the daily announcements. In Item D (other), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=13.68, p<.001$. There were more girls ( $9 \%$ ) than boys (5\%) who said that they would choose a different option than the ones listed. There was no significant difference in Item B (on the school Website). This item, however, had a high response rate: More boys (34\%) than girls (30\%) said that they would get tutoring if they cared more about their success in school.

In Question 14 (The subject[s] in which I am most likely to seek tutoring are), there were five responses that were significant. For Item A (mathematics), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=13.67, p$ $<.001$. More girls (30\%) than boys (27\%) said that if they got a tutor, it would be for mathematics. In Item B (English), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=9.30, p<.01$. There were more boys $(22 \%)$ than girls (16\%) who said that if they were to get a tutor, it would be for English. For Item C (science), the difference in gender and response was significant, $\chi^{2}(1, N=$ $1,960)=21.28, p<.001$. More girls $(24 \%)$ than boys (19\%) said that if they were to get a tutor for any subject, it would be science. In Item D (social studies), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=5.28, p<$ .05. There were more girls (14\%) than boys (12\%) who said that if they were to get a tutor it would be for social studies. For Item E (other), the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=13.16, p<.001$. More boys (20\%) than girls ( $16 \%$ ) said that if they were to get a tutor, it would be for a different subject then the ones listed.

In Question 15 (Students should receive school report cards showing), there were three responses that were significant. In Item A (group progress of tutored students), there was a significant difference in gender and response, $\chi^{2}(1$, $N=1,960)=4.56, p<.05$. There were more girls (31\%) than boys (30\%) who said that they thought that students' report cards should show the group progress of students who were tutored. For Item D (comments by students about tutoring),
the difference in gender and response was significant, $\chi^{2}(1, N=1,960)=10.47, p$ $<.001$. More girls ( $26 \%$ ) than boys ( $24 \%$ ) said that their report cards should show comments from students who were tutored. In Item E (other), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=15.30, p<.05$. There were more girls (7\%) than boys (5\%) who said that their report cards should show something other than the choices. There was no significant difference in Item B (gains that tutored students make in subjects). This item, however, had a high response rate: More boys (30\%) than girls (27\%) said that they would get tutoring if they cared more about their success in school.

In Question 16 (I am willing to volunteer as a tutor), there were two responses that were significant. For Item A (in the subjects that I understand well), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)$ $=23.83, p<.001$. More boys (48\%) than girls (47\%) said that they would be willing to volunteer as a tutor in subjects that they felt they understood well. In Item C (to help students with learning disabilities), the difference in gender and response was statistically significant, $\chi^{2}(1, N=1,960)=17.74, p<.001$. There were more girls ( $20 \%$ ) than boys ( $18 \%$ ) who said that they would be willing to volunteer as a tutor to help students with learning disabilities.

## Research Question 2: How are Student Perceptions Reported on the

## Tutoring Poll Influenced by Ethnicity?

There was one response that was statistically significant in Question 1 (Most students I know who need tutoring). For Item A (recognize they have a
problem with the subject), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=11.19, p<.05$. This item also had a high response rate, as indicated in the percentages of ethnic groups: Asian (30\%), Black (31\%), Hispanic (20\%), Native American (39\%), White (26\%), and Other (25\%). Although Item C (feel embarrassed and refuse to ask for help) was not statistically significant, it did have a high response rate: Asian (26\%), Black (26\%), Hispanic (30\%), Native American (30\%), White (26\%), and Other (27\%). Although Item C (feel embarrassed and refuse to ask for help) was not statistically significant, it did have a high response rate: Asian (26\%), Black (26\%), Hispanic (30\%), Native American (30\%), White (26\%), and Other (27\%). There was one response that was statistically significant in Question 2 (More students would seek tutoring if). For Item C (they cared more about their academic success), the difference in ethnicity and response was significant, $\chi^{2}(1$, $N=1,960)=11.68, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (29\%), Black (29\%), Hispanic (27\%), Native American (24\%), White (31\%), and Other (29\%). Although Item D (parents were aware that they needed it) was not statistically significant, it did have a high response rate: Asian (24\%), Black (25\%), Hispanic (27\%), Native American (30\%), White (26\%), and Other (30\%).

In Question 3 (Seeking help from a tutor), there were three responses that were statistically significant. For Item B (would embarrass me in front of friends), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=19.61$,
$p<.001$. The percentages of ethnic groups were distributed as follows: Asian (11\%), Black (9\%), Hispanic (13\%), Native American (33\%), White (10\%), and Other (9\%). In Item C (reflects my desire to learn and succeed), there was a significant difference in gender and response, $\chi^{2}(1, N=1,960)=12.26, p<.05$. This item also had a high response rate: Asian (24\%), Black (24\%), Hispanic (27\%), Native American (13\%), White (25\%), and Other (31\%). For Item D (helps meet requirements for graduation), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=15.33, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (22\%), Black (23\%), Hispanic (15\%), Native American (15\%), White (24\%), and Other (26\%). Item A (shows that I recognize a need for help) was not statistically significant. It did, however, have a high response rate: Asian (41\%), Black (39\%), Hispanic (34\%), Native American (28\%), White (35\%), and Other (30\%).

In Question 4 (When students fail a class or a test required to graduate, they should), there were three responses that were statistically significant. For Item B (take monthly practice tests), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=17.24, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (24\%), Black (17\%), Hispanic (20\%), Native American (15\%), White (21\%), and Other (25\%). In Item D (access a computer program for help), there was a difference in ethnicity and response, $\chi^{2}(1, N=$ $1,960)=11.39, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (20\%), Black (14\%), Hispanic (13\%), Native American (17\%),

White (17\%), and Other (17\%). For Item E (other), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=13.88, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (9\%), Black (9\%), Hispanic (16\%), Native American (13\%), White (11\%), and Other (11\%). Item A (automatically be assigned a tutor) was not statistically significant. It did, however, have a high response rate: Asian (33\%), Black (37\%), Hispanic (26\%), Native American (28\%), White (32\%), and Other (29\%).

For Question 5 (The most convenient time for me to attend tutoring sessions is), there were two responses that were statistically significant. For Item A (right after school), the difference in ethnicity and response was significant, $\chi^{2}$ $(1, N=1,960)=17.39, p<.01$. This item also had a high response rate, as indicated in the following percentages: Asian (48\%), Black (45\%), Hispanic (38\%), Native American (34\%), White (39\%), and Other (36\%). In Item F (other), there was a significant difference in ethnicity and response, $\chi^{2}(1, N=$ $1,960)=17.72, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (4\%), Black (7\%), Hispanic (15\%), Native American (13\%), White (12\%), and Other (8\%). Item E (before school) was not statistically significant. It did, however, have a high response rate: Asian (14\%), Black (18\%), Hispanic (14\%), Native American (15\%), White (20\%), and Other (19\%).

In Question 6 (If I told my friend that I was going to get tutoring), there were two responses that were statistically significant. For Item B (they would try to talk me out of it), the difference in ethnicity and response was significant, $\chi^{2}(1$,
$N=1,960)=14.61, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (11\%), Black (9\%), Hispanic (14\%), Native American (20\%), White (10\%), and Other (15\%). In Item C (they would suggest I drop the course), there was a significant difference in ethnicity and response, $\chi^{2}(1, N=1,960)=$ $15.03, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (9\%), Black (6\%), Hispanic (6\%), Native American (16\%), White (6\%), and Other (11\%). Item D (they would encourage my efforts) was not statistically significant. It did, however, have a high response rate: Asian (45\%), Black (47\%), Hispanic (43\%), Native American (31\%), White (46\%), and Other (47\%).

In Question 7 (If I told my parents that I was going to get tutoring), there were two responses that were statistically significant. For Item A (they would suggest I drop the class), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=33.18, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (6\%), Black (3\%), Hispanic (8\%), Native American (9\%), White (1\%), and Other (5\%). In Item B (they would encourage my efforts), there was a significant difference in ethnicity and response, $\chi^{2}(1, N=1,960)=$ $14.02, p<.01$. This item also had a high response rate, as indicated in the following percentages: Asian (39\%), Black (44\%), Hispanic (40\%), Native American (40\%), White (45\%), and Other (41\%). Item C (they would allow me to make the decision) was not statistically significant. It did, however, have a high response rate: Asian (33\%), Black (30\%), Hispanic (26\%), Native American ( $24 \%$ ), White (32\%), and Other (30\%).

In Question 8 (The reasons I would seek a tutor are), there were two responses that were statistically significant. For Item B (excessive absences from class), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=$ $13.24, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (10\%), Black (8\%), Hispanic (4\%), Native American (14\%), White (6\%), and Other (10\%). In Item G (other), there was a significant difference in ethnicity and response, $\chi^{2}(1, N=1,960)=12.14, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (8\%), Black (10\%), Hispanic (11\%), Native American (10\%), White (11\%), and Other (8\%). Item C (difficulty focusing because of disruptions) was not statistically significant. It did, however, have a high response rate: Asian (18\%), Black (22\%), Hispanic (23\%), Native American (27\%), White (22\%), and Other (21\%).

In Question 9 (If I were to seek help, I would prefer), there were three responses that were statistically significant. For Item B (one on one with a tutor), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=16.31$, $p<.01$. This item also had a high response rate, as indicated in the following percentages: Asian (54\%), Black (63\%), Hispanic (21\%), Native American (28\%), White (48\%), and Other (39\%). In Item D (video lessons to watch and repeat), there was a difference in ethnicity and response, $\chi^{2}(1, N=1,960)=$ 23.15, $p<.001$. The percentages of ethnic groups were distributed as follows: Asian (14\%), Black (9\%), Hispanic (5\%), Native American (11\%), White (7\%), and Other (16\%). For Item E (other), the difference in ethnicity and response was
significant, $\chi^{2}(1, N=1,960)=19.34, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (4\%), Black (5\%), Hispanic (2\%), Native American (11\%), White (4\%), and Other (4\%).

For Question 10 (If a subject is difficult to understand, I), there were four responses that were statistically significant. For Item A (ask the teacher questions), the difference in ethnicity and response was significant, $\chi^{2}(1, N=$ $1,960)=26.62, p<.001$. This item also had a high response rate, as indicated in the following percentages: Asian (40\%), Black (57\%), Hispanic (49\%), Native American (23\%), White (47\%), and Other (47\%). In Item B (meet with my counselor), there was a difference in ethnicity and response, $\chi^{2}(1, N=1,960)=$ $36.83, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (9\%), Black (5\%), Hispanic (2\%), Native American (16\%), White (3\%), and Other (8\%). For Item C (ask classmates or friends for help), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=42.50, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (4\%), Black (5\%), Hispanic (2\%), Native American (11\%), White (4\%), and Other (4\%). In Item E (other), there was a difference in ethnicity and response, $\chi^{2}(1, N=1960)=18.40$, $p<.01$. The percentages of ethnic groups were distributed as follows: Asian (7\%), Black (5\%), Hispanic (10\%), Native American (14\%), White (9\%), and Other (2\%).

In Question 11 (When I request tutoring, my teacher[s]), there were four responses that were statistically significant. For Item A (arrange for help without
delay), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)$ $=15.05, p<.01$. This item also had a high response rate, as indicated in the following percentages: Asian (47\%), Black (40\%), Hispanic (24\%), Native American (39\%), White (38\%), and Other (33\%). In Item B (put me off and ignore my request), there was a difference in ethnicity and response, $\chi^{2}(1, N=$ $1,960)=17.27, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (8\%), Black (8\%), Hispanic (9\%), Native American (19\%), White (6\%), and Other (12\%). For Item C (suggest checking with my counselor), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=17.37, p<$ .01. The percentages of ethnic groups were distributed as follows: Asian (16\%), Black (12\%), Hispanic (28\%), Native American (11\%), White (13\%), and Other (15\%). In Item E (other), there was a difference in ethnicity and response, $\chi^{2}(1, N$ $=1,960)=28.06, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (6\%), Black (11\%), Hispanic (13\%), Native American (14\%), White (19\%), and Other (11\%).

There was one response that was statistically significant $(f=2,849)$ in Question 12 (I prefer a tutor to be). For Item D (classmates who know the subject), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)$ $=24.49, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (20\%), Black (18\%), Hispanic (19\%), Native American (17\%), White (25\%), and Other (28\%). Although Item A (my teacher whose class I am struggling in) was not statistically significant, it did have a high response rate:

Asian (37\%), Black (39\%), Hispanic (37\%), Native American (31\%), White (37\%), and Other (29\%).

In Question 13 (My school should let students know about tutoring), there were three responses that were statistically significant. For Item B (on the school Website), the difference in ethnicity and response was significant, $\chi^{2}(1, N=$ $1,960)=19.43, p<.01$. This item also had a high response rate: Asian (37\%), Black (30\%), Hispanic (26\%), Native American (32\%), White (33\%), and Other (29\%). In Item C (on daily announcements), there was a difference in ethnicity and response, $\chi^{2}(1, N=1,960)=11.93, p<.05$. This item also had a high response rate, as indicated in the percentages: Asian (33\%), Black (42\%), Hispanic (33\%), Native American (29\%), White (34\%), and Other (34\%). For Item D (other), the difference in ethnicity and response was significant, $\chi^{2}(1, N=$ $1,960)=16.82, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (4\%), Black (4\%), Hispanic (14\%), Native American (13\%), White (8\%), and Other (8\%).

For Question 14 (The subject[s] in which I am most likely to seek tutoring are), there were three responses that were statistically significant. For Item C (science), the difference in ethnicity and response was significant, $\chi^{2}(1, N=$ $1,960)=12.13, p<.05$. This item also had a high response rate, as indicated in the following percentages: Asian (24\%), Black (26\%), Hispanic (20\%), Native American (27\%), White (21\%), and Other (19\%). In Item D (social studies), there was a difference in ethnicity and response, $\chi^{2}(1, N=1,960)=11.52, p<.05$. The
percentages of ethnic groups were distributed as follows: Asian (18\%), Black (14\%), Hispanic (15\%), Native American (15\%), White (12\%), and Other (20\%). For Item E (other), the difference in ethnicity and response was significant, $\chi^{2}(1$, $N=1,960)=21.77, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (15\%), Black (13\%), Hispanic (18\%), Native American (10\%), White (20\%), and Other (18\%). Item A (mathematics) was not statistically significant. It did, however, have a high response rate: Asian (19\%), Black (30\%), Hispanic (26\%), Native American (23\%), White (29\%), and Other (25\%).

There was one response that was statistically significant $(f=2,849)$ in Question 15 (Students should receive school report cards showing). For Item D (comments by students about tutoring), the difference in ethnicity and response was significant, $\chi^{2}(1, N=1,960)=15.99, p<.01$. The percentages of ethnic groups were distributed as follows: Asian (18\%), Black (21\%), Hispanic (8\%), Native American (42\%), White (6\%), and Other (7\%). Although Item A (progress of students who receive tutoring) was not statistically significant, it did have a high response rate: Asian (29\%), Black (36\%), Hispanic (36\%), Native American (22\%), White (29\%), and Other (38\%). Also, Item B (gains of tutored students in subjects) was not statistically significant. It did, however, have a high response rate: Asian (37\%), Black (28\%), Hispanic (36\%), Native American (18\%), White (29\%), and Other (28\%).

In Question 16 (I am willing to volunteer as a tutor), there were three responses that were statistically significant. For Item A (in the subjects I
understand well), the difference in ethnicity and response was significant, $\chi^{2}(1, N$ $=1,960)=15.40, p<.01$. This item also had a high response rate, as indicated in the following percentages: Asian (43\%), Black (48\%), Hispanic (45\%), Native American (36\%), White (49\%), and Other (42\%). In Item B (to help students who don't speak English), there was a difference in ethnicity and response, $\chi^{2}(1, N=$ $1,960)=23.38, p<.001$. The percentages of ethnic groups were distributed as follows: Asian (18\%), Black (12\%), Hispanic (19\%), Native American (11\%), White (9\%), and Other (13\%). For Item C (to help students with learning disabilities), the difference in ethnicity and response was significant, $\chi^{2}(1, N=$ $1,960)=11.39, p<.05$. The percentages of ethnic groups were distributed as follows: Asian (17\%), Black (21\%), Hispanic (11\%), Native American (31\%), White (18\%), and Other (22\%).

## Research Question 3: How are Student Perceptions Reported on the

 Tutoring Poll Influenced by Age?There were four responses that were statistically significant in Question 1 (Most students I know who need tutoring). For Item B (deny they have a problem with the subject), the difference in age and response was significant, $\chi^{2}(1, N=$ $1,960)=16.82, p<.001$. The percentages of age groups were distributed as follows: age 10 ( $21 \%$ ), age 11 (19\%), age 12 (22\%), age 13 (22\%), age 14 ( $25 \%$ ), and age 15 (28\%). In Item C (feel embarrassed and refuse to ask for help), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=8.66, p<.01$. This item also had a high response rate: age 10 (23\%), age 11 (27\%), age 12
(29\%), age 13 (27\%), age 14 (23\%), and age 15 (20\%). For Item D (blame their difficulties on poor teachers), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=98.65, p<.001$. The percentages of age groups were distributed as follows: age 10 (7\%), age 11 (10\%), age 12 (15\%), age 13 (22\%), age 14 (23\%), and age 15 (20\%). In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=11.84, p<.01$. The percentages of age groups were distributed as follows: age 10 (15\%), age 11 (12\%), age 12 (8\%), age 13 (7\%), age 14 (5\%), and age 15 (8\%). Although Item A (recognize their need and will ask for help) was not statistically significant, it did have a high response rate: age 10 (34\%), age 11 (32\%), age 12 (27\%), age 13 (22\%), age 14 (25\%), and age 15 ( $25 \%$ ).

In Question 2 (More students would seek tutoring if), there were three responses that were statistically significant. For Item A (it was more convenient and available), the difference in age and response was significant, $\chi^{2}(1, N=$ $1,960)=64.19, p<.001$. The percentages of age groups were distributed as follows: age 10 (11\%), age 11 (15\%), age 12 (17\%), age 13 (22\%), age 14 (22\%), and age 15 (23\%). In Item C (they cared more about academic success), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=41.18, p<.001$. This item also had a high response rate, as indicated in the percentages of age groups: age 10 (26\%), age 11 (27\%), age 12 (32\%), age 13 (31\%), age 14 (34\%), and age 15 (30\%). For Item E (other), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=12.49, p<.01$. The percentages of age groups were
distributed as follows: age 10 (11\%), age 11 (11\%), age 12 (8\%), age 13 (6\%), age 14 (5\%), and age 15 (6\%). Item D (parents were aware that they needed it) was not statistically significant. It did, however, have a high response rate: age 10 (31\%), age 11 (29\%), age 12 (24\%), age 13 (25\%), age 14 (24\%), and age 15 (20\%).

Question 3 (Seeking help from a tutor) had three responses that were statistically significant. For Item A (shows that I recognize a need for help), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=42.01, p<.001$. This item also had a high response rate: age 10 (35\%), age 11 (35\%), age 12 (34\%), age 13 (38\%), age 14 (37\%), and age 15 (40\%). In Item C (reflects my desire to learn and succeed), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=30.90, p<.001$. The percentages of age groups were distributed as follows: age 10 (22\%), age 11 (24\%), age 12 (25\%), age 13 (26\%), age 14 (27\%), and age 15 (24\%). For Item D (helps meet requirements for graduation), the difference in age and response was significant, $\chi^{2}(1, N=1,960)$ $=14.73, p<.05$. The percentages of age groups were distributed as follows: age $10(27 \%)$, age $11(22 \%)$, age $12(25 \%)$, age $13(23 \%)$, age $14(24 \%)$, and age 15 (18\%).

There were five responses that were statistically significant in Question 4 (When students fail a class or a test required to graduate, they should). For Item A (automatically be assigned a tutor), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=32.10, p<.001$. This item also had a high response
rate, as indicated in the percentages: age 10 (29\%), age 11 (33\%), age 12 (31\%), age 13 (35\%), age 14 (34\%), and age 15 (34\%). In Item B (take monthly practice tests), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=$ $21.35, p<.001$. This item also had a high response rate: age 10 (22\%), age 11 (18\%), age 12 (20\%), age 13 (23\%), age 14 (20\%), and age 15 (20\%). For Item C (go to summer school), the difference in age and response was significant, $\chi^{2}(1, N$ $=1,960)=19.14, p<.01$. The percentages of age groups were distributed as follows: age 10 ( $15 \%$ ), age 11 (19\%), age 12 (22\%), age 13 ( $18 \%$ ), age $14(20 \%)$, and age $15(25 \%)$. In Item D (access a computer program for help), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=14.35, p<.05$. The percentages of age groups were distributed as follows: age 10 (17\%), age 11 (16\%), age 12 (16\%), age 13 (17\%), age 14 (19\%), and age 15 (13\%). In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=$ 27.31, $p<.001$. The percentages of age groups were distributed as follows: age 10 (19\%), age 11 ( $15 \%$ ), age 12 ( $12 \%$ ), age 13 (7\%), age 14 (7\%), and age $15(8 \%)$.

Question 5 (The most convenient time for me to attend tutoring sessions is) had two responses that were statistically significant. For Item D (at lunchtime), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=22.86, p<$ .001. The percentages of age groups were distributed as follows: age 10 (6\%), age 11 (5\%), age 12 (7\%), age 13 (10\%), age 14 ( $09 \%$ ), and age 15 ( $15 \%$ ). In Item E (before school), there was a significant difference in age and response, $\chi^{2}(1, N=$ $1,960)=33.45, p<.001$. The percentages of age groups were distributed as
follows: age 10 (11\%), age 11 (21\%), age 12 (18\%), age 13 (21\%), age 14 (24\%), and age 15 (23\%). Item A (right after school) was not statistically significant. It did, however, have a high response rate: age 10 (45\%), age 11 (44\%), age 12 (41\%), age 13 (40\%), age 14 (39\%), and age 15 (38\%).

In Question 6 (If I told my friends that I was going to get tutoring), there were three responses that were statistically significant. For Item A (they would make fun of $m e$ ), the difference in age and response was significant, $\chi^{2}(1, N=$ $1,960)=11.36, p<.05$. The percentages of age groups were distributed as follows: age 10 (14\%), age 11 (21\%), age 12 (16\%), age 13 ( $17 \%$ ), age 14 ( $20 \%$ ), and age 15 (22\%). In Item B (they would try to talk me out of it), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=16.00, p<.01$. The percentages of age groups were distributed as follows: age $10(9 \%)$, age $11(9 \%)$, age 12 (8\%), age 13 (12\%), age 14 (12\%), and age 15 (18\%). For Item C (they would suggest I drop the class), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=22.86, p<.001$. The percentages of age groups were distributed as follows: age $10(3 \%)$, age $11(4 \%)$, age $12(5 \%)$, age $13(8 \%)$, age 14 (9\%), and age 15 (10\%). Item D (right after they would encourage my efforts)was not statistically significant. It did, however, have a high response rate: age $10(49 \%)$, age $11(46 \%)$, age $12(50 \%)$, age $13(45 \%)$, age $14(44 \%)$, and age 15 (36\%).

There were four responses that were statistically significant in Question 7 (If I told my parents that I was going to get tutoring). For Item A (they would
suggest I drop the class), the difference in age and response was significant, $\chi^{2}(1$, $N=1,960)=33.04, p<.001$. The percentages of age groups were distributed as follows: age $10(0 \%)$, age $11(1 \%)$, age $12(1 \%)$, age 13 (3\%), age $14(4 \%)$, and age 15 (8\%). In Item C (they would allow me to make the decision), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=13.90, p<.05$. This item also had a high response rate: age 10 (30\%), age 11 (28\%), age 12 (33\%), age 13 (34\%), age 14 (32\%), and age 15 (35\%). For Item D (they would question if I really needed help), the difference in age and response was significant, $\chi^{2}(1$, $N=1,960)=12.18, p<.05$. The percentages of age groups were distributed as follows: age 10 (17\%), age 11 (18\%), age 12 (15\%), age 13 (11\%), age 14 (15\%), and age 15 (13\%). In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=17.48, p<.01$. The percentages of age groups were distributed as follows: age 10 (10\%), age 11 (8\%), age 12 (7\%), age 13 (7\%), age $14(3 \%)$, and age $15(3 \%)$. Although Item B (they would encourage my efforts) was not statistically significant, it did have a high response rate: age 10 (42\%), age 11 (45\%), age 12 (43\%), age 13 (46\%), age 14 (46\%), and age $15(42 \%)$.

There were five responses that were statistically significant in Question 8 (The reasons I would seek a tutor are). For Item A (poor listening habits in class), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=13.78, p<$ .05. The percentages of age groups were distributed as follows: age $10(15 \%)$, age 11 (16\%), age 12 (13\%), age 13 (15\%), age 14 (15\%), and age 15 (17\%). In Item B (excessive absences from class), there was a significant difference in age and
response, $\chi^{2}(1, N=1,960)=40.47, p<.001$. The percentages of age groups were distributed as follows: age 10 (4\%), age 11 (5\%), age 12 (6\%), age 13 (7\%), age 14 (9\%), and age 15 (12\%). For Item D (my teacher doesn't explain material well), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=$ 144.93, $p<.001$. The percentages of age groups were distributed as follows: age 10 (5\%), age 11 (10\%), age 12 (13\%), age 13 (19\%), age 14 (20\%), and age 15 (19\%). In Item E (trouble reading or remembering materials), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=12.22, p<.05$. The percentages of age groups were distributed as follows: age 10 (21\%), age 11 (19\%), age 12 (20\%), age 13 (19\%), age 14 (19\%), and age 15 (1\%). In Item G (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=$ $31.02, p<.001$. The percentages of age groups were distributed as follows: age 10 (18\%), age 11 (15\%), age 12 (13\%), age 13 (7\%), age 14 (5\%), and age 15 (6\%). Although Item C (difficulty focusing because of disruptions) was not statistically significant, it did have a high response rate: age 10 (27\%), age 11 (24\%), age 12 (22\%), age 13 (21\%), age 14 (20\%), and age 15 (18\%).

Question 9 (If I were to seek help, I would prefer) had two responses that were statistically significant. For Item A (a small group setting), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=17.88, p<.01$. The percentages of age groups were distributed as follows: age 10 (17\%), age 11 (20\%), age 12 (26\%), age 13 (22\%), age 14 (23\%), and age 15 (25\%). In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=$
$50.49, p<.001$. The percentages of age groups were distributed as follows: age 10 (13\%), age $11(6 \%)$, age $12(4 \%)$, age $13(1 \%)$, age $14(1 \%)$, and age $15(5 \%)$.

There were four responses that were statistically significant in Question 10 (If a subject is difficult to understand, I). For Item B (meet with my counselor), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=17.68, p<.01$. The percentages of age groups were distributed as follows: age 10 (4\%), age 11 (3\%), age 12 (2\%), age 13 (4\%), age 14 (6\%), and age 15 (9\%). In Item C (ask classmates or friends for help), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=48.54, p<.001$. This item also had a high response rate: age $10(27 \%)$, age 11 (32\%), age 12 (39\%), age 13 (37\%), age $14(36 \%)$, and age 15 (29\%). For Item D (seek no help even though I may fail), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=19.64, p<.001$. The percentages of age groups were distributed as follows: age $10(3 \%)$, age $11(4 \%)$, age 12 (4\%), age $13(5 \%)$, age $14(7 \%)$, and age $15(12 \%)$. In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=26.31, p$ $<.001$. The percentages of age groups were distributed as follows: age $10(13 \%)$, age 11 ( $12 \%$ ), age 12 (8\%), age 13 (6\%), age 14 (3\%), and age 15 (6\%). Although Item A (ask the teacher questions) was not statistically significant, it did have a high response rate: age 10 (53\%), age 11 (49\%), age 12 (47\%), age 13 (47\%), age 14 (48\%), and age 15 (44\%).

Question 11 (When I request tutoring, my teacher[s]) had three responses that were statistically significant. For Item A (arrange for help without delay), the
difference in age and response was significant, $\chi^{2}(1, N=1,960)=28.51, p<.001$. This item also had a high response rate: age 10 (33\%), age 11 (39\%), age 12 (34\%), age 13 (40\%), age 14 (46\%), and age 15 (36\%). In Item B (put me off and ignore my request), there was a significant difference in age and response, $\chi^{2}(1, N$ $=1,960)=42.94, p<.001$. The percentages of age groups were distributed as follows: age $10(2 \%)$, age $11(5 \%)$, age $12(4 \%)$, age $13(8 \%)$, age $14(11 \%)$, and age $15(14 \%)$. For Item E (other), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=21.69, p<.001$. The percentages of age groups were distributed as follows: age 10 (22\%), age 11 (18\%), age 12 (20\%), age 13 (16\%), age 14 (9\%), and age 15 (6\%). Item D (tell me I should try harder) was not statistically significant. It did, however, have a high response rate: age 10 (29\%), age 11 (26\%), age 12 (26\%), age 13 (25\%), age 14 (20\%), and age 15 (28\%).

For Question 12 (I prefer a tutor to be), there were two responses that were statistically significant. For Item D (classmates who know the subject), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=20.15, p<.001$. The percentages of age groups were distributed as follows: age 10 (20\%), age 11 (20\%), age 12 (27\%), age 13 (24\%), age 14 (22\%), and age 15 (23\%). In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=$ 13.61, $p<.01$. The percentages of age groups were distributed as follows: age 10 (10\%), age 11 (10\%), age $12(7 \%)$, age $13(5 \%)$, age $14(3 \%)$, and age $15(7 \%)$. Item A (my teacher whose class I am struggling in) was not statistically
significant. It did, however, have a high response rate: age 10 (34\%), age 11 (39\%), age 12 (36\%), age 13 (37\%), age 14 (39\%), and age 15 ( $35 \%$ ).

Question 13 (My school should let students know about tutoring) had three responses that were statistically significant. For Item A (at orientation and in the handbook), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=$ $52.33, p<.001$. The percentages of age groups were distributed as follows: age 10 (17\%), age 11 (23\%), age 12 (25\%), age 13 (27\%), age 14 (30\%), and age 15 (23\%). In Item C (on daily announcements), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=56.78, p<.001$. This item also had a high response rate: age 10 (29\%), age 11 (33\%), age 12 (37\%), age 13 (40\%), age 14 (37\%), and age 15 (41\%). For Item D (other), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=24.35, p<.001$. The percentages of age groups were distributed as follows: age 10 (12\%), age 11 (11\%), age 12 (8\%), age $13(5 \%)$, age $14(2 \%)$, and age $15(6 \%)$. Item B (on the school Website) was not statistically significant. It did, however, have a high response rate: age $10(41 \%)$, age 11 (34\%), age 12 (31\%), age 13 (29\%), age 14 (31\%), and age 15 (29\%).

There were four responses that were statistically significant in Question 14 (The subject(s) in which I am most likely to seek tutoring are). For Item B (English), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=$ $38.07, p<.001$. The percentages of age groups were distributed as follows: age 10 (14\%), age 11 (15\%), age 12 (16\%), age 13 (26\%), age 14 (19\%), and age 15 (20\%). In Item C (science), there was a significant difference in age and response,
$\chi^{2}(1, N=1,960)=34.13, p<.001$. The percentages of age groups were distributed as follows: age 10 ( $15 \%$ ), age 11 (18\%), age $12(21 \%)$, age $13(24 \%)$, age 14 (30\%), and age 15 (27\%). For Item D (social studies), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=22.12, p<.001$. The percentages of age groups were distributed as follows: age 10 (13\%), age 11 ( $16 \%$ ), age 12 (15\%), age 13 (9\%), age 14 ( $10 \%$ ), and age 15 (12\%). In Item E (other), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=75.77, p<.001$. The percentages of age groups were distributed as follows: age 10 (29\%), age 11 (24\%), age 12 (20\%), age 13 (13\%), age 14 (9\%), and age 15 (8\%). Although Item A (mathematics) was not statistically significant, it did have a high response rate: age 10 (29\%), age 11 (27\%), age 12 (27\%), age 13 (27\%), age 14 (32\%), and age 15 (33\%).

Question 15 (Students should receive school report cards showing) had two responses that were statistically significant. For Item B (gains that tutored students make), the difference in age and response was significant, $\chi^{2}(1, N=$ $1,960)=28.98, p<.001$. This item also had a high response rate: age $10(24 \%)$, age 11 (26\%), age 12 (30\%), age 13 (31\%), age 14 (29\%), and age 15 (31\%). In Item C (number of dropouts and if they had tutoring), there was a significant difference in age and response, $\chi^{2}(1, N=1,960)=14.23, p<.01$. The percentages of age groups were distributed as follows: age $10(8 \%)$, age $11(9 \%)$, age $12(9 \%)$, age 13 (10\%), age 14 (12\%), and age 15 (16\%). Item A (group progress of tutored students) was not statistically significant. It did, however, have a high
response rate: age 10 (30\%), age 11 (31\%), age 12 (31\%), age 13 (31\%), age 14 (31\%), and age 15 (34\%). Item D (comments by students about tutoring) was not statistically significant. It did, however, have a high response rate: age 10 (29\%), age 11 (26\%), age 12 (25\%), age 13 (24\%), age 14 (24\%), and age 15 (17\%).

In Question 16 (I am willing to volunteer as a tutor), there was one response that was statistically significant. For Item A (in the subjects I understand well), the difference in age and response was significant, $\chi^{2}(1, N=1,960)=$ $19.58, p<.001$. This item also had a high response rate: age 10 ( $48 \%$ ), age 11 (49\%), age 12 (48\%), age 13 (47\%), age 14 (50\%), and age 15 ( $43 \%$ ).

## Research Question 4: How are Student Perceptions Reported on the

## Tutoring Poll Influenced by Grade?

There were five responses that were statistically significant in Question 1 (Most students I know who need tutoring). For Item A (recognize they have a problem with the subject), the difference in grade and response was significant, $\chi^{2}$ $(1, N=1,960)=10.22, p<.05$. This item also had a high response rate, as indicated in the percentages of grade levels: Grade 5 (34\%), Grade 6 (25\%), Grade 7 (24\%), and Grade $8(23 \%)$. For Item B (deny they have a problem with the subject), the difference in grade and response was significant, $\chi^{2}(1, N=$ $1,960)=22.79, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (20\%), Grade $6(22 \%)$, Grade $7(22 \%)$ and Grade $8(24 \%)$. In Item C (feel embarrassed and refuse to ask for help), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=15.12, p<.001$. This item
also had a high response rate for grade levels: Grade 5 (25\%), Grade 6 (29\%), Grade 7 (27\%), and Grade 8 (24\%). For Item D (blame their difficulties on poor teachers), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $126.02, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (8\%), Grade 6 (15\%), Grade 7 (19\%) and Grade 8 (24\%). In Item E (other), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)$ $=17.51, p<.001$. The percentages of grade levels were distributed as follows: Grade $5(13 \%)$, Grade $6(8 \%)$, Grade $7(8 \%)$ and Grade $8(5 \%)$.

In Question 2 (More students would seek tutoring if), there were three responses that were statistically significant. For Item A (it was more convenient and available), the difference in grade and response was significant, $\chi^{2}(1, N=$ $1,960)=63.25, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (14\%), Grade 6 (15\%), Grade 7 (22\%) and Grade 8 (23\%). In Item C (they cared more about academic success), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=53.07, p<.001$. This item also had a high response rate, as indicated in the percentages of grade levels: Grade 5 (26\%), Grade 6 (31\%), Grade 7 (31\%), and Grade 8 (34\%). For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $13.94, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (28\%), Grade 6 (34\%), Grade 7 (45\%), and Grade 8 (23\%). Although Item D (parents were aware that they needed it) was not statistically significant, it did
have a high response rate: Grade $5(29 \%)$, Grade $6(26 \%)$, Grade $7(25 \%)$, and Grade 8 (24\%).

Question 3 (Seeking help from a tutor) had three responses that were statistically significant. For Item A (shows that I recognize a need for help), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=50.32, p<$ .001. This item also had a high response rate: Grade 5 (35\%), Grade 6 (34\%), Grade $7(38 \%)$, and Grade $8(37 \%)$. In Item C (reflects my desire to learn and succeed), there was a significant difference in grade and response, $\chi^{2}(1, N=$ $1,960)=46.58, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (22\%), Grade 6 (25\%), Grade 7 (27\%), and Grade 8 (27\%). For Item D (helps meet requirements for graduation), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=10.49, p<.05$. The percentages of grade levels were distributed as follows: Grade 5 (24\%), Grade 6 ( $24 \%$ ), Grade 7 (24\%), and Grade 8 (24\%).

There were five responses that were statistically significant in Question 4 (When students fail a class or test required to graduate, they should). For Item A (automatically be assigned a tutor), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=39.77, p<.001$. This item also had a high response rate, as indicated in the percentages of grade levels: Grade 5 (31\%), Grade 6 (30\%), Grade 7 (34\%), and Grade 8 ( $35 \%$ ). For Item B (take monthly practice tests), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $23.50, p<.001$. The percentages of grade levels were distributed as follows:

Grade 5 (20\%), Grade 6 (19\%), Grade 7 (23\%), and Grade 8 (20\%). In Item C (go to summer school), there was a significant difference in grade and response, $\chi^{2}(1$, $N=1,960)=23.27, p<.001$. This item also had a high response rate: Grade 5 (16\%), Grade 6 (23\%), Grade 7 (19\%), and Grade 8 (20\%). For Item D (access a computer program for help), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=13.81, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (16\%), Grade 6 (15\%), Grade 7 (16\%), and Grade $8(20 \%)$. In Item E (other), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=32.31, p<.001$. The percentages of grade levels were distributed as follows: Grade $5(17 \%)$, Grade $6(13 \%)$, Grade $7(7 \%)$, and Grade 8 (6\%).

Question 5 (The most convenient time for me to attend tutoring sessions is) had two responses that were statistically significant. For Item D (at lunchtime), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=21.47, p$ $<.001$. The percentages of grade levels were distributed as follows: Grade 5 (6\%), Grade 6 (6\%), Grade 7 (9\%), and Grade 8 (11\%). In Item E (before school), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=19.67, p<$ .001. The percentages of grade levels were distributed as follows: Grade $5(16 \%)$, Grade 6 (19\%), Grade 7 (20\%), and Grade 8 (24\%). Although Item A (right after school) was not statistically significant, it did have a high response rate: Grade 5 (43\%), Grade 6 (41\%), Grade 7 (40\%), and Grade 8 (37\%).

In Question 6 (If I told my friends that I was going to get tutoring), there were three responses that were statistically significant. For Item B (they would try to talk me out of it), the difference in grade and response was significant, $\chi^{2}(1, N$ $=1,960)=8.17, p<.05$. The percentages of grade levels were distributed as follows: Grade $5(9 \%)$, Grade $6(10 \%)$, Grade 7 (10\%), and Grade 8 (13\%). In Item C (they would suggest I drop the course), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=13.69, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (4\%), Grade 6 (5\%), Grade 7 (7\%), and Grade $8(9 \%)$. For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=15.16, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (21\%), Grade 6 (23\%), Grade 7 (20\%), and Grade 8 (13\%). Although Item D (they would encourage my efforts) was not statistically significant, it did have a high response rate: Grade 5 (48\%), Grade 6 (43\%), Grade $7(47 \%)$, and Grade $8(45 \%)$.

Question 7 (If I told my parents that I was going to get tutoring) had four responses that were statistically significant. For Item A (they would suggest I drop the class), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)$ $=37.12, p<.001$. The percentages of grade levels were distributed as follows: Grade $5(2 \%)$, Grade $6(1 \%)$, Grade $7(1 \%)$, and Grade $8(5 \%)$. In Item B (they would encourage my efforts), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=12.54, p<.01$. This item also had a high response rate, as indicated in the percentages: Grade 5 (43\%), Grade 6 (43\%), Grade 7
(45\%), and Grade 8 (46\%). For Item C (they would allow me to make the decision), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $25.59, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (29\%), Grade 6 (32\%), Grade 7 (35\%), and Grade 8 (32\%). For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $15.14, p<.01$. The percentages of grade levels were distributed as follows: Grade $5(10 \%)$, Grade $6(8 \%)$, Grade 7 (6\%), and Grade $8(4 \%)$.

There were six responses that were statistically significant in Question 8 (The reasons I would seek a tutor are). For Item A (poor listening habits in class), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=13.43, p$ $<.01$. The percentages of grade levels were distributed as follows: Grade $5(15 \%)$, Grade 6 (15\%), Grade 7 (14\%), and Grade 8 (16\%). For Item B (excessive absences from class), the difference in grade and response was significant, $\chi^{2}(1$, $N=1,960)=49.21, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (4\%), Grade 6 (5\%), Grade 7 (7\%), and Grade 8 (10\%). In Item D (my teacher doesn't explain the material well), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=163.27, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (8\%), Grade 6 (11\%), Grade 7 (19\%), and Grade 8 (21\%). For Item E (trouble reading or remembering materials), the difference in grade and response was significant, $\chi^{2}$ $(1, N=1,960)=14.42, p<.01$. The percentages of grade levels were distributed as follows: Grade $5(20 \%)$, Grade $6(21 \%)$, Grade $7(20 \%)$, and Grade $8(18 \%)$. In

Item F (not passing a section of the state test), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=12.81, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (12\%), Grade 6 (11\%), Grade 7 (12\%), and v8 (11\%). In Item G (other), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=39.17, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (16\%), Grade 6 (15\%), Grade 7 (7\%), and Grade 8 (5\%). Although Item C (difficulty focusing because of disruptions) was not statistically significant, it did have a high response rate: Grade 5 (25\%), Grade 6 ( $23 \%$ ), Grade 7 ( $21 \%$ ), and Grade 8 (20\%).

For Question 9 (If I were to seek help I would prefer), there were three significant responses. For Item A (a small group setting), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=25.70, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (18\%), Grade 6 (26\%), Grade $7(21 \%)$, and Grade $8(24 \%)$. In Item B (one on one with a tutor), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=8.14, p<.05$. This item also had a high response rate, as indicated in the following percentages: Grade 5 (49\%), Grade 6 (47\%), Grade 7 (51\%), and Grade 8 ( $46 \%$ ). For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ 37.77, $p<.001$. The percentages of grade levels were distributed as follows: Grade $5(9 \%)$, Grade $6(4 \%)$, Grade $7(1 \%)$, and Grade $8(2 \%)$.

Question 10 (If a subject is difficult to understand, I) had four responses that were statistically significant. For Item B (meet with my counselor), the
difference in grade and response was significant, $\chi^{2}(1, N=1,960)=10.93, p<$ .05. The percentages of grade levels were distributed as follows: Grade $5(4 \%)$, Grade 6 (3\%), Grade 7 (4\%), and Grade 8 (6\%). In Item C (ask classmates or friends for help), there was a significant difference in grade and response, $\chi^{2}(1, N$ $=1,960)=39.05, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (29\%), Grade 6 (38\%), Grade 7 (37\%), and v8 (36\%). For Item D (seek no help even though I may fail), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=17.38, p<.001$. The percentages of grade levels were distributed as follows: Grade $5(4 \%)$, Grade $6(5 \%)$, Grade $7(4 \%)$, and Grade $8(8 \%)$. For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=19.11, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (12\%), Grade 6 (8\%), Grade 7 (6\%), and Grade 8 (4\%). Although Item A (ask the teacher questions) was not statistically significant, it did have a high response rate: Grade 5 (51\%), Grade 6 (46\%), Grade 7 (49\%), and Grade 8 (46\%).

In Question 11 (When I request tutoring, my teacher[s]), there were three responses that were statistically significant. For Item A (arrange for help without delay), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ 43.93, $p<.001$. This item also had a high response rate: Grade 5 (35\%), Grade 6 (31\%), Grade 7 (43\%), and Grade 8 ( $44 \%$ ). In Item B (put me off and ignore my request), there was a significant difference in grade and response, $\chi^{2}(1, N=$ $1,960)=35.15, p<.001$. The percentages of grade levels were distributed as
follows: Grade 5 (5\%), Grade 6 (5\%), Grade 7 (6\%), and Grade 8 ( $12 \%$ ). For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $22.59, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (19\%), Grade 6 (23\%), Grade 7 (15\%), and Grade 8 (9\%). Although Item D (tell me I should try harder) was not statistically significant, it did have a high response rate: Grade 5 (28\%), Grade 6 (28\%), Grade 7 (22\%), and Grade 8 (22\%). Question 12 (I prefer a tutor to be) had three responses that were statistically significant. For Item A (my teacher whose class I am struggling in), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=18.11, p$ $<.001$. This item also had a high response rate: Grade 5 (36\%), Grade 6 (34\%), Grade 7 (41\%), and Grade 8 (37\%). In Item D (classmates who know the subject), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=21.07$, $p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (20\%), Grade 6 (27\%), Grade 7 (23\%), and Grade 8 (23\%). For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=9.98, p<$ .05. The percentages of grade levels were distributed as follows: Grade 5 (10\%), Grade 6 (8\%), Grade 7 (5\%), and Grade 8 (3\%).

In Question 13 (My school should let students know about tutoring), three responses were statistically significant. For Item A (at orientation and in the handbook), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)$ $=60.58, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (20\%), Grade 6 (24\%), Grade 7 (27\%), and Grade 8 (29\%). In Item C (on
daily announcements), there was a significant difference in grade and response, $\chi^{2}$ $(1, N=1,960)=52.79, p<.001$. The percentages of grade levels were distributed as follows: Grade $5(33 \%)$, Grade $6(34 \%)$, Grade $7(38 \%)$, and Grade $8(38 \%)$. For Item D (other), the difference in grade and response was significant, $\chi^{2}(1, N$ $=1,960)=23.51, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (11\%), Grade 6 (10\%), Grade 7 (4\%), and Grade 8 (3\%). Although Item B (on the school Website) was not statistically significant, it did have a high response rate: Grade $5(36 \%)$, Grade $6(32 \%)$, Grade $7(30 \%)$, and Grade 8 (30\%).

Question 14 (The subject(s) in which I am most likely to seek tutoring are) had four responses that were statistically significant. For Item B (English), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=58.98, p<$ .001. The percentages of grade levels were distributed as follows: Grade 5 ( $15 \%$ ), Grade $6(14 \%)$, Grade 7 (27\%), and Grade 8 (19\%). In Item C (science), there was a significant difference in grade and response, $\chi^{2}(1, N=1,960)=47.18, p<$ .001. The percentages of grade levels were distributed as follows: Grade $5(17 \%)$, Grade $6(19 \%)$, Grade $7(22 \%)$, and Grade $8(32 \%)$. For Item D (social studies), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=21.41, p$ $<.001$. The percentages of grade levels were distributed as follows: Grade 5 (16\%), Grade 6 (14\%), Grade 7 (11\%), and Grade 8 (10\%). For Item E (other), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=83.60, p$ $<.001$. The percentages of grade levels were distributed as follows: Grade 5
( $25 \%$ ), Grade 6 ( $25 \%$ ), Grade 7 ( $12 \%$ ), and Grade $8(8 \%)$. Although Item A (mathematics) was not statistically significant, it did have a high response rate: Grade 5 (28\%), Grade 6 (27\%), Grade 7 (28\%), and Grade 8 (31\%).

Question 15 (Students should receive school report cards showing) had three significant responses. For Item A (the progress of students who receive tutoring), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=$ $12.74, p<.01$. This item also had a high response rate: Grade 5 (31\%), Grade 6 (31\%), Grade 7 (30\%), and Grade 8 (33\%). In Item B (gains of tutored students in subjects), there was a significant difference in grade and response, $\chi^{2}(1, N=$ $1,960)=52.70, p<.001$. The percentages of grade levels were distributed as follows: Grade 5 (25\%), Grade 6 (29\%), Grade 7 (33\%), and Grade 8 (28\%). For Item C (number of dropouts and if they had tutoring), the difference in grade and response was significant $\chi^{2}(1, N=1,960)=12.03, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (9\%), Grade 6 (8\%), Grade 7 (9\%), and Grade 8 (13\%). Although Item D (comments by students about tutoring) was not statistically significant, it did have a high response rate: Grade 5 (26\%), Grade 6 ( $25 \%$ ), Grade 7 ( $25 \%$ ), and Grade 8 ( $24 \%$ ).

In Question 16 (I am willing to volunteer as a tutor), three responses were statistically significant. For Item A (in the subjects that I understand well), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=13.72, p<$ .001. This item also had a high response rate: Grade 5 (48\%), Grade 6 (47\%), Grade 7 (47\%), and Grade 8 (49\%). In Item B (to help students who don't speak

English), there was a significant difference in grade and response, $\chi^{2}(1, N=$ $1,960)=8.13, p<.05$. The percentages of grade levels were distributed as follows: Grade 5 ( $9 \%$ ), Grade 6 ( $9 \%$ ), Grade 7 (12\%), and Grade 8 (12\%). For Item D (for classmates in my cooperative group), the difference in grade and response was significant, $\chi^{2}(1, N=1,960)=13.20, p<.01$. The percentages of grade levels were distributed as follows: Grade 5 (15\%), Grade 6 (18\%), Grade 7 (18\%), and Grade 8 (17\%).

## Research Question 5: How are Student Perceptions Reported on the

## Tutoring Poll Influenced by School?

There were five responses that were statistically significant in Question 1 (Most students I know who need tutoring). For Item A (recognize they have a problem with the subject), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=16.99, p<.001$. This item also had a high response rate, as indicated in the percentages of schools: elementary (28\%), middle (34\%), and junior high (23\%). For Item B (deny they have a problem with the subject), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=16.82, p<$ .001. The percentages of schools were distributed as follows: elementary (20\%), middle (22\%), and junior high (23\%). In Item C (feel embarrassed and refuse to ask for help), there was a significant difference in school and response, $\chi^{2}(1, N=$ $1,960)=8.66, p<.01$. This item also had a high response rate, as indicated in the percentages of schools: elementary (30\%), middle (23\%), and junior high (25\%). For Item D (blame their difficulties on poor teachers), the difference in school
and response was significant, $\chi^{2}(1, N=1,960)=98.65, p<.001$. The percentages of schools were distributed as follows: elementary (12\%), middle (10\%), and junior high (22\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=11.84, p<.01$. The percentages of schools were distributed as follows: elementary (11\%), middle (11\%), and junior high (66\%).

In Question 2 (More students would seek tutoring if), there were three responses that were statistically significant. For Item A (it was more convenient and available), the difference in school and response was significant, $\chi^{2}(1, N=$ $1,960)=64.19, p<.001$. The percentages of schools were distributed as follows: elementary (14\%), middle (15\%), and junior high (22\%). In Item C (they cared more about academic success), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=41.18, p<.001$. This item also had a high response rate, as indicated in the percentages of schools: elementary (26\%), middle (31\%), and junior high (32\%). For Item E (other), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=12.49, p<.01$. The percentages of schools were distributed as follows: elementary (11\%), middle (9\%), and junior high (5\%).

Question 3 (Seeking help from a tutor) had three responses that were statistically significant. For Item A (shows that I recognize a need for help), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=46.63, p<$ .001. This item also had a high response rate: elementary (34\%), middle (35\%), and junior high (37\%). In Item C (reflects my desire to learn and succeed), there
was a significant difference in school and response, $\chi^{2}(1, N=1,960)=40.80, p<$ .001. The percentages of schools were distributed as follows: elementary ( $23 \%$ ), middle (23\%), and junior high (27\%). For Item D (helps meet requirements for graduation), the difference in school and response was significant, $\chi^{2}(1, N=$ $1,960)=8.27, p<.01$. The percentages of schools were distributed as follows: elementary ( $25 \%$ ), middle ( $23 \%$ ), and junior high ( $23 \%$ ).

There were five responses that were statistically significant in Question 4 (When students fail a class or a test required to graduate, they should). For Item A (automatically be assigned a tutor), the difference in school and response was significant $\chi^{2}(1, N=1,960)=48.58, p<.001$. This item also had a high response rate, as indicated in the following percentages: elementary (28\%), middle (34\%), and junior high (34\%). For Item B (take monthly practice tests), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=22.31, p<.001$. The percentages of schools were distributed as follows: elementary (19\%), middle (22\%), and junior high (20\%). In Item C (go to summer school), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=7.81, p<.05$. The percentages of schools were distributed as follows: elementary (19\%), middle (19\%), and junior high (20\%). For Item D (access a computer program for help), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=14.39, p$ $<.001$. The percentages of schools were distributed as follows: elementary ( $15 \%$ ), middle (19\%), and junior high (14\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=40.52, p<.001$. The
percentages of schools were distributed as follows: elementary (19\%), middle (7\%), and junior high (11\%).

In Question 5 (The most convenient time for me to attend tutoring sessions is), there were three responses that were statistically significant. For Item D (at lunchtime), the difference in school and response was significant, $\chi^{2}(1, N=$ $1,960)=27.06, p<.001$. The percentages of schools were distributed as follows: elementary (5\%), middle (10\%), and junior high (7\%). In Item E (before school), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=$ $53.35, p<.001$. The percentages of schools were distributed as follows: elementary (12\%), middle (22\%), and junior high (23\%). For Item F (other), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=10.05, p<$ .01. The percentages of schools were distributed as follows: elementary ( $16 \%$ ), middle (9\%), and junior high (10\%). Although Item A (right after school) was not statistically significant, it did have a high response rate: elementary (46\%), middle (38\%), and junior high (38\%).

In Question 6 (If I told my friends that I was going to get tutoring), two responses were statistically significant. For Item B (they would try to talk me out of it), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=$ 5.98, $p<.05$. The percentages of schools were distributed as follows: elementary (9\%), middle (12\%), and junior high (10\%). In Item C (they would suggest I drop the course), there was a significant difference in school and response, $\chi^{2}(1, N=$ $1,960)=15.74, p<.001$. The percentages of schools were distributed as follows:
elementary (4\%), middle (8\%), and junior high (6\%). Although Item D (they would encourage my efforts) was not statistically significant, it did have a high response rate: elementary (45\%), middle (46\%), and junior high (48\%).

There were five responses that were statistically significant in Question 7 (If I told my parents that I was going to get tutoring). For Item A (they would suggest I drop the class), the difference in school and response was significant, $\chi^{2}$ $(1, N=1,960)=16.22, p<.001$. The percentages of schools were distributed as follows: elementary (1\%), middle (3\%), and junior high (2\%). For Item B (they would encourage my efforts), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=9.24, p<.01$. This item also had a high response rate, as indicated in the following percentages: elementary (43\%), middle (45\%), and junior high (44\%). In Item C (they would allow me to make the decision), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=$ $11.36, p<.01$. The percentages of schools were distributed as follows: elementary (29\%), middle (33\%), and junior high (31\%). For Item D (they would question if I really need help), the difference in school and response was significant, $\chi^{2}(1, N=$ $1,960)=6.70, p<.05$. The percentages of schools were distributed as follows: elementary (17\%), middle (13\%), and junior high (16\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=10.23, p<$ .01. The percentages of schools were distributed as follows: elementary (10\%), middle (5\%), and junior high (7\%).

There were six responses that were statistically significant in Question 8 (The reasons I would seek a tutor are). For Item A (poor listening habits in class), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=12.95, p$ $<.01$. The percentages of schools were distributed as follows: elementary (15\%), middle (15\%), and junior high (15\%). For Item B (excessive absences from class), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=48.16, p$ $<.001$. The percentages of schools were distributed as follows: elementary (4\%), middle (8\%), and junior high (5\%). In Item D (my teach doesn't explain material well), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)$ $=152.13, p<.001$. The percentages of schools were distributed as follows: elementary (10\%), middle (20\%), and junior high (9\%). For Item E (trouble reading or remembering materials), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=13.49, p<.001$. The percentages of schools were distributed as follows: elementary (19\%), middle (19\%), and junior high (23\%). In Item F (not passing a section of the state test), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=16.09, p<.001$. The percentages of schools were distributed as follows: elementary (10\%), middle (12\%), and junior high (12\%). In Item F (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=26.34, p<.001$. The percentages of schools were distributed as follows: elementary (18\%), middle (6\%), and junior high (13\%). Although Item C (difficulty focusing because of disruptions) was not
statistically significant, it did have a high response rate: elementary (25\%), middle (20\%), and junior high (23\%).

In Question 9 (If I were to seek help, I would prefer), there were two significant responses. For Item B (one on one with a tutor), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=6.13, p<.05$. This item also had a high response rate, as indicated in the following percentages: elementary (47\%), middle (48\%), and junior high (51\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=38.91, p<$ .001. The percentages of schools were distributed as follows: elementary ( $9 \%$ ), middle (2\%), and junior high (4\%).

There were five responses that were statistically significant in Question 10 (If a subject is difficult to understand, I). For Item A (ask the teacher questions), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=6.77, p<$ .05. This item also had a high response rate, as indicated: elementary (46\%), middle (47\%), and junior high (53\%). For Item B (meet with my counselor), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=14.82, p<$ .001. The percentages of schools were distributed as follows: elementary ( $2 \%$ ), middle (5\%), and junior high (5\%). In Item C (ask classmates or friends for help), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=$ 27.43, $p<.001$. The percentages of schools were distributed as follows: elementary (36\%), middle (36\%), and junior high (29\%). For Item D (seek no help even though I may fail), the difference in school and response was
significant, $\chi^{2}(1, N=1,960)=6.58, p<.05$. The percentages of schools were distributed as follows: elementary (4\%), middle (6\%), and junior high (5\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N$ $=1,960)=19.34, p<.001$. The percentages of schools were distributed as follows: elementary (12\%), middle (5\%), and junior high (8\%).

In Question 11 (When I request tutoring, my teacher[s]), there were four responses that were statistically significant. For Item A (arrange for help without delay), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=$ $42.45, p<.001$. This item also had a high response rate, as indicated in the following percentages: elementary (31\%), middle (43\%), and junior high (37\%). In Item B (put me off and ignore my request), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=22.08, p<.001$. The percentages of schools were distributed as follows: elementary (5\%), middle (9\%), and junior high (5\%). For Item C (suggest checking with a counselor), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=6.02, p<.05$. The percentages of schools were distributed as follows: elementary (11\%), middle (14\%), and junior high (16\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=28.27, p<.001$. The percentages of schools were distributed as follows: elementary (25\%), middle (12\%), and junior high (14\%).

In Question 12 (I prefer a tutor to be), three responses were statistically significant. For Item A (my teacher whose class I am struggling in), the difference
in school and response was significant, $\chi^{2}(1, N=1,960)=9.90, p<.01$. This item also had a high response rate, as indicated in the percentages: elementary (36\%), middle (38\%), and junior high (35\%). In Item B (another teacher in the same subject area), there was a significant difference in school and response, $\chi^{2}(1, N=$ $1,960)=9.25, p<.01$. The percentages of schools were distributed as follows: elementary (15\%), middle (18\%), and junior high (19\%). For Item E (other), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=7.95, p<$ .05. The percentages of schools were distributed as follows: elementary (10\%), middle (5\%), and junior high (8\%).

Four responses were statistically significant in Question 13 (My school should let students know about tutoring). For Item A (at orientation and in the handbook), the difference in school and response was significant, $\chi^{2}(1, N=$ $1,960)=52.87, p<.001$. The percentages of schools were distributed as follows: elementary (22\%), middle (28\%), and junior high (21\%). In Item B (on the school Website), there was a significant difference in school and response, $\chi^{2}(1, N=$ $1,960)=11.66, p<.01$. The percentages of schools were distributed as follows: elementary (38\%), middle (30\%), and junior high (30\%). For Item C (on daily announcements), the difference in school and response was significant, $\chi^{2}(1, N=$ $1,960)=88.22, p<.001$. This item also had a high response rate, as indicated in the percentages: elementary (27\%), middle (38\%), and junior high (41\%). In Item D (other), there was a significant difference in school and response, $\chi^{2}(1, N=$
$1,960)=19.91, p<.001$. The percentages of schools were distributed as follows: elementary (13\%), middle (4\%), and junior high (8\%).

In Question 14 (The subject[s] in which I am most likely to seek tutoring are), there were four responses that were statistically significant. For Item B (English), the difference in school and response was significant, $\chi^{2}(1, N=1,960)$ $=36.94, p<.001$. The percentages of schools were distributed as follows: lementary (16\%), middle (23\%), and junior high (13\%). In Item C (science), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=50.93, p<$ .001. The percentages of schools were distributed as follows: elementary (15\%), middle (27\%), and junior high (23\%). For Item D (social studies), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=26.90, p<.001$. The percentages of schools were distributed as follows: elementary (14\%), middle (10\%), and junior high (19\%). In Item E (other), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=85.01, p<.001$. The percentages of schools were distributed as follows: elementary (24\%), middle (10\%), and junior high (19\%). Although Item A (mathematics) was not statistically significant, it did have a high response rate: elementary (31\%), middle (30\%), and junior high (26\%).

Question 15 (Students should receive school report cards showing) had three responses that were statistically significant. For Item A (progress of students who receive tutoring), the difference in school and response was significant, $\chi^{2}(1$, $N=1,960)=6.96, p<.05$. This item also had a high response rate, as indicated in
the percentages: elementary (30\%), middle (31\%), and junior high (32\%). In Item B (gains of tutored students in subjects), there was a significant difference in school and response, $\chi^{2}(1, N=1,960)=25.15, p<.001$. The percentages of schools were distributed as follows: elementary (25\%), middle (30\%), and junior high (28\%). For Item C (number of dropouts and if they had tutoring), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=16.38, p<$ .001. The percentages of schools were distributed as follows: elementary (7\%), middle (11\%), and junior high (10\%).

Two responses were statistically significant in Question 16 (I am willing to volunteer as a tutor). For Item B (to help students who don't speak English), the difference in school and response was significant, $\chi^{2}(1, N=1,960)=9.78, p<$ .01 . The percentages of schools were distributed as follows: elementary (8\%), middle (12\%), and junior high (10\%). In Item C (to help students with learning disabilities), there was a significant difference in school and response, $\chi^{2}(1, N=$ $1,960)=10.26, p<.01$. The percentages of schools were distributed as follows: elementary (18\%), middle (18\%), and junior high (22\%). Although Item A (in subjects that I understand well) was not statistically significant, it did have a high response rate: elementary (50\%), middle (48\%), and junior high (46\%).

## Table 7

Tutoring Poll Items with a High Response Rate by Gender

| Questions and Responses | $\begin{gathered} \text { Female } \\ (n=994) \end{gathered}$ |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $f$ | \% | $f$ | \% |
| 1. Most students I know who need tutoring |  |  |  |  |
| A. recognize their need and will ask for help | 402 | 26.90 | 355 | 26.73 |
| C. feel embarrassed and refuse to ask for help | 407 | 27.24 | 324 | 24.39 |
| 2. More students would seek tutoring if C. they cared more about academic success | 449 | 28.31 | 438 | 32.66 |
| 3. Seeking help from a tutor |  |  |  |  |
| A. shows that I recognize a need for help | 597 | 35.76 | 498 | 35.90 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |
| A. automatically be assigned a tutor | 536 | 33.54 | 438 | 31.39 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |
| A. right after school | 593 | 41.18 | 492 | 39.51 |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |
| D. they would encourage my efforts | 656 | 52.10 | 455 | 39.36 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |
| B. they would encourage my efforts | 678 | 43.49 | 610 | 45.19 |
| 8. The reasons I would seek a tutor are |  |  |  |  |
| C. difficulty focusing because of disruptions | 409 | 22.16 | 340 | 21.71 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice. Frequency ( $f$ ) indicates how many times that response item was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g., girls and boys).

Table 7 continued

| Questions and Responses | Female$(n=994)$ |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $f$ | \% | $f$ | \% |
| 9. If I were to seek help, I would prefer |  |  |  |  |
| B. one on one with a tutor | 697 | 50.62 | 564 | 45.85 |
| 10. If a subject is difficult to understand, I |  |  |  |  |
| A. ask the teacher questions | 730 | 47.87 | 638 | 48.37 |
| C. ask classmates or friends for help | 536 | 35.15 | 447 | 33.89 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |
| A. arrange for help without delay | 474 | 39.14 | 405 | 37.33 |
| 12. I prefer a tutor to be |  |  |  |  |
| A. my teacher whose class I amstruggling in | 560 | 38.89 | 437 | 34.41 |
| 13. My school should let students know about tutoring |  |  |  |  |
| B. on the school website | 503 | 30.48 | 452 | 34.22 |
| C. on daily announcements | 568 | 34.42 | 491 | 37.17 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |
| A. mathematics | 435 | 29.94 | 337 | 26.75 |
| 15. Students should receive school report cards showing |  |  |  |  |
| A. group progress of students who receive tutoring | 479 | 31.18 | 411 | 30.39 |
| B. gains that tutored students make in subjects | 416 | 27.08 | 405 | 29.96 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |
| A. in the subjects that I understand well | 759 | 47.41 | 629 | 48.27 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice. Frequency $(f)$ indicates how many times that response item was chosen; it does not reflect the number of participants $(n)$. Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g., girls and boys).

## Table 8

Tutoring Poll Items with a High Response Rate by Ethnicity

| Questions and Responses | $\begin{aligned} & \text { Asian } \\ & (n=45) \end{aligned}$ | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  | Hispanic$(n=67)$ |  | Native Am.$(n=30)$ |  | $\begin{aligned} & \text { White } \\ & (n=1322) \end{aligned}$ |  | $\begin{aligned} & \text { Other } \\ & (n=70) \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $f$ \% | $f$ | \% |  | \% |  | \% |  | \% |  | \% |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help | 2032.79 | 179 | 33.39 | 18 | 21.43 | 16 | 41.03 | 500 | 25.64 | 27 | 28.42 |
| C. feel embarrassed and refuse to ask for help | 1727.87 | 147 | 27.42 | 28 | 33.33 | 12 | 30.77 | 504 | 25.85 | 29 | 30.53 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |  |  |  |
| C. they cared more about academic success | 2229.33 | 166 | 29.02 | 26 | 27.37 | 10 | 23.81 | 635 | 31.04 | 30 | 28.57 |
| D. parents were aware that they needed it | 1824.00 |  | 25.35 | 26 |  | 11 | 26.19 | 533 | 26.05 | 31 | 29.52 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |  |  |  |
| A. shows that Irecognize a need for help | 3140.79 |  | 38.91 | 33 | 34.38 |  | 28.21 | 742 | 35.17 | 35 | 29.66 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |  |  |  |
| A. automatically be assigned a tutor | 2632.50 |  | 35.69 |  |  | 13 | 28.26 | 665 | 32.11 | 33 | 28.95 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| A. right after school | 3447.89 |  | 44.59 | 33 |  | 16 | 34.04 | 708 | 39.46 | 41 | 36.28 |
| 6. IfI told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |
| D. they would encourage my efforts | 2544.64 | 233 | 46.88 | 36 | 42.86 | 14 | 31.11 | 760 | 46.12 | 43 | 46.74 |
| 7. If Itold my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |
| B. they would encourage my efforts | 2738.57 | 257 | 44.23 | 36 | 39.56 | 18 | 40.00 | 912 | 45.13 | 44 | 40.74 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |  |  |  |
| C. difficulty focusing because of disruptions | $17 \quad 18.48$ | 144 | 21.52 | 23 | 22.77 | 13 | 26.53 | 529 | 22.32 | 28 | 20.89 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency $(f)$ indicates how many times that response itemwas chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent $(\%)$ indicates the percentage of how many times ( f ) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. Asian, Black, etc.).

Table 8 continued

| Questions and Responses | $\begin{aligned} & \text { Asian } \\ & (n=45) \end{aligned}$ | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  | Hispanic$(n=67)$ |  | Native Am.$(n=30)$ |  | $\begin{gathered} \text { White } \\ (n=1322) \end{gathered}$ |  | $\begin{aligned} & \text { Other } \\ & (n=70) \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $f$ \% |  | \% |  | \% | $f$ | \% | f | \% | $f$ | \% |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |  |  |  |  |  |
| B. one on one with a tutor | 3154.38 | 280 | 62.64 |  | 41.66 | 15 | 28.30 | 866 | 62.53 | 35 | 6.69 |
| 10. Ifa subject is difficult to understand, I |  |  |  |  |  |  |  |  |  |  |  |
| A. ask the teacher questions | 3040.00 |  | 56.68 | 46 | 49.46 | 10 | 22.73 | 921 | 46.66 | 51 | 46.79 |
| C. ask classmates or friends for help | 2938.67 |  | 27.44 |  | 34.41 | 16 | 36.36 | 716 | 36.27 | 37 | 33.94 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |  |  |  |
| A. arrange for help without delay | 2946.77 | 192 | 40.08 |  | 24.36 | 14 | 38.89 | 600 | 38.49 | 29 | 32.58 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in | 2636.62 | 209 | 38.99 |  | 37.36 | 13 | 30.95 | 690 | 36.76 | 29 | 29.29 |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |  |  |  |
| B. on the school website | $28 \quad 37.33$ |  | 30.44 | 23 | 26.14 | 12 | 31.58 | 683 | 32.87 | 32 | 28.83 |
| C. on daily announcements | 2533.33 |  | 42.01 |  | 32.95 | 11 | 28.95 | 712 | 34.26 | 38 | 34.23 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |  |  |  |
| A. mathematics | 1319.12 | 171 | 30.05 | 24 | 25.53 | 12 | 23.08 | 531 | 28.87 | 25 | 25.00 |
| C. science | 1623.53 | 149 | 26.19 |  | 20.21 | 14 | 26.92 | 382 | 20.77 | 19 | 19.00 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |  |  |  |
| A. group progress of students who receive tutoring | $20 \quad 29.40$ | 211 | 45.77 | 27 | 13.92 | 12 | 21.81 | 590 | 29.46 | 33 | 37.93 |
| B. gains that tutored students make in subjects | 2536.76 | 162 | 35.14 | 27 | 13.92 | 10 | 18.18 | 576 | 28.75 | 24 | 27.59 |
| D. comments by students about tutoring experience | $12 \quad 17.60$ | 6 | 1.30 | 124 | 63.92 | 23 | 41.81 | 523 | 26.11 | 10 | 11.49 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well | 3542.68 | 283 | 48.05 | 43 | 44.79 | 16 | 35.56 | 971 | 48.79 | 43 | 42.16 |

Note. The answer items displayed were chosen because they have the highest ( or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency ( $f$ ) indicates how many times that response item was chosen, ;it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. Asian, Black, etc.).

## Table 9

Tutoring Poll Items with a High Response Rate by Age

|  | $\begin{gathered} 10 \\ (n=257) \end{gathered}$ | $\begin{gathered} 11 \\ (n=401) \end{gathered}$ | $\begin{gathered} 12 \\ (n=401) \end{gathered}$ | $\begin{gathered} 13 \\ (n=444) \end{gathered}$ | $\begin{gathered} 14 \\ (n=354) \end{gathered}$ | $\begin{gathered} 15 \\ (n=76) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Questions and Responses | $f$ \% | $f$ \% | $f$ \% | $f$ \% | $f$ \% | $f$ \% |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |
| A. recognize their need and will ask for help | 11033.95 | 17432.04 | 15626.76 | 15422.03 | 13624.59 | 2424.74 |
| C. feel embarrassed and refuse to ask for help | 7523.15 | 14626.89 | 16828.81 | 19127.32 | 12824.02 | 1919.59 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |
| C. they cared more about academic success | 8925.57 | 14526.80 | 19731.88 | 23131.30 | 19334.46 | 2929.59 |
| D. parents were aware that they needed it | 10730.75 | 15829.21 | 14924.11 | 18324.79 | 13724.46 | 2020.41 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |
| A. shows that I recognize a need for help | 12035.39 | 20334.58 | 21133.76 | 29537.82 | 22236.94 | 4040.00 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |
| A. automatically be assigned a tutor | 10128.77 | 18733.03 | 19230.87 | 26134.71 | 19534.09 | 3533.98 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |
| A. right after school | 14944.74 | 23843.67 | 22940.82 | 24539.90 | 18637.13 | 3937.86 |
| 6. IfI told my friends that I was going to get tutoring |  |  |  |  |  |  |
| D. they would encourage my efforts | 14848.52 | 22445.90 | 24849.89 | 25344.94 | 19544.22 | 3636.00 |
| 7. If It told my parents that I was going to get tutoring |  |  |  |  |  |  |
| B. they would encourage my efforts | 16142.48 | 26245.41 | 26743.27 | 30945.62 | 24445.95 | 4341.75 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |
| C. difficulty focusing because of disruptions | 10126.86 | 14523.81 | 15322.11 | 18420.81 | 13820.23 | 2417.65 |
| E. trouble reading or remembering materials | 7820.74 | 11619.05 | 14020.23 | $171 \quad 19.34$ | 12718.62 | 2115.44 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency $(f)$ indicates how many times that response item was chosen; it does not reflect the number of participants $(n)$. Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. age 10 , age 11 , etc.).

Table 9 continued

|  | $\begin{gathered} 10 \\ (n=257) \end{gathered}$ | $\begin{gathered} 11 \\ (n=401) \end{gathered}$ | $\begin{gathered} 12 \\ (n=401) \end{gathered}$ | $\begin{gathered} 13 \\ (n=444) \end{gathered}$ | $\begin{gathered} 14 \\ (n=354) \end{gathered}$ | $\begin{gathered} 15 \\ (n=76) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Questions and Responses | \% | $f$ \% | $f$ \% | \% | \% | \% |
| 9. IfI were to seek help, I would prefer |  |  |  |  |  |  |
| B. one on one with a tutor | 15548.59 | 26850.85 | 26048.06 | 29448.36 | 23348.44 | 4545.00 |
| 10. Ifa subject is difficult to understand, I |  |  |  |  |  |  |
| A. ask the teacher questions | 18753.13 | 27549.37 | 28946.99 | 32047.34 | 25148.46 | 4343.88 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |
| A. arrange for help without delay | 9633.22 | 18139.00 | 16033.83 | 20639.54 | 19946.49 | 3536.08 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |
| A. my teacher whose class Iamstruggling in | 11634.42 | 20138.51 | 21436.03 | 24037.38 | 19138.51 | 3434.69 |
| D. classmates who know the subject | 6920.47 | 10720.49 | 15826.59 | 15323.83 | 10821.77 | 2323.47 |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |
| B. on the school website | 14641.24 | 19333.68 | 19631.11 | 21529.13 | 17230.60 | 2929.29 |
| C. on daily announcements | 10329.09 | 18932.98 | 22335.39 | 29339.70 | 20837.01 | 4141.41 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |
| A. mathematics | 10933.53 | 15232.47 | 15432.21 | 17030.68 | 15135.36 | 3537.23 |
| B. English | 5115.69 | 8217.52 | 8918.61 | 16028.88 | 9221.54 | 2122.34 |
| C. science | 5717.53 | 9921.15 | 12025.10 | 14526.17 | 14333.48 | 2930.85 |
| E. other | 10833.23 | 13528.84 | 11524.05 | 7914.25 | 419.60 | 99.57 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |
| A. group progress of students who receive tutoring | 10229.82 | 17631.37 | 18830.88 | 21730.65 | 17331.34 | 3234.04 |
| B. gains that tutored students make in subjects | 8123.68 | 14726.20 | 18229.83 | 21830.79 | 15928.80 | 2930.85 |
| D. comments by students about tutoring experience | 9928.94 | 14826.38 | 15425.24 | 16923.87 | 13424.27 | 1617.02 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |
| A. in the subjects that I understand well | 17748.09 | 28848.73 | 30748.42 | 31746.55 | 25850.19 | 4043.48 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.

Frequency $(f)$ indicates how many times that response item was chosen; it does not reflect the number of participants $(n)$. Participants were allowed to choose more than one response on each question. Percent $(\%)$ indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. age 10 , age 11 , etc.).

Table 10
Tutoring Poll Items with a High Response Rate by Grade

| Questions and Responses | $\begin{gathered} 5 \\ (n=642) \end{gathered}$ |  | $\begin{gathered} 6 \\ (n=377) \end{gathered}$ |  | $\begin{gathered} 7 \\ (n=454) \end{gathered}$ |  | $\begin{gathered} 8 \\ (n=475) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% | $f$ | \% | $f$ | \% | $f$ | \% |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help | 282 | 34.09 | 141 | 25.13 | 167 | 23.86 | 169 | 22.72 |
| C. feel embarrassed and refuse to ask for help | 209 | 25.27 | 163 | 29.05 | 189 | 27.00 | 177 | 23.79 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |
| C. they cared more about academic success | 221 | 25.64 | 177 | 30.99 | 237 | 31.22 | 255 | 34.13 |
| D. parents were aware that they needed it | 253 | 29.35 | 146 | 25.57 | 189 | 24.90 | 176 | 23.56 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |
| A. shows that I recognize a need for help | 305 | 34.62 | 197 | 33.73 | 307 | 37.81 | 289 | 36.58 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |
| A. automatically be assigned a tutor | 270 | 30.72 | 174 | 30.10 | 270 | 34.39 | 262 | 34.79 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |
| A. right after school | 367 | 42.82 | 214 | 41.31 | 258 | 39.87 | 252 | 37.44 |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |
| D. they would encourage my efforts | 365 | 47.65 | 207 | 42.86 | 275 | 47.01 | 267 | 45.17 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |
| B. they would encourage my efforts | 397 | 43.39 | 249 | 42.78 | 325 | 45.01 | 326 | 46.37 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |
| C. difficulty focusing because of disruptions | 232 | 24.81 | 146 | 22.88 | 188 | 20.50 | 186 | 19.98 |
| E. trouble reading or remembering materials | 185 | 19.79 | 131 | 20.53 | 180 | 19.63 | 166 | 17.83 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency $(f)$ indicates how many times that response item was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. Grade 5, Grade 6, etc.).

Table 10 continued

| Questions and Responses | $\begin{gathered} 5 \\ (n=642) \end{gathered}$ |  | $\begin{gathered} 6 \\ (n=377) \end{gathered}$ |  | $\begin{gathered} 7 \\ (n=454) \end{gathered}$ |  | $\begin{gathered} 8 \\ (n=475) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |  |  |
| B. one on one with a tutor | 401 | 49.02 | 249 | 46.89 | 318 | 51.29 | 298 | 46.34 |
| 10. If a subject is difficult to understand, I |  |  |  |  |  |  |  |  |
| A. ask the teacher questions | 448 | 50.62 | 265 | 45.93 | 340 | 49.49 | 323 | 46.07 |
| C. ask classmates or friends for help | 261 | 29.49 | 217 | 37.61 | 253 | 36.83 | 254 | 36.23 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |
| A. arrange for help without delay | 253 | 34.52 | 137 | 31.14 | 234 | 43.49 | 258 | 43.80 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in | 300 | 35.97 | 186 | 33.69 | 270 | 41.03 | 246 | 36.61 |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |
| B. on the school website | 323 | 36.45 | 181 | 31.75 | 225 | 29.76 | 230 | 29.91 |
| C. on daily announcements | 288 | 32.51 | 194 | 34.03 | 291 | 38.49 | 294 | 38.23 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |
| A. mathematics | 257 | 27.99 | 140 | 26.72 | 185 | 28.24 | 196 | 31.21 |
| C. science | 154 | 16.77 | 102 | 19.46 | 144 | 21.98 | 202 | 32.16 |
| E. other | 228 | 24.84 | 132 | 25.19 | 77 | 11.75 | 52 | 8.28 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |
| A. group progress of students who receive tutoring | 259 | 30.51 | 181 | 30.94 | 225 | 29.96 | 232 | 32.54 |
| B. gains that tutored students make in subjects | 210 | 24.73 | 170 | 29.06 | 247 | 32.88 | 198 | 27.77 |
| D. comments by students about tutoring experience | 223 | 26.26 | 149 | 25.47 | 185 | 24.63 | 168 | 23.56 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well | 432 | 47.84 | 293 | 47.48 | 333 | 46.70 | 335 | 49.12 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency $(f)$ indicates how many times that response item was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. Grade 5, Grade 6, etc.).

## Table 11

Tutoring Poll Items with a High Response Rate by School

| Questions and Responses | Elementary$(n=585)$ |  | Middle$(n=441)$ |  | Junior High$(n=934)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $f$ | \% | $f$ | \% | $f$ | \% |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |
| A. recognize their need and will ask for help | 216 | 27.69 | 209 | 34.26 | 339 | 23.23 |
| C. feel embarrassed and refuse to ask for help | 233 | 29.87 | 140 | 22.95 | 366 | 25.08 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |
| C. they cared more about academic success | 209 | 26.16 | 194 | 30.59 | 490 | 32.19 |
| D. parents were aware that they needed it | 222 | 27.78 | 176 | 27.76 | 369 | 24.24 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |
| A. shows that I recognize a need for help | 271 | 33.79 | 235 | 35.28 | 596 | 35.85 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |
| A. automatically be assigned a tutor | 227 | 28.41 | 223 | 33.63 | 534 | 34.25 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |
| A. right after school | 347 | 47.21 | 237 | 38.54 | 511 | 38.51 |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |
| D. they would encourage my efforts | 315 | 44.68 | 261 | 47.89 | 542 | 45.58 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |
| B. they would encourage my efforts | 365 | 42.99 | 286 | 43.93 | 651 | 45.30 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |
| C. difficulty focusing because of disruptions | 221 | 25.14 | 161 | 23.00 | 375 | 20.11 |
| E. trouble reading or remembering materials | 165 | 18.77 | 151 | 21.57 | 349 | 18.71 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency ( $f$ ) indicates how many times that response item was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times ( f ) that response item was chosen out of the total frequency of responses for a question on a particular categorical variable (e.g. Elementary, Middle, etc.).

## Table 11 continued

| Questions and Responses | Elementary$(n=585)$ |  | Middle$(n=441)$ |  | Junior High$(n=934)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $f$ | \% | $f$ | \% | $f$ | \% |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |
| B. one on one with a tutor | 356 | 46.72 | 298 | 50.94 | 617 | 48.24 |
| 10. If a subject is difficult to understand, I |  |  |  |  |  |  |
| A. ask the teacher questions | 389 | 45.82 | 325 | 53.02 | 664 | 47.26 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |
| A. arrange for help without delay | 208 | 31.04 | 188 | 37.08 | 489 | 42.89 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in | 283 | 36.05 | 209 | 34.60 | 514 | 38.22 |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |
| B. on the school Website | 315 | 38.13 | 190 | 30.02 | 458 | 29.78 |
| C. on daily announcements | 225 | 27.23 | 261 | 41.23 | 583 | 37.91 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |
| A. mathematics | 243 | 30.84 | 157 | 26.08 | 381 | 29.69 |
| C. science | 116 | 17.03 | 140 | 23.25 | 347 | 30.14 |
| E. other | 192 | 28.19 | 113 | 18.77 | 124 | 10.77 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |
| A. group progress of students who receive tutoring | 245 | 29.98 | 198 | 32.19 | 455 | 30.76 |
| B. gains that tutored students make in subjects | 208 | 25.46 | 172 | 27.97 | 448 | 30.29 |
| D. comments by students about tutoring experience | 228 | 27.91 | 145 | 23.58 | 355 | 24.00 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |
| A. in the subjects that I understand well | 418 | 49.58 | 310 | 45.86 | 669 | 47.51 |

Note. The answer items displayed were chosen because they have the highest (or one of the highest) response rate for that particular question, indicating the majority's choice.
Frequency ( $f$ ) indicates how many times that response item was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question. Percent (\%) indicates the percentage of how many times (f) that response item was chosen out of the total frequency of response for a question on a particular categorical variable (e.g. Elementary, Middle, etc.).

## CHAPTER 5

## DISCUSSION

## Research Questions

The following research questions were posed and explored in the present study:

1. How are student perceptions reported on the tutoring poll influenced by gender?
2. How are student perceptions reported on the tutoring poll influenced by ethnicity?
3. How are student perceptions reported on the tutoring poll influenced by age?
4. How are student perceptions reported on the tutoring poll influenced by grade?
5. How are student perceptions reported on the tutoring poll influenced by school?

## Summary and Implications of Key Findings

The results of this study are sizeable; consequently, not all of the significant findings will be mentioned. Only the significant results for each of the variables that have substantial meaning and implications will be discussed. Knowing the significant relationship between item response and demographic variable is beneficial, but the discrepancies and variations in response rates among subgroups within a category also prove to be valuable. This information can be of significant use to policy makers, school districts, schools, teachers, and parents
not only in improving the school, but also in understanding and meeting the needs of all students.

Overall findings of the study. Several global themes and patterns were discovered in the results of the study. An important one to note is that the variables age, grade, and school were all similar in terms of significant relationships and corresponding response rates. This most likely occurred because the variables coincide with one another. For example, most 10- and 11-year-olds are in Grades 5 and 6, which also are part of the elementary school. Therefore, the responses rates and significance across all three variables would be comparable, as evident in Questions 1-8. The variables gender and ethnicity had some connections to the other three variables; however, gender and ethnicity were fairly different from each other, because each one had significant item responses that contrasted with the other. These variables do not have common characteristics to link them together which occurs with age, gender, and school. This variation is apparent in Questions 1, 7, 8, 11, and 12.

Other noteworthy findings include the differences between groups in a particular variable. The categories of participants who responded the most on the survey, in general, were the females and students at the junior high school; groups that responded the least were Hispanics, Blacks, 10-year-olds, 15-year-olds, $5^{\text {th }}$ graders, and elementary school students. Part of this response trend might be explained by the ability of the younger students to comprehend the questions. Perhaps the younger students also do not reflect as much or think as complexly
when responding. The majority of the total responses to the item (other) were elementary students and 11- and 12-year-olds. Additionally, females and Whites also responded more frequently to the other item response, which allowed the participant to complete it using his or her own words. Out of the total responses to this item, $60-70 \%$, on average, were female. One proposed explanation of this finding is biological in nature: Females tend to be more verbal then males. Considerable differences also occurred in responses between Grades 5 and 7-8, as well as between the ages of 10 and 15 . The obvious reasoning behind this is the similarity between the variables grade and age, and perhaps the cognitive differences between younger students and older students.

A second pattern found was that the variables ethnicity and gender had the least amount of significant relationships with the response items: Out of 82 total response items in the Tutoring Poll, gender was significant on 45 of them, and ethnicity was significant on 37 . In comparison, the variables age, grade, and school produced more relationships: age with 50 , grade with 57 , and school with 59. This result corresponds with the aforementioned reasoning. Even though analysis indicated that gender and ethnicity did not reveal significant relationships with item responses, there were numerous differences in response rates among the subgroups in each variable. Results also indicate that several questions exhibited patterns of significant relationships that were similar for all variables (Questions $4,6,10,13,14)$, and ones that were more distinct and varied in their pattern (Questions 9, 12, 15, and 16). In addition, there were questions that generated the
most significant relationships for items on all five variables: Questions $1,4,7,8$, 10, 13, and 14. Seventy-five percent of the item responses participants revealed a significant difference between variables of item response and of demographic characteristic.

In this study, there were a total of 45,559 responses, with a mean frequency of 2,847 responses per question (a total of 16 questions) and a range of 2,317-3,444. Questions with the highest total frequency of responses include the following: Question 3 (Seeking help from a tutor) $(f=3,085)$, Question 4 (When students fail a class or a test required to graduate, they should $)(f=3,021)$, and Question 8 (The reasons I would seek a tutor are) $(f=3,444)$. One rationale for why these questions received the most responses might be that students identified with several of the item responses, therefore choosing more than one response and thus increasing the total frequency of responses. The lowest response rate is evident in the following questions: Question 6 (If I told my friends that I was going to get tutoring) ( $f=2,439$ ), Question 9 (If I were to seek help, I would prefer $a)(f=2,626)$, and Question 11 (When I request tutoring, my teacher) ( $f=$ 2,317). Conversely, students may have only associated with just one response item, suggesting that there is one clear-cut answer to each of the questions, and that several of the items do not accurately reflect the opinions of adolescents. This theory is parallel to that for the items that had a considerably low response rate, such as 7A (they would suggest I drop the class), which had a total response rate of $2 \%(f=65)$. Another example that corroborates this hypothesis is demonstrated
in the distribution of response rates among items. Although some questions are fairly equivalent in the total frequency of responses distributed across variables, other questions have substantial discrepancies in the total response rate distribution. Question 10 (If a subject is difficult to understand, I) displays a large margin among responses, with Item A (ask the teacher questions) consisting of $48 \%(f=1,378)$. An example of a question with a similar distribution across the response items would be Question 1 (Most students I know who need tutoring). Information such as frequency of responses (i.e., response rate) demonstrates the importance of getting feedback on survey response items so that the answers are an updated portrayal of the students' views.

General impressions of tutoring. Questions from the study that concentrate on the general notion views of tutoring consist of Question 1 (Most students I know who need tutoring) and Question 3 (Seeking help from a tutor). Understanding how adolescents perceive the idea of seeking help can provide administrators, teachers, parents, and tutoring programs invaluable knowledge to increase the use of tutoring as a means to assist student learning, and can also ameliorate any issues that prevent students from pursuing additional support (Naidu, 2006; Rogers \& Hallman, 2010; "Stuck in the Middle," 2008; Wilson \& Deane, 2001). The most common responses for Question 1 were the following: Item A (recognize their need and will ask for help) (27\%), Item B (deny that they have a problem with the subject) (22\%), and Item C (feel embarrassed and refuse to ask for help) (26\%). Understanding why students think this way can help
teachers to be more cognizant of students who are having difficulties, as well as to create a comfortable environment for students to seek help, and to remove any potential barriers to learning ("Stuck in the Middle," 2008; Wilson \& Deane, 2001. For example, Wilson and Deane (2001) found that males are extremely preoccupied with how seeking help is portrayed. In the present study, Hispanics (30\%) responded that students who need tutoring feel embarrassed more than the fact that it recognizes the need for help $(20 \%)$. This is contradictory to the responses of the remaining groups, since Asians (30\%), Blacks (31\%), and Native Americans (39\%) reported that students who need tutoring recognize their need for help.

In addition, younger students who were ages 10 (34\%), 11 (32\%), and 15 $(25 \%)$ and in Grade $5(34 \%)$ responded more frequently to Item A, saying that the students they know who need tutoring acknowledge that they need support. Students of the ages 12 (29\%) and 13 (27\%) in Grades 6 (29\%) and 7 (32\%) said that students who are in need of tutoring feel embarrassed more they feel that tutoring demonstrates their need for help. This is in agreement with the theory that students in their middle teenage years can be extremely self-conscious and heavily reliant on their friends' opinions. Knowing that certain subgroups, such as Native Americans or $6^{\text {th }}$ and $7^{\text {th }}$ graders, feel embarrassed about tutoring can help schools and teachers to develop strategies in overcoming this obstacle. One such strategy may include encouraging peer tutoring so that students feel less uncomfortable in obtaining help. During adolescence, students feel that it is bad to
stand out, so showing students that others are involved in tutoring might help to change their perceptions to a more positive viewpoint. When students are failing, some students may be compelled to seek additional support; on the other hand, some students may feel more self-conscious. The motivational and reasoning factors behind students' decisions to seek help lay the groundwork for both students and teachers in designing effective instructional methods and maintaining student engagement (Naidu, 2006; Rogers \& Hallam, 2008).

For Question 3, the majority of students (36\%) replied to Item A, saying that seeking help from a tutor shows a need for help. Four variables- gender, age, school, and grade-were significant for this item. This result is in agreement with the majority of findings in the literature, as indicated in Wilson and Deane (2001), who found that "most students seemed to have positive attitudes toward help seeking" (p. 348). Older students said that using a tutor helps to meet requirements for graduation; districts in the state of Arizona employed this approach to increase graduation rates (Hoff, 2005, 2008c). Educators can use these data to help minimize students' negative perceptions on seeking help and to promote the benefits of tutoring.

Others' viewpoints on tutoring. Questions 6 and 7 on the poll focused on how other people-specifically, friends and parents-viewed tutoring if the student were to receive help. Responses to these questions varied from offering support and encouragement to questioning the necessity to ridicule. The most common response (46\%) to Question 6 (If I told my friends that I was going to get
tutoring) was Item D (they would encourage my efforts). So, although students may feel embarrassed or think that others do not get tutoring because they might be embarrassed, the majority still report that their friends would support them. This is similar to Question 7 (If I told my parents that I was going to get tutoring), in which the majority of students (44\%) selected Item B (they would encourage my efforts). There was a significant difference in the response rate for gender on Question 6. More girls (52\%) than boys (39\%) stated that their friends would encourage their efforts to get help. Research done by Wilson and Deane (2001) indicated that females are more concerned with the opinion of others. A higher percentage of 10 -year-olds (49\%) than of 15 -year-olds also stated that their friends would encourage their efforts. Fifteen-year-olds more than any other age group reported that their friends would talk them out of it or make fun of them. Peer influence appears to be the most prevalent during the middle school and junior high school years, and does not affect young children nearly as much (Juvonen et al., 2004; Pescolido, 1992). On this question, Item E (other) had the largest response rate out of any of the other responses. Twenty percent of Whites selected this item on Question 6; they also composed 70\% of the total frequency of responses for this item. Out of all the responses for Item E, the majority ( $27 \%$ ) said that their friends wouldn't care or would be okay (see Appendix D for more information on responses to this item).

On Question 7, there were several differences in age groups and ethnicity. Blacks and Whites had a 5\% higher response rate, saying that their parents would
encourage their efforts. Native Americans and Hispanics had the lowest response rate to Item C (parents would allow me to make the decision). This information indicates to the school that parents of certain ethnic groups need information about the benefits of tutoring and perhaps encouragement to get involved in their child's schooling. The response rate for the items on Questions 6 and 7 that stated friends and parents would suggest the student drop the class was extremely low: Less than $5 \%$ of students chose this option. Because of this, it would be beneficial to discover more accurate statements that reflect students' viewpoints. The responses that students provided in the other item can supply additional information that schools can use when interpreting the results of the polls and in modifying future polls. Nevertheless, research has shown that parents play an integral role in student learning and engagement; their involvement and support has a positive and direct correlation to student achievement (Boyer, 1995; Cripps \& Zyromski, 2009; Korkmaz, 2007; "Meeting the Challenge," 2005; Meier, 2002; Ryan, et al., 2010; Tomlinson \& Allan, 2000). In fact, research has shown that parent support has a stronger link to Black and Hispanic students ("Using Positive Student Engagement," 2007). There are, however, many barriers to parent participation and communication; examples include language, transportation, attitudes, culture, stigma, and work. Schools need to overcome the many obstacles that hinder parent involvement and communication (Mendez, Carpenter, La Forett, \& Cohen, 2009; P. Strom \& R. Strom, 2002, 2003). Strategies include creating a friendly climate, providing specific and varied opportunities for parents
to get involved, and using consistent communication that reaches all parents ("Meeting the Challenge of Involving Parents," 2005; P. Strom \& R. Strom, 2003).

Experiences with tutoring. Question 11 (When I request tutoring) and Question 16 (I am willing to volunteer as a tutor) ask students about specific situations that a student has experienced and is presented in a more personal context. Item A (arrange for help without delay) was significant across all five variables, indicating that future research should look at the subgroups to identify additional information. This was also the most common response, since $39 \%$ of students selected it. The Hispanic students (24\%) were the least likely to report that their teachers would arrange help for them. Awareness that this group of students feels that their teachers are not supportive can provide schools with insight on developing techniques to increase teacher support. Perhaps teachers are not aware of their behaviors or attitudes; another reason may be that teachers lack the information about tutoring. School districts and schools can easily remedy this by providing this piece to the teachers. Question 11 also had a high percentage (14\%) of responses to Item E (other). The answers that students wrote in provide further explanations; for example, $30 \%$ of the responses for Item E said that they had never asked a teacher this question. Furthermore, $22 \%$ said that their teacher would help them find a tutor, which is identical to the response for Item
A.

Question 16 did not exhibit many significant relationships or noteworthy differences across groups. The most widespread response was Item A, with a total response rate of $49 \%$. Half of the sample stated that they would be willing to tutor other students in subjects that they know well. Principals and teachers may not be aware of this invaluable finding. This knowledge, however, could help schools to implement more systems of support and methods of tutoring that are effective in cost and resources. Peer tutoring is extremely cost effective, and yields significant gains in student achievement (De Smet et al., 2010; Heller \& Fantuzzo, 1993; Paterson \& Elliot, 2006; Topping, 1995, 2005; Veerkamp \& Kamps, 2007). Studies also reveal that it increases student engagement and selfesteem (Gordon et al., 2004; McDuffie, Mastropieri, \& Scruggs, 2009). Another study, performed by Paterson and Eliot (2006), explored the effects of a cross-age tutoring program that used a learning technique called scaffolding that was first developed by scientist Lev Vygotsky (O’Donnell, Reeve, \& Smith, 2007). This study reported that older students enjoyed tutoring younger students. Peers serve as a feasible and credible mode of support that schools should utilize regularly.

Reasons for tutoring. Responses about the reasons why students request tutoring can inform all stakeholders who are involved on many issues, such as explanations of low student achievement and barriers to seeking help. This information would enable the various stakeholders to increase the awareness and identification of students who are having difficulties, as well as minimize or remove any impediments to students who are seeking help (Wilson \& Deane,
2001). For example, the predominant responses to Question 2 (More students would seek tutoring if) were Items C (they cared more about academic success) and D (parents were aware that they needed it). Although these items contained $55 \%$ of the total responses for this question, $40 \%$ responded to A (it was more convenient and available) and to B (teachers would offer them this option).

One significant finding for significance was evident in the age, grade, and school distribution of response rates. There was a $10 \%$ difference between elementary school students who were ages 10 and 11 and who were mostly in Grade 5, and the older students who were ages 12-15 and in Grades 7-8 at the middle school and junior high. More younger than older students reported that they would get tutoring if their parents were aware of it, indicating that parent involvement and support is more important to the younger children. Older students may view that their parents do not need to be involved and that it is their decision to seek help; this view is parallel to the findings in Question 7: More older than younger students reported that their parents would allow them to make the decision regarding tutoring. This view is also parallel to the research (Juvonen et al., 2004) regarding the decreased involvement of parents as students get older, as well as the increased independence that adolescents begin to crave (Cripps \& Zyromski, 2009). In addition, more boys (33\%) than girls (28\%) thought that students would seek help if they cared more about academic success. Schools could then address this issue by creating ways to help motivate students,
especially boys and older students, to do well in school and to care about their success (Dzubak, 2009).

Question 8 provides clues into why students may be having difficulties in school and therefore need a tutor. This question had the most significant relationships and the most amount of total responses; there were almost twice as many total responses $(f=3,444)$ as there were participants in the sample $(N=$ 1,960 ), indicating that further investigation into the relationships within the subgroups is a worthwhile idea. Item C (difficulty focusing because of disruptions) was the most prevalent response ( $22 \%$ ), even though it was the response with the least significant relationships. Other frequent responses (on average, $15-19 \%$ for each) include poor listening habits, poor teacher explanations of the material, and trouble reading or remembering the information. A high percentage of students (11\%) selected other as a response. Further examination into the individual responses of students reveals difficulty understanding the material, bad grades, and lack of need for a tutor as additional reasons why students seek help (see Appendix D) (Naidu, 2006).

Five to $10 \%$ more younger students than older students cited that difficulty focusing was the main reason why they would get a tutor. Perhaps this result can be explained by shorter attention spans in 10- and 11-year-olds, or maybe the lower grades and elementary schools have more distractions. Students in higher grades (7 and 8) in the middle school and junior high expressed that one of their main motivations in seeking help is that teachers do not provide suitable
explanations of the subject matter. Attribution theory illustrates the different types of factors that people use to explain behaviors and outcomes (O'Donnell et al., 2007). In the present study, it appears that older students appear to use more uncontrollable attributions to explain why they need help, whereas younger students tend to attribute outcomes to more controllable factors, such as poor listening habits by the student ("Stuck in the Middle," 2008). Students who favor more controllable factors are likely to modify their learning approach or to seek additional help than are students who believe that they have no control over the outcomes, which decreases the probability of success. A strategy to reverse this way of thinking is to create a more responsive environment in which students feel in control, as well as to provide clear expectations so that students understand how they can succeed (O’Donnell et al., 2007). Schools can apply these student perceptions for implementation in the school. Principals and teachers can create an environment with minimal distractions. This insight from older students can also inform school districts, policy makers, and principals that teachers may need more training in providing instruction and activities that focus on mastery learning, comprehension, and authentic application of the material. These instructional practices have been shown to increase student engagement and motivation, which one study proved with at-risk Black middle schoolers (Dzubak, 2009; "Stuck in the Middle," 2008).

Approaches used when in need of help. Although tutoring is not the only method in obtaining help, it is one of the most effective ways (Bloom, 1984).

Asking adolescents what they do when they are struggling in a class can provide insight into how stakeholders, such as schools, teachers, and parents, can tailor support strategies around the approaches they prefer to use (Naidu, 2006;

Truschel, 2006). Question 4 asks students what they do when they fail a class or a test that is required to graduate. The majority of students (33\%) favored having a tutor automatically assigned to them. Hispanics, however, were least likely to choose this response (25\%), and Blacks (36\%) selected this response more than any other group. Another option, with which Hispanics (25\%) identified, along with Blacks (23\%) and Native Americans (26\%), included going to summer school. Summer school can provide many benefits to students, such as decreased loss of knowledge (Tutor Vista, 2009). Hispanics also chose taking monthly practice tests (20\%), which both Whites (21\%) and Asians (24\%) selected as their second option. Asians and Whites also had a stronger affinity toward using computer programs for help, which may be explained by availability of or comfortability (skill level) with computers. Studies do reveal that $87 \%$ of the content on the Internet is in English, which presents an obstacle to English Language Learners (Revenaugh, 2001). Identifying adolescent preferences for other approaches of getting help assists schools in meeting the needs of each group, and thus of each individual student. Schools can offer more practice tests and more summer school opportunities to students who prefer those options. This knowledge can also help principals and teachers to market this support information effectively.

A study conducted by Chaplain (2000) indicated that about $33 \%$ of adolescents find it difficult or feel uncomfortable asking their teacher for help. Question 10 (If a subject is difficult to understand I), contained several key findings. There were two clear majority responses for this question: asking the teacher questions (48\%) and asking classmates or friends for help (35\%). Meeting with a counselor or not seeking help at all did not represent the perspectives of students in this sample. One difference is seen in the response choice of Native Americans; this group selected asking friends for help (36\%) more than asking the teacher for help (22\%). Minority groups heavily rely on peers (Goza \& Ryabov, 2009). This outcome is opposite of that of the other ethnic groups, especially Blacks; $57 \%$ of them chose asking the teacher for help, and $28 \%$ favored asking their friends or classmates indicated that they preferred asking friends for help, similar to much of the research conducted (McDuffie, Mastropieri, \& Scruggs, 2009; Paterson \& Elliot, 2006; Veerkamp \& Kamps, 2007). This strategy of utilizing peers to support student learning can also apply to other demographic variables. The response of asking friends for help was significantly more prevalent among students who were ages 11-14 and in middle school than it was for 10- and 15-year-olds. Peer relationships are a critical aspect of adolescence; this is not only evident in the results of this study, but in most research as well (Juvonen et al., 2004; Cripps \& Zyromski, 2009; Pescolido, 1992; P. Strom \& R. Strom, 2009). Schools can use this knowledge, however, to their advantage and can design more opportunities for peer tutoring.

Methods in obtaining tutoring information. Accessing information about support and tutoring is a critical part of its success. In Question 13, students are asked how schools should inform students about tutoring opportunities. Understanding the preference for each subgroup can help schools to identify and resolve any potential barriers and to use each group's preference to increase the number of students that they reach. Both on school Website (32\%) and on daily announcements (36\%) were the majority's response; at orientation and in the handbook was selected by $25 \%$ of the students. Boys significantly chose the Web site and announcements over orientation, whereas the response rates of girls were less distinguishable. Elementary students (38\%) chose the school Web site more than did the middle school and junior high school students, whose preference was daily announcements ( $38-41 \%$ ). Younger students chose the Web site over announcements by $10 \%$; the opposite was true for older students. Older students also preferred orientation and the handbook slightly more than did younger students. This could be because experience with these materials is lacking at the lower level.

In terms of ethnicity, Blacks (42\%), Whites (34\%), and Hispanics (33\%) preferred obtaining information via daily announcements, whereas Asians (37\%) and Native Americans (32\%) favored the Web site. Hispanics were the least likely group to choose the Web site as a communication mode, because the response rate for this item was $26 \%$. An explanation for this might be the lack of available technology. There is a "digital divide" among families and students,
demonstrating significant discrepancies among ethnic groups and SES (Bitter \& Legacy, 2006, 2008; Revenaugh, 2000). Closing this gap is a hurdle that schools and educators must overcome to ensure equality in education. Schools have, however, made significant gains in providing access to all students: $94 \%$ report having instructional rooms with Internet access (Wells \& Lewis, 2006).

Student responses to the open-ended question, other, suggested newsletters sent home, flyers posted in the school and teacher announcements in the classroom as additional avenues for communication. Contradictory to recent literature (Lenhart et al., 2005), the communication preferences of adolescent students, the participants in this study surprisingly didn't relate the use of technological devices as an option. As much of the research and literature (Cripps \& Zyromski, 2009; Goza \& Ryabov, 2009; Juvonen et al., 2004; P. Strom \& R. Strom, 2009) about adolescence illustrates, peers have a significant influence on teenagers. Therefore, using adolescents' social networks by having students who are already involved in tutoring spread the word can be advantageous (Pescolido, 1992; Wilson \& Deane, 2001). The optimal method would be to use several or all methods of communication in order to reach the maximum amount of students, parents, and community members; this was another recommendation from the students (see Appendix D). Students' opinions and affinities for communication style can help school districts, schools, and teachers understand, create, and implement effective methods to relate information about tutoring or other school news to students, parents, and the community. Providing avenues for open and
effective communication to occur between all stakeholders is an indicator of a quality, successful school and an essential part to any school improvement plan (Boyer, 1995; Bryk, 2010; "Conducting a Comprehensive," 2009; Creemers et al., 1998; Cripps \& Zyromski, 2009; Epstein; 2001; Meier, 2002; P. Strom \& R. Strom, 2002, 2003; "Using Positive Student Engagement," 2007).

For Question 15 (Students should receive school report cards showing), the highest response rate indicated that the following responses were the most common and were somewhat evenly distributed: Item A (group progress of students who receive tutoring) (31\%), Item B (gains that tutored students make in subjects) (28\%), and Item C (comments by students about tutoring) (25\%). The variable ethnicity had the most variation in responses. Whites were the only group that consisted of a fairly even distribution across all three items, with a range of $31-35 \%$. The other groups had more sizeable differences among their responses. Asians (46\%) were the only group who favored report cards showing the gains that students make in subjects. The majority of Blacks (56\%) liked the group progress of students who receive tutoring. Hispanics (70\%) and Native Americans (51\%) both wanted to see the comments about the tutoring experience by other students who attend sessions, something that Wilson and Deane (2001) denote as an important means to promote help-seeking behaviors. Statistical analysis also revealed a significant difference between this item response and ethnicity. The variations among responses for Item C were great; 21\% of Asians and $2 \%$ of Blacks selected this choice. Addressing all three options might be the
only way for schools to be the most influential. Teachers, however, could use the specific data that each group preferred when conferring with students and their parents.

Specifics of tutoring: Time, type, and subject. Tutoring can occur in numerous places, at different times, and in many subjects; types of tutoring can also vary, from one-on-one with a professional tutor, teacher, or peer, to small group instruction. In terms of environment, studies reveal that the home environment is the most conducive to effective tutoring (Gordon, 2009). Recognizing the preferred context and the needs for individual students and specific demographic categories increases the likelihood of students to seek help, therefore enhancing student achievement (Bailey \& Thompson, 2008; Goza \& Ryabov, 2009; Naidu, 2006; Rogers \& Hallam, 2010; Wilson \& Deane, 2001). In addition, using research to understand the most beneficial forms of tutoring can maximize student learning (Bloom, 1994; Gordon, 2006; Topping, 2000 Truschel, 2008). Question 5 focuses on the time of day that is most optimal for students to receive tutoring. The majority of students (41\%) stated that right after school was the best option. Although this choice was reflected across all variables, an interesting finding was that younger children preferred after-school tutoring significantly more than they preferred before-school tutoring, which differed slightly from students in middle school and junior high. The response rates of students in lower grades and in elementary school indicate that tutoring sessions on the weekends or at home are more convenient for them than they are for
students in middle school and junior high. Older students who are ages 13-15 in Grades 7-8 generally selected before school more than their younger peers did. Perhaps this was due to after-school activities such as sports, or hanging out with friends, which are more common among older adolescents. Because the time that tutoring is offered can be differentiated by school, providing tutoring at the most preferred time of the students is easily possible. It is important to note that without polling students' opinions, this information would not be available.

The focus of Question 9 is on the type of help that students prefer. Almost half ( $49 \%$ ) of the total responses favored a one-on-one session with a tutor (Item B) over a small group setting (22\%), computer programs/online support (18\%), and video lessons (8\%). One-on-one tutoring is an extremely effective method in providing support and increasing student comprehension of the material (Bloom, 1984; Cohen et al., 1982; Topping, 2000; Wasik \& Slavin, 1993). Technology options were not more selected; this is surprising since adolescents report using any type of technological device as being more fun and engaging (Gross, 2004; Lenhart et al., 2005; Livingstone, 2003; Livingstone \& Bober, 2004). Since the data in this study were collected several years ago, the frequency for this response might be higher today. Computer programs, such as Virtual Nerd and other tutorial software, can have a positive impact on student learning and can help to improve their grades (The Associated Press, 2010; Schmid, Miodrag, \& Di Francesco, 2008; Yesilyurt \& Kara, 2007). Differences in gender were found: Girls (51\%) favored tutoring more than boys (46\%). There was one large
discrepancy among ethnic groups. There was a significant preference for tutoring with Asians (54\%), Blacks (63\%), and Whites (63\%). Forty-one percent of Hispanics chose one-on-one tutoring, whereas $28 \%$ of Native Americans selected this option. The response rate of Native Americans (36\%) illustrates their preference for small group instruction over tutoring. Hispanics (22\%) and Whites (24\%) selected small group instruction as their second choice. This finding is consistent with those in other questions on this poll, indicating that Hispanics and Native Americans prefer options related to friends, classmates, or peers. Studies have shown that peer influence can increase student success in school in the Hispanic culture (Goza \& Ryabov, 2009).

In Question 12, the majority of students (36\%) selected the teacher in whose class they are struggling as their preference for the type of tutor desired. Classmates who know the subject had a response rate of $23 \%$. This finding corresponds to much of the literature about the preference and importance of peer tutoring among adolescence (Gordon, 2009; Paterson \& Elliot, 2006; De Smet, et al., 2010; Topping, 2000, 2005, 2008; Veerkamp \& Kamps, 2007). An unexpected discovery was the response rate for Item C (someone from a tutoring company); it was predicted that this item would have elicited more than $16 \%$ of responses that it actually received. This particular finding is especially valuable to all stakeholders, including tutoring companies. Discovering the reasoning behind the students' preference for this will definitely help focus the type of tutor and the format of support sessions. It also will help explain why many students go to a
tutor. One explanation, as the literature reveals, is that adolescents prefer to receive help from someone they know and are comfortable with (Giordan, 2004; Gordon, 2009; Morrow-Howell et al., 2009; Naidu, 2006; Triplett, 2004; Truschel, 2006). This preference is also evident in the individual responses to the open-ended item (other) for this question. Students indicated that they preferred a family member, a teacher, friends, or someone they know as a tutor. Although Question 12 revealed few significant relationships in item responses and in the variables, in addition to little or no substantial discrepancies in response rates among groups, the overall implications of the total response rate in conjunction with the literature validate its importance (Morrow-Howell et al., 2010).

When districts, schools, or teachers provide support to students, it is important for them to recognize that students like to work with people they know and trust and will likely make more gains if that is the case. Therefore, requesting parents and peers to tutor would be beneficial (Crary, 2010; Dzubak, 2009; Heller \& Fantuzzo, 1993; Rohr \& He, 2010; Topping, 1995, 2005; Topping, et al., 2004). Parent involvement is significant to student gains (Cripps \& Zyromski, 2009; Meier, 2002; "Using Positive Student Engagement," 2007). It can also decrease school dropout rates among teenagers, especially Hispanics (Ryan, Casas, Kelly-Vance, Ryalls, \& Nero, 2010). Knowing the importance of forming relationships is critical for members of the community, other volunteers, and tutoring companies as well. These groups serve an important role in providing support to students (Bell, 2009; Hoff, 2008b; Morrow-Howell et al., 2009; Parker,

2009; Relerford, 2009; S. Strom \& S. Strom, 1995a). It is clear through previous research and literature (Truschel, 2006) that any tutor needs to develop a rapport and bond with students if they want students to benefit.

Question 14 discussed the subjects in which students were most likely to seek help. The options included mathematics, English, science, social studies, and other. There were many significant relationships found across variables and item responses, except for math. Mathematics, however, had one of the highest response rates, with a total frequency of $29 \%$; the total frequency for the remaining subjects included the following: science (23\%), English (19\%), social studies (13\%), and other (16\%). Other subjects that students reported in the openended response were reading, spelling, several subjects, and no subjects at all. It is interesting to note that $75 \%$ of the total responses to other were selected by Whites-although this does correspond to the overall pattern in this study. Comparisons between the subgroups revealed numerous differences in the subjects that students found challenging. Girls reported needing more help in math $(30 \%)$ and science ( $24 \%$ ) than boys did ( $27 \%$ and $19 \%$, respectively); conversely, boys (22\%) stated they need more support in English than girls did $(15 \%)$. This is in agreement with literature that indicates the tendency of boys to prefer science over girls (Liu, 2010).

With regard to ethnicity, Blacks (30\%), Hispanics (26\%), and Whites (29\%) reported that they struggled with math the most. Asians (25\%) and Native Americans (25\%) said that English was harder for them than math. Reasoning for
this may be the limited exposure to or experience with English that these students could have, whereas English is the native language for most Blacks and Whites. Even though it is not the principal language of the Hispanic culture in this study, perhaps they may have less difficulty with the English language than Asians and Native Americans if they are surrounded by it more frequently. All of the ethnic groups selected science as the second most difficult subject for them.

Examining the responses to math across age, grade, and school indicated that it was the most common subject chosen by all subgroups, declaring that they needed the most help with math. Seventh graders (28\%) and 13year-olds (29\%), however, selected English 7-12\% more than any other group. The curriculum for students in this grade or of this age must focus significantly on an English-related topic, or perhaps $7^{\text {th }}$ graders endure high stakes testing in this subject. Science was reported to be more challenging for students in Grade 8 (32\%) and who were ages 14 (33\%) and 15 (31\%); junior high students reported similarly (30\%). The challenge of science became less prevalent as age and grade decreased:

Elementary school students, $5^{\text {th }}$ graders, and 10 -year-olds had a considerably lower response rate to science ( $17 \%$ ). This indicates that science is a central part of the curriculum in the upper grades; the results also show that science concepts are more difficult in junior high than they are in elementary school. Younger adolescents who are age $10(33 \%)$, in $5^{\text {th }}$ grade ( $25 \%$ ), and in elementary schools (28\%) selected other more. Spelling, reading, and no subjects were the most prevailing responses completed in the open-ended item. The response rate for
these subjects significantly declined as students' grade, age, and school increased, indicating that they are a main focus of elementary school curriculum. Understanding the curriculum for each grade level can help each tutor tailor his or her instruction to meet the individual students' needs. Gaining student perceptions of the subjects in which they struggle as well as in which they are interested is a crucial part of school improvement and student learning (Wakefield \& Pumfrey, 2009). Rather than using more general tutors who are not trained or specialized in certain content areas, each school can also apply this knowledge to find experts in these specific subjects to increase efficiency of tutoring and students' achievement.

## Implications for the Stakeholders

Stakeholders can and should base their decisions on all of these students' perspectives when designing and creating opportunities for student support and tutoring in order to maximize school improvement and student achievement. They should not waste this valuable knowledge. Each one can take advantage of the important information derived from student viewpoints in the decisions made at their level. The outcomes that can result are improved schools and increased student achievement, in addition to a strengthened and more effective educational system. Because everyone plays a role in school improvement, student opinions and ideas should be included in this process, since they have the most at stake (Bechtel \& Reed, 1998; P. Strom \& R. Strom, 2009).

There were several significant purposes of this study: first, to understand the importance of using student perspectives to inform school decision-making and improve schools; second, to use online polling as a systematic method in obtaining student perceptions on conditions of learning in the schools; third, to demonstrate the importance of tutoring as a fundamental component in increasing student achievement. Recommendations on each of these topics for all stakeholders involved are described below. They are made on the basis of current literature in the field and on the results of this study.

Recommendations for policy makers. Lawmakers may be able to more effectively create and implement new strategies, such as the following:

- Include tutoring in educational policies as a critical piece of student achievement
- Provide funding for schools who employ online polling or other methods to improve the conditions of learning
- Use funds for researchers to construct and develop innovative methods of acquiring student perceptions, especially through the use of technology
- Consult with tutoring agencies to create a plan for using their services to increase student achievement
- Provide grants for districts to conduct large surveys about student perceptions and then implement the changes
- Supply school districts and school boards with information on using polls to inform school decision-making
- Publish the results of polls conducted across the United States, in addition to the changes made by schools and districts as a result of these outcomes
- Support school districts that make improvements on the basis of the polls with additional resources and funds
- Offer funds and grants for schools and districts to use tutoring to improve student achievement

Recommendations for school boards and school districts. Ideas that school districts and school boards can implement to aid in school improvement consist of the following:

- Converse with educational researchers and consultants about using and developing Internet polls for school improvement purposes
- Conduct polls using the entire school district as a populationpolls for students, teachers, principals, parents, and people in the community
- Publish the reports from the polls across the district and community
- Inform stakeholders of the progress on a regular basis
- Implement strategies outlined by the poll results and monitor their impact
- Arrange opportunities for principals and schools to collaborate on a regular basis about the poll results and the modifications that ensued
- Expand the participation of parent organizations and encourage them to develop strategies for connecting parents with the community
- Provide funding to those schools that make improvements on the basis of the polls
- Use funds for tutoring purposes
- Consult with local tutoring agencies, retired teachers, and current teachers about using their services to assist and tutor students
- Find providers and businesses in the community who will serve schools in the district

Recommendations for schools and principals. The following portrays strategies that schools and their administrators can adopt in their school to serve as a catalyst for reform:

- Utilize the research on using Internet polls and obtaining student perspectives to supplement school improvement
- Demonstrate the importance and explain the purpose of online polls to the students, teachers, parents, and community
- Question students, teachers, parents, and the community about relevant topics and issues on which the school needs to improve
- Create and conduct Internet polls and surveys several times throughout the year on topics that are salient to the school. Give polls to teachers, students, parents, and the community
- Announce the poll results to all stakeholders and show the changes made as a consequence of them
- Use the results from the polls to implement changes in a timely fashion
- Monitor and broadcast the effects of the implementations made
- Report progress on a regular basis to all stakeholders
- Request parents, teachers, and members of the community to assist with the execution of the polling process
- Provide opportunities and incentives for teachers to tutor students
- Invite parents, groups, businesses, and people in the community to assist with school improvement plans and to tutor students
- Request members of the community to donate their services to help improve the school
- Organize meetings to allow all of the stakeholders to discuss issues in the school, methods of improving the school, changes implemented in the school, and the use of tutoring in the school
- Establish an atmosphere that is conducive to the involvement of all stakeholders
- Increase community involvement through regular communication and elicit its help in getting the word out
- Supply an area in the school for both tutoring and polling
- Strengthen parent and community partnerships
- Initiate student feedback groups and meet with them on a consistent basis

Recommendations for teachers. Suggestions that teachers can
implement include the following:

- Motivate students to contribute to the school's improvement plan and committee
- Foster a classroom environment in which students help each other learn
- Attend school improvement meetings
- Urge students to partake in the online polling process and discussions about salient topics for the polls
- Provide experiences for students to understand the importance of their involvement and the polling process
- Demonstrate to students the value of their perspectives
- Allow students to complete the polls during class time
- Develop detailed plans and a "resource box" for people who tutor in the school
- Communicate specific ways in which the community can get involved in the classroom and school
- Create an environment in the classroom in which parents, students, and community members feel welcome
- Monitor student participation in the polls

Recommendations for students. Students can use the following approaches to help improve the school:

- Participate in school and district polls
- Serve on the school improvement committee or in the student feedback group
- Assist in the design of survey questions and response items
- Provide the school with insight on the problems and issues in the school, as well as with some potential solutions
- Encourage the parents to participate and explain the various ways they can help
- Give feedback on the changes implemented to help the school
- Offer time and help in tutoring other students

Recommendations for parents. The following provides ideas for parents to employ to assist in school reform:

- Seek out members and businesses in the community that can provide assistance to improve the school: publishers for the poll results, tutors, survey constructors, and so on
- Participate in elections and support policies that consist of effective strategies to increase student achievement
- Help the school raise funds for tutoring or for online polling
- Become an active member in the school's improvement plan
- Volunteer time to help tutor students or assist in the polling process
- Offer input on any polls or surveys that are requested
- Encourage children to complete the polls

Recommendations for members in the community. There are many strategies that the community can utilize to aid the local schools in their plans for improvement:

- Vote for policies that encourage and provide funds for school improvement and student achievement purposes
- Volunteer in the schools in roles such as a tutor
- Get involved in a local school
- Attend fundraising events at a school in the community
- Respond to any surveys or polls in a timely fashion
- Provide personal services for the school, such as publishing reports, advertising polls, creating surveys or Web sites on the Internet, offering tutoring services, and so on
- Find resources in the community for school improvement purposes


## Recommendations for educational researchers and technologists.

Educational researchers can conduct studies, among other things, to gain new knowledge about school reform so that they can relate the information to other members in the educational world:

- Design innovative methods to use tutoring in the schools to increase student achievement
- Use technology to create new instruments to measure and obtain the viewpoints of schools, districts, teachers, students, parents, and the community
- Develop advanced systems and strategies to improve schools and assist in school reform
- Perform continual research on the use of Internet- and computerbased polls in school improvement, as well as the use of stakeholders' viewpoints to inform educational decision-making
- Publish research conducted on these topics and on those related to them
- Collaborate with all of the stakeholders on new research and discoveries


## Limitations and Recommendations for Future Studies

The present study investigated the importance of acquiring student perceptions for school improvement purposes. This was achieved using the method of an online poll that pertained to tutoring among adolescents. One limitation of this study was that it did not analyze the relationships within each categorical group (e.g., boys and girls); this study looked only for significant relationships between a general category (gender) and the item response. The results that ensued from this research, and from the few others that are similar in nature (Sindel-Arrington, 2010; Wing, 2007; Wingate, 2010), provide the foundation on which future studies can be based. New research can take the findings a step further to focus on the relationships within demographic groups. For example, Walker (2009) explored the difference between girls and boys on their perceptions of cyberbullying. Studies that take the next step and examine specific hypotheses regarding the relationship between the genders, for example, or each age group, will offer more insight into the importance and application of this topic.

Another limitation of this study was that the participants in this study's sample may have greater access to computers and therefore stronger computer skills. This characteristic, however, may not be indicative of other schools and sample populations (Greenlaw \& Brown-Welty, 2009). Performing studies in a variety of locations will supply more information about the significance of the results and perhaps allow for more inferences and generalizability to the entire population.

The polling questions may serve as another limitation, since self-reporting and self-respondent surveys may be biased. As Takalkar, Waugh, and Micceri (1993) stated in their article about the truth in student responses on surveys, "all self-report measures...will likely have significant measurement error" (p. 14). This error can occur even when participants respond to items that ask about factual information, such as ethnicity, age, and grade level. In fact, two studies found that there was an error rate of $0-10 \%$ when participants answered these types of questions. For items that focused on participants' attitudes or judgments, the error rate was much higher (Pace, 1985; Takalkar et al., 1993). When participants report inaccuracies about personal beliefs, behaviors, or other subjective topics, this is known as self-presentation bias. Self-presentation bias is the tendency of people to report more desirable responses, even though they may be erroneous. Most research with adolescents, however, indicates that computer- or Web-based surveys reduce this bias in comparison with those in traditional paper-and-pencil format. Although paper-and-pencil surveys allow participants to leave questions
blank or to modify answers, causing higher rates of missing data, surveys conducted on the computer have the capability of preventing nonresponses (Sax et al., 2003; Supple et al., 1999). Even though the present study did not utilize this aspect, future studies can employ this technique in addition to the many other features that only computer- and Internet-based polls can utilize to enhance the quality of the data. This study also revealed that Item A produced a $63 \%(f=10)$ response rate out of all sixteen questions. Discovering more about the reasoning for Item A's being chosen as the most common response (e.g., was it random or was it student laziness) would assist in developing more accurate surveys.

Topics of the polls need to be updated to reflect the current issues in schools. Likewise, questions and responses should portray an accurate depiction of adolescent views. Allowing all stakeholders to offer input on the polling topics and questions, and asking students specifically for feedback on the item responses will help to accomplish this objective. This will also maximize the success and purpose of the study and demonstrate its significance to all stakeholders. Future studies can also create polls on additional topics that may be more applicable in other populations. In order for surveys to be beneficial, the topics need to be pertinent to all of the stakeholders. The salience of the subject matter can affect the participation rate of the subjects, (Groves et al., 2004). Although topics of the polls may be one reason why some students choose not to participate, there may be other explanations as well. Obtaining this information is important; once the reasons are evident, a researcher can control for these factors to enhance the
accuracy and quality of the data. Previous studies suggest that the anonymity of online polling is a common concern among adolescents (Brener, Eaton, Kann, Grunbaum, Gross, Kyle, \& Ross, 2006; Eaton et al., 2010; Nevo et al., 2010; Supple et al., 1999; Wright et al., 1998). Eaton and her colleagues (2010) suggested that researchers can control for this by "placing barriers around each computer and increasing the distance between computers" (p. 151). Providing time in school to complete the poll, as long as privacy is regulated, may also encourage more poll participation.

Other modifications and improvements for future research include a clear plan to report the results of the studies to all stakeholders involved: school boards, policy makers, principals, teachers, students, parents, and the community. By doing this research at the beginning of a school year, the changes proposed by the findings can be implemented in a timely fashion. According to a study by Nevo et al. (2010), the application of the results was an important factor in the success of using students' perceptions to improve conditions of learning. Students wanted to see the actual results of the survey and the use of their solicited views and inpt. This not only will increase student participation in the future, but will also strengthen the relationship between students and their school (Epstein, 2001).

## Conclusions

The purpose of the present study was to explore the use of Internet polls to solicit and understand student perspectives on tutoring in order to inform school decision-making and improvement plans. As a result of the Department of

Education's NCLB (U.S. Department of Education, Office of Elementary Education, 2001) and the Recovery Act of 2009 (Recovery.gov, 2009), schools are being held more accountable for student achievement and learning. Students can help improve the school's learning environment by providing ideas and insights. Electronic polls are one way to gather these student perspectives in an efficient manner.

Electronic polling or Internet polling can take place in elementary schools, high schools, and colleges, as students' opinions are beneficial at all ages. Although student input is extremely beneficial, the teachers, parents, and even people in the community, can express their viewpoints through anonymous polls. Polling topics can be designed in accordance with the needs of both the school and community. Online polling allows a variety of people to give their viewpoints. When there are more perspectives, there is a more holistic and consolidated view of the ideas and changes that should be implemented. The results of the online polling would, of course, be more effective if they were shared with the staff, parents, students, and even the school district. In doing so, these stakeholders can see how their viewpoints have guided the improvement of the school. This will promote enthusiasm and reciprocal learning, as well as a build a learning community in which all members involved are valued and respected.

The United States comprises many students who are struggling to succeed. "If [we] don't catch them at the right time, these can be the kids who never catch
up" (Kolodner, 2009, p. 1). According to the Recovery Act (Recovery.gov, 2009), funds can be distributed to underperforming schools that have developed ways to ensure that their goals to improve and increase student achievement can be reached. Tutoring is one of the best methods in helping struggling students achieve and progress. New and innovative ideas and suggestions for improvement with regard to tutoring need to be generated. Gaining insight about tutoring from the ones who have the most at stake-the students-is a necessity in order to create and implement effective tutoring programs in the schools; this will in turn promote lasting and successful school reform.

## References

Asher, H. (1998). Polling and the public: What every citizen should know. Washington, DC: Congressional Quarterly Press.

Avery, R. J., Bryant, W. K., Matbios, A., Kang, H., \& Bell, D. (2006). Electronic course evaluations: Does an online delivery system influence student evaluations? Journal of Economic Education, 37(1), 21-37. Retrieved from http://www.tandf.co.uk/journals/titles/00220485.asp

Baggaley, J., Kane, T., \& Wade, B. (2002). Online polling services. International Review of Research in Open and Distance Learning, 3(2). Retrieved from http://cde.athabascau.ca/softeval/reports/R120205.pdf

Bailey, M., \& Thompson, P. (2008). "It makes you feel free": Interpreting students' views of study on support. Educational Review, 60(3), 283-297. doi: 10.1080/00131910802195885

Barth, R. S. (1990). Improving schools from within: Teachers, parents, and principals can make the difference. San Francisco, CA: Jossey-Bass.

Bechtel, D., \& Reed, C. (1998). Students as documenters, benefits reflections, and suggestions. NASSP Bulletin, 82, 89-95. doi:
10.1177/019263659808259413

Beebe, T. J., Harrison, P.A., McRae, J. A., Anderson, R. E., \& Fulkerson, J. A. (1998). An evaluation of computer-assisted self-interviewing in a school setting. Public Opinion Quarterly, 62(4), 623-632. Retrieved from http://poq.oxfordjournals.org

Bell, A. (2009, April 8). Tutor program documents benefits to older people and children. Chronicle of Philanthropy. Retrieved from http://www.philanthropy.com

Bitter, G. G., \& Legacy, J. M. (2006). Using technology in the classroom: Brief Version. Boston, MA: Pearson.

Bitter, G. G., \& Legacy, J. M. (2008). Using technology in the classroom. Boston, MA: Pearson.

Black, S. (2005). Listening to students. American School Board Journal, 192(11), 39-41. Retrieved from http://www.asbj.org

Bloom, B. (1984). The search for methods of group instruction as effective as
one-to-one tutoring. Educational Leadership, 41(8), 4-16. Retrieved from http://www.ased.org

Blumenstyk, G. (2008, January 18). Chronicle joins with Gallup to help colleges find out how they are seen by the public. The Chronicle of Higher Education, p. 15a. Retrieved from http://chronicle.com

Bowie, L. (2009, April 14). Older volunteers do good for schools and for their own health, studies find. Baltimore Sun. Retrieved from http://www.baltimoresun.com

Boyer, E. L. (1995). The basic school: A community for learning. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Brener, N. D., Eaton, D. E., Kann, L., Grunbaum, J., Gross, L. A., Kyle, T. M., \& Ross, J. G. (2006). The association of survey setting and mode with selfreported health risk behaviors among high school students. Public Opinion Quarterly 70(3), 354-374. doi: 10.1093/poq/nfl1003

Bryk, A. (2010). Organizing schools for improvement. Phi Delta Kappan, 91(7), 23-30. http://www.pdkintl.org

Bueschel, A. C. (2008). Listening to students about learning (Research Report). Retrieved from The Carnegie Foundation for the Advancement of Teaching website: http://www.carnegiefoundation.org

Burch, P. (2007, May). Supplemental Education Services under NCLB: Emerging evidence and policy issues (Policy Brief). East Lansing, MI: The Great Lakes Center for Educational Research and Practice.

Caffray, C. M., \& Chatterji, P. (2009). Developing an internet-based survey to collect program data. Evaluation and Program Planning, 32, 62-73. doi: 10.1016/j.evalprogplan.2008.08.009

Carini, R. M., Hayek, J., Kuh, G., Kennedy, J., \& Ouimet, J. (2003). College student responses to web and paper surveys: Does mode matter? Research in Higher Education 44(1), 1-19. doi: 0361.0365/03/0200-0001/0

Chaplain, R. P. (2000). Beyond exam results? Differences in the social and psychological perceptions of young males and females at school.
Educational Studies, 26(2), 177-190. Retrieved from http://www.educationalstudies.org

Chatterji, M. (2003). Designing and using tools for educational assessment.

Boston, MA: Allyn \& Bacon.
Cohen, P.A., Kulik, J.A., \& Kulik, C. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. American Educational Research Journal, 19(2), 237-248. doi: 10.3102/00028312019002237

Coladarci, T., Cobb, C. D., Minium, E. W., \& Clarke, R. B. (2008). Fundamentals of statistical reasoning in education. Hoboken, NJ: Wiley.

Common Core Standards Initiative. (2010). Retrieved from http://www.corestandards.org/

Conducting a comprehensive needs assessment. (2009, June). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id=674\&Itemid=5

Cook, C., Heath F., \& Thompson, R. L. (2000). A meta-analysis of response rates in web- or internet-based surveys. Educational and Psychological Measurement 60(6), 821-36. doi: 10.1177/00131640021970934

Crary, D. (2010, April 5). It's win-win for elderly tutors, grade-school kids. Associated Press. Retrieved from http://www.boston.com

Creemers, B., Reynolds, D., Chrispeels, J., Mortmore, P., Murphy J., Stringfield, S., Stoll, L., \& Townsend, T. (1998). The future of school effectiveness and improvement. Effectiveness and School Improvement, 9(2), 125-134. Retrieved from http://www.icsei.net

Cresswell, J. W. (2002). Educational research: Planning, conducting, and evaluatingquantitative and qualitative research. Upper Saddle River, NJ: Pearson.

Cripps, K., \& Zyromski, B. (2009). Adolescents' well-being and perceived parental involvement: Implications for parental involvement in middle schools. Research in Middle Level Education Online, 33(4), 1-13. Retrieved from http://www.nmsa.org/

Darling, B., \& Price, T. (2004). Students' perspectives on alternative community and correctional education schools and services. Journal of Correctional Education, 55(1), 69-76. Retrieved from http://www.ashland.edu/centers/gill/edjournal/articles.php

Davidson, J. (2003). A new role in facilitating school reform. The case of the
educational technologist. Teachers College Record, 105(5), 729-752. Retrieved from http://www.tcrecord.org

Defining the role of school boards: Architect, communicator, leader. (2006, August). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id=350\&Itemid=5

Designing effective school improvement strategies.(2009, June). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id=675\&Itemid=5

De Smet, M., Van Keer, H., De Wever, B., \& Valcke, M. (2010). Studying thought processes of online peer tutors through stimulated-recall interviews. High Education, 59, 645-661. doi: 10.1007/s10734-009-92732

Developing a positive school climate. (2009, April). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org

Dillon, S. (2009, June 1). U.S. effort to reshape schools faces challenges. New York Times. Retrieved from http://www.nytimes.com

District support of school improvement: Highlights from three districts. (2009, September). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id=653\&Itemid=5

Doucette, C. (2005). Smoothing the path to learning success: A student perspective. Education Canada, 45(2), 21-23. Retrieved from http://www.ceaace.ca/

Dzubak, C. M. (2009). Why tutoring matters: The interaction of a peer tutor and a tutee during scaffolding. Synergy: The Journal of the Association for the Tutoring Profession, 2, 1-5. Retrieved from http://www.myatp.org/ejournal.htm

Eaton, D. K., Brener, N. D, Kann, L, Denniston, M. M., McManus, T., Kyle, T. M., Roberts, A. M., Flint, K. H., \& Ross, J. G. (2010). A comparison of paper-and-pencil versus web administration of the youth risk behavior
survey (YRBS): Risk behavior prevalence estimates. Evaluation Review, 34(2), 137-153. doi: 10.1177/0193841X362491

EducationNews. (2010, March 23). President Obama's plan to eliminate tutoring draws broad-based criticism. Retrieved from http://www.educationnews.org

Epstein, J. L. (2001). School, family, and community partnerships: Preparing educators and improving schools. Boulder, Colorado: Westview Press.

Experience Corps. (2010). Retrieved from http://www.experiencecorps.com
Fruchter, N. (2001). Challenging failing schools [Report]. Retrieved from the National Housing Institute website: http://www.nhi.org/online/issues/118/Fruchter.html

Gay, L. R., \& Airasian, P. (1992). Educational research: Competencies for analysis and applications. Upper Saddle River, NJ: Pearson.

Gazette Opinion. (2010, August 11). AYP spotlights challenges for schools. Billings Gazette. Retrieved from http://www.billingsgazette.com

Gewertz, C. (2004). Student-designed poll shows teenagers feel lack of adult interest. Education Week, 24(10), 6-7. Retrieved from http://www.edweek.org/

Gewertz, C. (2008). Consensus on learning time builds: Interest in expanding hours for students to master academic, social, and workplace skills is mounting. Education Week, 28(5), 1. Retrieved from http://www.edweek.org/

Gewertz, C. (2009a). Proposed Title I changes ease tutoring rules. Education Week, 28(28), 15. Retrieved from http://www.edweek.org/

Gewertz, C. (2009b). Tutoring and reading; "Evaluation of Experience Corps: Student reading outcomes." Education Week, 28(29), 5. Retrieved from http://www.edweek.org/

Gibson, S. (2009). Intergenerational communication in the classroom: Recommendations for successful teacher-student relationships. Nursing Education Perspectives, 30(1), 37-39. Retrieved from http://www.nln.org/nlnjournal

Giordan, M. (2004). Tutoring through the internet: How students and teachers
interact to construct meaning. International Journal of Science Education, 26(15), 1875-1894. Retrieved from http://www.tandf.co.uk

Girod, M., Pardales, M., Cavanaugh, S., \& Wadsworth, P. (2005). By teens, for teachers: A descriptive study of adolescence. American Secondary Education, 33(2), 4-19. Retrieved from http://www.ashland.edu/ase

Gordon, E. E. (2006). The state of tutoring in America. Synergy: The Journal of the Association for the Tutoring Profession, 1(1), 1-12. Retrieved from http://www.myatp.org/ejournal.htm

Gordon, E. E. (2009). 5 ways to improve tutoring. Phi Delta Kappan, 90(6), 440445. Retrieved from http://www.pdkintl.org/

Gordon, E. E., Morgan, R. R., Ponticell, J. A., \& O’Malley, C. J. (2004). Tutoring solutions for No Child Left Behind: Research, practice, and policy implications. NASSP Bulletin, 88(638), 59-68. doi: 10.1177/019263650408863805

Goza, F., \& Ryabov, I. (2009). Adolescents' educational outcomes: Racial and ethnic variations in peer network importance. Youth Adolescence, 38, 1264-1279. doi: 10.1007/s10964-009-9418-8

Greenlaw, C., \& Brown-Welty, S. (2009). A comparison of web-based and paperbased survey methods: Testing assumptions of survey mode and response cost. Evaluation Review, 33(5), 464-480. doi: 10.1177/0193841X09340214

Gross, E. (2004). Adolescent internet use: What we expect, what teens report. Applied Developmental Psychology, 25, 633-649. doi:10.1016/j.appdev.2004.09.005

Groves, R. M., Presser, S., \& Dipko, S. (2004). The role of topic interest in survey participation decisions. Public Opinion Quarterly, 68(1), 2-31. doi: 10.1093/poq/nfh002

Growing Stars. (2010). Retrieved from http://www.growingstars.com
Hallfors, D., Watson, K., Khatapoush, S., Kadushim, C., \& Saxe, L. (2000). A comparison of paper vs. computer assisted self-interview for school alcohol, tobacco, and other drug surveys. Evaluation and Program Planning, 23(2), 149-155. http://www.elsevier.com

Hallinger, P. (2003). Learning education change: Reflections on the practice of
instructional and transformational leadership. Cambridge Journal of Education, 33(3), 329-352. doi: 10.1080/0305764032000122005

Hatch, T. (2009). Four flawed assumptions of school reform. Education Week, 29(14), 24-32. Retrieved from http://www.edweek.org

Heck, R. H. (2000). Examining the impact of school quality on school outcomes and improvement: A value-added approach. Educational Administration Quarterly, 36(4), 513-552. doi: 10.1177/00131610021969092

Heller, L. R., \& Fantuzzo, J. W. (1993). Reciprocal peer tutoring and parent involvement: Does parent involvement make a difference? School Psychology Review, 22(3), 517-535. Retrieved from http://www.nasponline.com

Hendricks, C. C. (2009). Strategies for collecting data. In C. C. Hendricks (Ed.), Improving schools through action research: A comprehensive guide for educators (pp. 71-100). Boston, MA: Allyn \& Bacon.

Hoff, D. (2005). Arizona students welcome tutoring for graduation exam. Education Week, 24(6), 12. Retrieved from http://www.edweek.org

Hoff, D. (2008a). Education department report shows increase in tutoring, choice under NCLB. Education Week, 27(32), 4. Retrieved from http://www.edweek.org/

Hoff, D. (2008b). NCLB tutoring outside the box. Education Week, 27(37), 20-23. Retrieved from http://www.edweek.org/

Hoff, D. (2008c). Rules mandate uniform graduation rates. Education Week, 28(11), 15-16. Retrieved from http://www.edweek.org/

Houge, T. T. (2009). Delivering one-to-one tutoring in literacy via videoconferencing. Journal of Adolescent and Adult Literacy, 53, 154164. doi:10.1598/JAAL.53.2.6

Huntington Learning Center. (2010). Retrieved from
http://huntingtonlearning.com
Idleman, L. (2003, April). Comparing responses to mail and web-based surveys. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Ishaq, K., \& Kritsonis, W. (2009). School leadership makes a difference: A
sociological perspective of effective strategic planning and integrating realms of meaning into school improvement. National Forum of Applied Educational Research Journal, 23(1\&2), 1-8. Retrieved from $\mathrm{http}: / / \mathrm{www}$. nationalforum.com/Journals

Juvonen, J., Vi-Nhuan, L., Kaganoff, T., Augustine, C., \& Constant, L. (2004). Focus on the wonder years: Challenges facing the American middle school [Monograph]. Retrieved from http://www.rand.org/pubs/monographs/MG139/

Kaplan Tutoring. (2010). Retrieved from http://www.kaplantutoring.com
Kaplowitz, M., Hadlock, T., \& Levine, R. (2004). A comparison of web and mail survey response rates. Public Opinion Quarterly, 68(1), 94-101. doi: 10.1177/105960117600100205

Kiernan, N. E., Kiernan, M., Oyler, M. O., \& Gilles, C. (2005). Is a web survey as effective as a mail survey? A field experiment among computer users. American Journal of Evaluation 2(2), 245-252. doi: 10.1177/1098214005275826

Kolodner, M. (2009, April 18). Read it and weep! Tutors get cut. New York Daily News. Retrieved from http://www.nydailynews.com

Konings, K. D., van Zundert, M. J., Brand-Gruwel, S., \& van Merrienboer, J. G. (2007). Participatory design in secondary education: Is it a good idea? Students' and teachers' opinions on its desirability and feasibility. Educational Studies, 33(4), 445-465. doi: 10.1080/03055690701423648

Korkmaz, I. (2007). Teachers' opinions about the responsibilities of parents, schools, and teachers in enhancing student learning. Education, 127(8), 389-399. Retrieved from http://projectinnovation.biz/education_2006.html

Kuhn, P. (2008). Education for thinking. Cambridge, MA: Harvard University Press.

LeClaire, D. (2010). Leech lake hosts TCUs for peer tutoring. Tribal College Journal, 21(3), 50. Retrieved from http://www.tribalcollegejournal.org/

Lenhart, A., Madden, M., \& Hitlin, P. (2005). Teens and technology: Youth are leading the transition to a fully wired and mobile nation (Research Report). Retrieved from Pew Internet and American Life Project website: http://www.pewinternet.org

Leung, D. Y. P., \& Kember, D. (2005). Comparability of data gathered from evaluation questionnaires on paper and through the internet. Research in Higher Education, 46(5), 571-591. doi: 10.1007/s11162-005-3365-3

Levin, B. (2000). Putting students at the centre in education reform. Journal of 155-172. Retrieved from http://www.springerlink.com/content/104758/

Liu, M. (2005). The effect of a hypermedia learning environment on middle school students' motivation, attitude, and science knowledge. Computers in the Schools, 22(3/4), 159-171. Retrieved from http://www.tandf.co.uk/journals/

Livingstone, S. (2003). Children's use of the internet: Reflections on the emerging research agenda. New Media \& Society, 5(2), 147-166. Retrieved from http://nms.sagepub.com

Livingstone, S., \& Bober, M. (2004). Taking up online opportunities? Children's uses of the internet for education, communication and participation. $E$ Learning, 7(3), 395-419. Retrieved from http://www.wwwords.co.uk/elea/

Lodge, C. (2005). From hearing voices to engaging in dialogue: Problematising student participation in school improvement. Journal of Educational Change, 6(2), 125-146. doi: 10.1007/s10833-005-1299-3

MacDonald, C., \& Figueredo, L. (2010). Closing the gap early: Implementing a literacy intervention for at-risk kindergartners in urban schools. The Reading Teacher, 63(5), 404-418. doi: 10.1598/rt.63.5.6

Marzano, R. J., Waters, T., \& McNulty, B. A. (2005). School leadership that works: From research to results. Alexandria, VA: Association for Supervision and Curriculum Development.

Mathis, W. J. (2010). The "common core" standards initiative: An effective reform tool? (Policy Brief). East Lansing, MI: The Great Lakes Center for Educational Research and Practice.

McCabe, S. E. (2004). Comparison of web and mail surveys in collecting illicit drug use data: A randomized experiment. Journal of Drug Education, 34(1), 61-72. Retrieved from http://www.baywood.com/journals/

McDuffie, K. A., Mastropieri, M. A., Scruggs, T. E. (2009). Differential effects of peer tutoring in co-taught classes: Results for content learning and studentteacher interactions. Exceptional Children, 75(4), 493-510.

Meeting the challenge of involving parents in school. (2005, August). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/files/August\ newsletter.pdf

Meier, D. (2002). In schools we trust: Creating communities of learning in an era of testing and standardization. Boston, MA: Beacon Press.

Mendez, J. L., Carpenter, J. L., LaForett, D. R., \& Cohen, J. S. (2009). Parental engagement and barriers to participation in a community-based preventative intervention. Community Psychology, 44, 1-14. doi: 10.1007/s10464-009-9252-x

Morrow-Howell, N., Jonson-Reid, M., McCrary, S., Lee, Y., \& Spitznagal, E. (2009). Evaluation of Experience Corps: Student reading outcomes [CSD Research Report No. 09-01]. Retrieved from Washington University in St. Louis, Center for Social Development website: http://csd.wustl.edu/Publications/Documents/RP09-01.pdf

Munoz, M., Potter, A., \& Ross, S. (2008). Supplemental Educational Services as a consequence of the NCLB legislation: Evaluating its impact on student achievement in a large urban district. Journal of Education for Students Placed at Risk, 13(1), 1-25. doi: 10.1080/10824660701860342

Nadler, D. A. (1976). The use of feedback for organizational change: Promises and pitfalls. Group \& Organization Studies, 1(2), 177-186. doi: 10.1177/105960117600100205

Naidu, P. (2006). Literature review: Tutoring. Synergy: The Journal of the Association for the Tutoring Profession, 1(1), 1-12. Retrieved from http://www.myatp.org/ejournal.htm

National Center for Education Statistics. (2010). Retrieved from http://nces.ed.gov

National Middle School Association. (2010). Retrieved from http://www.nmsa.org

Nevo, D., McClean, R., \& Nevo, S. (2010). Harnessing information technology to improve the process of students' evaluations of teaching: An exploration of students' critical success factors of online evaluations. Journal of Information Systems Education, 21(1), 99-109. Retrieved from http://www.jise.org/

O’Donnell, A., Reeves, J., \& Smith, J. (2007). Educational psychology: A call for
action [Custom Edition for Arizona State University]. Hoboken, NJ: Wiley.

Obama, B. (Producer). (2009a, March 10). National Educational Technology Plan 2010. [Video \& audio podcast]. Retrieved from http://www.whitehouse.gov

Obama, B. (Producer). (2009b, March 10). Taking on education. [Video \& audio podcast]. Retrieved from http://www.whitehouse.gov

Obama, B. (Producer). (2009c, November 23). President Obama kicks off "Educate to Innovate." [Video \& audio podcast]. Retrieved from http://www.whitehouse.gov

Obama, B. (Producer). (2010a, March 1). Obama vows education reform. [Video \& audio podcast]. Retrieved from http://www.whitehouse.gov

Obama, B. (Producer). (2010b, March 13). Weekly address: Education for a more competitive America \& better future. [Video \& audio podcast]. Retrieved from http://www.whitehouse.gov

Obama, B. (2010c, June 7). Remarks by the President at Kalamazoo Central High School Commencement." Western Michigan University Arena, Kalamazoo, Michigan. Retrieved from http://www.whitehouse.gov

Oliver, R. (1998). Partnerships in teaching and learning: An emerging role for technology. In C. McBeath and R. Atkinson (Eds.), Proceedings of Edtech '98: The Biennial Conference of the Australian Society for Educational Technology (pp. 188-192). Perth, Australia: ASET.

Pace, R. (1985). The credibility of student self-reports (Research Report No. ED266174). Retrieved from University of California, Center for the Study of Evaluation website: http://www.cse.ucla.edu

Parker, R. (2009, April 15). Study touts benefits of tutor program. The Arizona Republic. Retrieved from http://www.azcentral.com

Paterson, P. O., \& Elliot, L. N. (2006). Struggling reader to struggling reader: High school students' responses to a cross-age tutoring program. Journal of Adolescent and Adult Literacy, 49(5), 378-389. doi:10.1598/JAAL.49.5.2

Pescolido, B. A. (1992). Beyond rational choice: The social dynamics of how people seek help. American Journal of Sociology, 97, 1096-1138. Retrieved from http://www.journals.uchicago.edu/toc/ajs/current

Pines, S. (2010, March 17). Statement of Education Industry Association executive director Steven Pines on the U.S. Deptartment of Education's plans for a Reauthorized Elementary and Secondary Education Act. Education News. Retrieved from http://www.educationnews.org

Program evaluation for the practitioner: Using evaluation as a school improvement strategy. (2006, June). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/files/TheCenter_NL_June06.pdf

Reallocating resources to support school improvement. (2009, July). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id=676\&Itemid=5

Recovery.gov. (2009). American Recovery and Reinvestment Act of 2009. Retrieved from http://www.recovery.gov

Reeves, T. (1998). The impact of media and technology in schools (Research Report). Retrieved from the Bertelsmann Foundation website: http://www.bertelsmannstiftung.de/cps/rde/xchg/bst_engl/hx.xsl/index.html

Relerford, P. (2009, April 21). Experience Corps tutors making big difference for kids. Star Tribune. Retrieved from http://www.startribune.com

Revenaugh, M. (2000). Closing the gap for urban families. Curriculum Administrator, 36(9), 29. Retrieved from http://www.accessmylibrary.com

Revenaugh, M. (2001). We don't speak internet. Curriculum Administrator, 37(3), 29. Retrieved from http://www.accessmylibrary.com

Rideout, V. J., Foehr, U. G., \& Roberts, D. F. (2010). Generation M: Media in the lives of 8- to 18 year olds. Retrieved from http://www.kff.org

Rogers, L., \& Hallam, S. (2010). Changes in perceptions of studying for the GCSE among year 10 and year 11 pupils. Educational Studies, 36(2), 153163. doi: 10.1080/030556903148746

Rohr, J., \& He, Y. (2010). Preservice teachers and parents: Using a reading course to change perceptions and practice. Educational Studies, 36, 35-45. doi:10.1080/03055690903148530

Rose, L. C. (2006). Centennial reflections: A brief history of Phi Delta Kappa/Gallup poll. Phi Delta Kappan, 87, 631-633. Retrieved from http://www.pdkintl.org/

Rourke, L., \& Kanuka, H. (2009). Learning in communities on inquiry: A review of the literature. American Journal of Distance Education, 23(1), 19-48. Retrieved from http://www.jofde.ca/index.php/jde

Ryan, C. S., Casas, J. F., Kelly-Vance, L., Ryalls, B. O., \& Nero, C. (2010). Parent involvement and views of school success: The role of parents' Latino and White American cultural orientations. Psychology in the Schools, 47(4), 391-404. doi: 10.1002/pits. 20477

Sax, L. J., Gillmartin, S., \& Bryant, A. (2003). Assessing response rates and nonresponse bias in web and paper surveys. Research in Higher Education, 44(4), 409-432. Retrieved from http://www.aabri.com/rhej.html

Schmid, R. F., Miodrag, N., \& Di Francesco, N. (2008). A human-computer partnership: The tutor/child/computer triangle promoting the acquisition of early literacy skills. Journal of Research on Technology in Education, 41(1), 63-84. Retrieved from http://www.iste.org

Schonlau, M., Fricker, R., \& Elliott, M. (2002). Conducting research surveys via $e$-mail and the web (Research Report No. MR-1480-RC). Retrieved from Rand Corporation website: http://www.rand.org

Seven actions that improve school district performance. (2006, November). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/files/TheCenter_NL_Nov06.pdf

Shannon, D., \& Bradshaw, C. (2002). A comparison of response rate, response time, and costs of mail and electronic surveys. The Journal of Experimental Education, 70(2), 179-192. Retrieved from http://www.jstor.org/stable/20152675

Shannon, D., Johnson, T., Searcy, S., \& Lott, A. (2002). Using electronic surveys: Advice from survey professionals. Practical Assessment, Records and Evaluation, 8(1), 1-10. Retrieved from http://PAREonline.net/getvn.asp?v=8\&n=1

Sindel-Arrington, P. (2010). Using internet polling to capture students' perspectives (Doctoral dissertation). Available from ProQuest Interdisciplinary Dissertations and Theses database. (AAT No. 3407117)

Smith, G. (2010, September 19). Next schools chief to face daunting challenges. The State. Retrieved from http://www.the state.com

Spellings, M. (2007, June 20). Tutoring shows success. USA Today, p. 12a.
Sternberg, R. J. (2004). Good intentions, bad results. Education Week, 24(9), 4256. Retrieved from http://www.edweek.org

Stiggins, R. (2004). New assessment beliefs for a new school mission. Phi Delta Kappan, 86(1), 22-27. Retrieved from http://www.pdkintl.org/

Stock, S. E., Davies, D. K., \& Wehmeyer, M. L. (2004). Internet-based multimedia tests and surveys for individuals with intellectual disabilities. Journal of Special Education Technology, 19(4), 43-47. Retrieved from http://www.tamcec.org/jset/

Stover, D., \& Hardy, L. (2008). As tutoring becomes a billion dollar industry, are you doing what it takes to make a difference for your students? American School Board Journal, February, 15-19. Retrieved from http://www.asbj.com

Strom, P., \& Strom, R. (2002). Teacher-parent communication reforms. High School Journal, 86(2), 14. Retrieved from http://uncpress.unc.edu/browse/page/7

Strom, P., \& Strom, R. (2003). Uniting adolescent support systems for safe learning environments. Educational Forum, 67, 164-173. Retrieved from http://www.kdp.org/publications/theeducationalforum/index.php

Strom, P., \& Strom, R. (2008). Trading places: Adolescents as teachers. Adolescence, 44(173), 22-32. Retrieved from http://www.childresearch.net/

Strom, P., \& Strom, R. (2009). Adolescents in the internet age. Charlotte, NC: Information Publishing, Inc.

Strom, P., Strom, R., \& Wing, C. (2008). Polling students about conditions of learning. NASSP Bulletin, 92(4), 292-304. doi: 10.1177/0192636508325512

Strom, P., Strom, R., Wing, C, \& Beckert, T. (2009). Adolescent learning and the
internet: Implications for school leadership and student engagement in learning. NASSP Bulletin, 93(2), 111 -121. doi:
10.1177/0192636509340436

Strom, R., \& Strom, P. (2002). Changing the rules: Education for creative thinking. Journal of Creative Behavior, 36(3), 183-200. Retrieved from http://www.creativeeducationfoundation.org/

Strom, R., \& Strom, P. (2007). Adolescent polling and school improvement (Research Report). Retrieved from Child Research Net website: http://www.childresearch.net/resource/research/2007/strom2.htm

Strom, R., \& Strom, S. (1994). Grandparent volunteers in the schools: Building a partnership. Journal of Instructional Psychology, 21(4), 329. Retrieved from http://www.questia.com

Strom, R., \& Strom, S. (1995a). Grandparent volunteers and education. Education Digest, 61(3), 48. Retrieved from http://www.eddigest.com/

Strom, R., \& Strom, S. (1995b). Intergenerational learning: Grandparents in the schools. Educational Gerontology, 21(4), 321-335. doi:
10.1080/0360127950210403

Stuck in the middle: Strategies to engage middle-level learners. (2008, May). Center for Comprehensive School Reform and Improvement. Retrieved from
http://www.centerforcsri.org/index.php?Itemid=5\&id=551\&option=com_c ontent\&task=view

Sun, A., \& McClanahan, R. (2003, April). Is newer better: A comparison of web and paper-pencil survey administration modes. Paper presented at the annual meeting of the American Research Association, Chicago, IL.

Supple, A. J., Aquilino, W. S., \& Wright, D. L. (1999). Collecting sensitive selfreport data with laptop computers: Impact on the response tendencies of adolescents in a home interview. Journal of Research on Adolescence, 9(4), 467-488. Retrieved from http://www.s-r-a.org/journal-researchadolescence

Sylvan Learning Center. (2010). Retrieved from
http://tutoring.sylvanlearning.com
Takalkar, P., Waugh, G., \& Micceri, T. (1993, May). A search for truth in student
responses to survey items. Paper presented at the AIR Annual Forum, Chicago, IL.

The Associated Press. (2010, February 24). Need help with math? Watch the virtual nerd. Education Week, 29(22), 10-11. Retrieved from http://www.edweek.org

The role of principal leadership in improving student achievement. (2005, September). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?Itemid=5\&id=145\&option=com_c ontent\&task=view

Tomlinson, C. A., \& Allan, S. D. (2000). Leadership for differentiating schools and classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.

Tonn, J. L. (2006). Later high school start times a reaction to research. Education Week, 25(28), 5-17. Retrieved from http://www.edweek.org

Topping, K. J. (1995). Cued-spelling: A powerful technique for parent and peer tutoring. The Reading Teacher, 48(5), 374-383.

Topping, K. J. (2000). Tutoring. In K. J. Topping (Ed.), Educational Practices Series: 5 (pp.1-33). Brussels, Belgium: International Academy of Education.

Topping, K. J. (2005). Trends in peer learning. Educational Psychology, 25(6), 631-645. doi: 10.1080/01443410500345172

Topping, K. J., Kearney, M., McGee, E., \& Pugh, J. (2004). Tutoring in mathematics: A generic method. Mentoring and Tutoring, 12(3), 1-20. doi: 10.1080/030910042000275954

Triplett, C. F. (2004). Looking for a struggle: Exploring the emotions of a middle school reader. Journal of Adolescent and Adult Literacy, 48(3), 214-222. doi: 10.1598/jaal.48.3.3

Truschel, J. (2006). 6 habits of a highly effective tutor. Synergy: The Journal of the Association for the Tutoring Profession, 1(2), 1-4. Retrieved from http://www.myatp.org/ejournal.htm

Truschel, J. (2008). What tutors can do to enhance the critical thinking skills
through the use of Bloom's taxonomy. Synergy: The Journal of the Association for the Tutoring Profession, 2(1), 1-10. Retrieved from http://www.myatp.org/ejournal.htm

Tutor Our Children. (2010a, September 28). Waiting for SES tutoring [Web log post]. Retrieved from http://www.tutorourchildren.org

Tutor Our Children. (2010b, October 1). Tough message for President Obama [Web log post]. Retrieved from http://www.tutorourchildren.org

Tutor Our Children. (2010c, October 2). Parents get involved in their child's education [Web log post]. Retrieved from http://www.tutorourchildren.org

Tutor Our Children. (2010d, October 9). Recent poll shows democratic voters' strong support for SES [Web log post]. Retrieved from http://www.tutorourchildren.org/

Tutor Our Children. (2010e, October 11). Deficiencies in public schools lead families to rely on tutors [Web log post]. Retrieved from http://www.tutorourchildren.org/

TutorVista. (2009, June 2). Re: Making summer tutoring work [Web log comment]. Retrieved from http://blog.tutorvista.com/tag/online-tutoring/
U.S. Department of Education, Office of Educational Technology. (2010). Transforming American education: Learning powered by technology. Retrieved from the Department of Education website: http://www.ed.gov
U.S. Department of Education, Office of Elementary Education. (2001). No Child Left Behind Act (The Elementary and Secondary Education Act as Reauthorized by the No Child Left Behind Act of 2001). Retrieved from the Department of Education website: http://www.ed.gov
U.S. Department of Education, Office of Innovation and Improvement. (2004). Innovations in education: Creating strong Supplemental Education Services programs. (No. ED-01-CO-0012). Retrieved from the Department of Education website: http://www.ed.gov
U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. (2010). Blueprint for reform: Reauthorization of the Elementary and Secondary Education Act. Retrieved from the Department of Education website: http://www.ed.gov

Using positive student engagement to increase student achievement. (2007,

April). Center for Comprehensive School Reform and Improvement. Retrieved from
http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id=446\&Itemid=5

Vail, K. (2006). A tool for reform. American School Board Journal, July, 15-18. Retrieved from http://www.asbj.com

Venezky, R. (2004). Technology in the classroom: Steps toward a new vision. Education, Communication, and Information, 4(1), 3-21. doi:
10.1080/1463631042000211024

Veerkamp, M. B., \& Kamps, D. (2007). The effects of classwide peer tutoring on the reading achievement of urban middle school students. Education and Treatment of Children, 30(2), 21-51. Retrieved from http://www.educationandtreatmentofchildren.net/

Viadero, D. (2008). Research yields clues on the effects of extra time for learning; yet results are inconclusive as scholars have trouble teasing out which strategies work best. Education Week, 28(5), 16. Retrieved from http://www.edweek.org

Viadero, D. (2009). Research doesn't offer much guidance on turnarounds; prescriptions are lacking for transforming failing schools. Education Week, 28(37), 10. Retrieved from http://www.edweek.org

Virtual Nerd. (2010). Retrieved from http://www.virtualnerd.com
Voices from the field: How school boards can support district-wide school improvement efforts. (2009, August). Center for Comprehensive School Reform and Improvement. Retrieved from http://www.centerforcsri.org/index.php?option=com_content\&task=view \&id $=679$ \&Itemid $=5$

Wakefield, P., \& Pumfrey, D. (2009). Illuminating and improving national curriculum development: Students' perceptions and suggestions. A pilot study in a state secondary school. Educational Review, 61(1), 63-83. doi: 10.1080/00131910802684805

Walker, J. (2009). The contextualized rapid resolution cycle intervention model for cyberbullying (Doctoral dissertation). Available from ProQuest Interdisciplinary Dissertations and Theses database. (AAT No. 3392128)

Wasik, B. A., \& Slavin, R. E. (1993). Preventing early reading failure with one-
to-one tutoring: A review of five programs. Reading Research Quarterly, 28(2), 178-200. Retrieved from http://www.jstor.org

Wells, J., and Lewis, L. (2006). Internet access in U.S. public schools and classrooms: 1994-2005 (NCES 2007-020). Washington, DC: National Center for Education Statistics.

Westen, T. (2000). E-democracy: Ready or not, here it comes. National Civic Review, 89(3), 217. Retrieved from http://www.ncl.org/publications/ncr/

Wilson, C. J., \& Deane, F. P. (2001). Adolescent opinions about reducing helpseeking barriers and increasing appropriate help engagement. Journal of Educational and Psychological Consultation, 12(4), 345-364.

Wing, C. (2007). Student polling in rural title I schools to inform required decision-making (Doctoral dissertation). Available from ProQuest Interdisciplinary Dissertations and Theses database. (AAT No. 3258192)

Wingate, J. J. (2010). Using online student polling for continuous improvement planning (Doctoral dissertation). Available from ProQuest Interdisciplinary Dissertations and Theses database.

Wright, D. L., Aquilino, W. S., \& Supple, A. J. (1998). A comparison of computer-assisted and paper-and-pencil self-administered questionnaires in a survey on smoking, alcohol, and drug abuse. Public Opinion Quarterly, 62, 331-353. Retrieved from http://poq.oxfordjournals.org

Yesilyurt, S., \& Kara, Y. (2007). The effects of tutorial and edutainment software programs on students' achievements, misconceptions, and attitudes towards biology on the cell division issue. Journal of Baltic Science Education, 6(2), 5-15.

Zenanko, M., \& Burrows, C. G. (2006). The teaching/learning center and technology. Synergy: The Journal of the Association for the Tutoring Profession, 1(1), 1-7. Retrieved from http://www.myatp.org/ejournal.htm

Zenkov, K. (2009). Seeing the pedagogies, practices, and programs urban students want. Theory Into Practice, 48, 168-175. doi: 0.1080/00405840902997253

Zimmer, R., Hamilton, L., \& Christina, R. (2010). After-school tutoring in the context of NCLB: Effectiveness of two programs in the Pittsburgh public schools. Economics of Education Review, 29, 18-28.
doi:10.1016/j.econedurev.2009.02.005

## APPENDIX A

TUTORING POLL

## LearningPolls.org <br> Tutoring Poll

The purpose of this poll is to find out how students at your school feel about tutoring. A common goal for tutoring is to help students gain skills that are needed to do well in a course or pass a test.

Directions: For each item, select the answer(s) that indicate how you feel. In some cases, you may select more than one answer. If an answer you want to give is not listed, write it down on the line marked 'other.' Your responses are anonymous and may be combined with those of other students at your school in a report to students, faculty, and parents.

1. Most students I know who need tutoring
$\square$ recognize their need and will ask for help
$\square$ deny they have a problem with the subject
$\square$ feel embarrassed and refuse to ask for help
$\square$ blame their difficulties on poor teachers
$\square$ other:
2. More students would seek tutoring if
$\square$ it was more convenient and available
$\square$ teachers would offer them this option
$\square$ they cared about academic success
$\square$ parents were aware that they needed itother:
3. Seeking help from a tutor
$\square$ shows that I recognize a need for help
$\square$ would embarrass me in front of friends
$\square$ reflects my desire to learn and succeed
$\square$ helps meet requirements for graduation
$\square$ other:
4. When students fail a class or a test required to graduate, they shouldautomatically be assigned a tutor
$\square$ take monthly practice tests
$\square$ go to summer school
$\square$ access a computer program for help
$\square$ other:
5. The most convenient time for me to attend tutoring sessions isright after schoolduring the evening

## LearningPolls.org | Tutoring Poll

$\square$ on weekends
$\square$ as a class during schoolbefore schoolother:
6. If I told my friends that I was going to get tutoring
$\square$ they would make fun of me
$\square$ they would try to talk me out of it
$\square$ they would suggest I drop the course
$\square$ they would encourage my effortsother:
7. If I told my parents that I was going to get tutoring
$\square$ they would suggest I drop the class
$\square$ they would encourage my efforts
$\square$ they would allow me to make the decision
$\square$ they would question if I really need helpother:
8. The reasons I would seek a tutor are
$\square$ poor listening habits in classexcessive absences from classdifficulty focusing because of disruptions
$\square$ my teacher doesn't explain material well
$\square$ trouble reading or remembering materialsnot passing a section of the state testother:
9. If I were to seek help, I would prefera small group settingone on one with a tutor
$\square$ computer program or online support
$\square$ video lessons to watch and repeat
$\square$ other:
10. If a subject is difficult to understand, Iask the teacher questionsask classmates or friends for help
$\square$ look on the Internet for help
$\square$ ask a parent or sibling for help
$\square$ other:

## LearningPolls.org | Tutoring Poll

11. When I request tutoring, my teacher(s)
$\square$ arrange for help without delay
$\square$ put me off and ignore my request
$\square$ suggest checking with a counselor
$\square$ tell me that I should try harder
$\square$ other:
12. I prefer a tutor to be
$\square$ my teacher whose class I am struggling in
$\square$ another teacher in the same subject area
$\square$ someone from a tutoring company
$\square$ classmates who know the subject
$\square$ other:
13. My school should let students know about tutoring
$\square$ at orientation and in the handbook
$\square$ on the school Websiteon daily announcementsother: $\qquad$
14. The subject(s) in which I am most likely to seek tutoring are mathematics
$\square$ English
$\square$ science
$\square$ social studies
$\square$ other:
15. Students should receive school reports showing
group progress of students who receive tutoring
$\square$ gains that tutored students make in specific subjects
$\square$ number of dropouts and whether they had tutoring
$\square$ comments by students about their tutoring experienceother: $\qquad$
16. I am willing to volunteer as a tutor
$\square$ in the subjects that I understand well
$\square$ to help students from families who don't speak English
$\square$ to help students with learning disabilities
$\square$ for classmates in my cooperative group
$\square$
other:

Select your grade level, gender, ethnicity, and age.
17. My grade level is:

O5
O6
07
O 8
O9
O 10
O 11
O 12
18. My gender is:

O Female
OMale
19. My ethnicity is:

OAsian
O Black
O Hispanic
O Native American
O White
O other
20. My age is:

O 10
O 11
O 12
O 13
O14
O 15
O 16
O 17
O 18
O 19
Please enter your school code:
$\square$
[About LearningPolls,org] [Home] [©2006 by P. Strom and R. Strom]

## APPENDIX B

POLLING INSTRUCTIONS FOR TEACHERS

LINK and ENTRY PASSWORD TO TAKE THE POLL

TUTORING POLL is at http://learningpolls.org/XXXX Password is: XXXXX

REQUIRED INSTRUCTIONS TO POLLING TEAM: Faculty/Polling Team can use the above to access the polls but make available to students the link and password using a pdf file to be placed on each school computer's desktop by school IT or other faculty/staff. The pdf file is intended for student use (sent to each team member for his/her school) and should ONLY contain the name of the poll with the active link (URL) and entry password but nothing else. Make sure this pdf is on every computer in the computer lab well before polling begins in order to make the polling an easy, quick process using the link. The second step to make polling easy will be to make sure each student receives a STUDENT STEPS FOR POLLING SHEET-see below.

Copies of the student steps for polling sheet will be provided to the liaison who will provide these to the schools involved. Note that for the second to final item on the poll, be sure each student enters the School ID. This is on the STUDENT STEPS for POLLING SHEET to be given to each student when they arrive at the polling room. --- This sheet must be provided on site to each student when they fill out their polls or else they will lose all this information if provided before they go to the polling labs.

The random individual code is entered by each student at the very end of the poll. Each student gets ONLY one random code during a polling session and this is on the STUDENT STEPS for POLLING SHEET they each get. The code allows them to vote on several polls but not more than once on the same poll. When they try to double vote, the software disallows them. When students are done with polling they should place the student steps for polling sheet in the recycle bin in the room before they leave.

Thanks for the assistance in helping your students express their views about how to improve this school's conditions of learning.

Paris Strom and Robert Strom © 2009

## APPENDIX C

## POLLING INSTRUCTIONS FOR STUDENTS

## STUDENT STEPS for POLLING

1. Open the POLLS file on this computer's desktop.

This file has an active link you press to instantly bring you to the poll below.
2. Fill out the poll using the entry password below.
entry password for TUTORING POLL: XXXXX
3. Near the end of the poll type in your SCHOOL CODE: XXXXX
4. Then type in your RANDOM INDIVIDUAL CODE: XXXXX
5. Press the SUBMIT button.

Your school thanks you for making your views known!!

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## APPENDIX D

RESULTS OF OTHER RESPONSES FROM TUTORING POLL

## Question 1

1. Most students I know who need tutoring
A. recognize their need and will ask for help
26.82\%
B. deny they have a problem with the subject
22.04\%
C. feel embarrassed and refuse to ask for help 25.94\%
D. blame their difficulties on poor teachers
16.46\%
E. other (responses)
8.74\%


## Question 2

2. More students would seek tutoring if
A. it was more convenient and available
18.48\%
B. teachers would offer them this option 17.56\%
C. they cared more about academic success 30.22\%
D. parents were aware that they needed it 25.96\%
E. other
7.78\%


## Question 3

3. Seeking help from a tutor
A. shows that I recognize a need for help
35.72\%
B. would embarrass me in front of friends
10.24\%
C. reflects my desire to learn and succeed 25.12\%
D. helps meet requirements for graduation
23.73\%
E. other (responses)
5.19\%


## Question 4

4. When students fail a class or a test required to graduate, they should
A. automatically be assigned a tutor
32.57\%
B. take monthly practice tests
20.56\%
C. go to summer school
19.10\%
D. access a computer program for help
16.68\%
E. other (responses)
11.09\%


## Question 5

5. The most convenient time for me to attend tutoring sessions is
A. right after school
40.38\%
B. during the evening
10.18\%
C. on weekends
10.91\%
D. at lunchtime
8.04\%
E. before school
19.43\%
F. other (responses)
11.06\%


## Question 6

6. If I told my friends that I was going to get tutoring
A. they would make fun of me
17.79\%
B. they would try to talk me out of it $10.50 \%$
C. they would suggest I drop the course 6.44\%
D. they would encourage my efforts 45.84\%
E. other (responses)
19.43\%


## Question 7

7. If I told my parents that I was going to get tutoring
A. they would suggest I drop the class
2.21\%
B. they would encourage my efforts 44.33\%
C. they would allow me to make the decision
31.56\%
D. they would question if I really need help 14.91\%
E. other (responses)


## Question 8

8. The reasons I would seek a tutor are
A. poor listening habits in class
14.95\%
B. excessive absences from class 6.68\%
C. difficulty focusing because of disruptions 21.98\%
D. my teacher doesn't explain material well 14.98\%
E. trouble reading or remembering materials 19.31\%
F. not passing a section of the state test 11.50\%
G. other (responses) 10.60\%


## Question 9

9. If I were to seek help, I would prefer
A. a small group setting
21.82\%
B. one on one with a tutor
48.40\%
C. computer program or online support
17.67\%
D. video lessons to watch and repeat
7.58\%
E. other (responses)
4.53\%


## Question 10

10. If a subject is difficult to understand, I
A. ask the teacher questions
48.06\%
B. meet with my counselor
4.15\%
C. ask classmates or friends for help
34.50\%
D. seek no help even though I may fail
5.30\%
E. other (responses)
7.99\%


## Question 11

11. When I request tutoring, my teacher(s)
A. arrange for help without delay
38.20\%
B. put me off and ignore my request
7.16\%
C. suggest checking with a counselor
13.55\%
D. tell me I should try harder
24.95\%
E. other (responses)
16.14\%


## Question 12

12. I prefer a tutor to be
A. my teacher whose class I am struggling in
36.80\%
B. another teacher in the same subject area 17.45\%
C. someone from a tutoring company 16.06\%
D. classmates who know the subject 22.90\%
E. other (responses)


## Question 13

13. My school should let students know about tutoring
A. at orientation and in the handbook
24.99\%
B. on the school Website
32.13\%
C. on daily announcements
35.67\%
D. other (responses)
7.21\%


## Question 14

14. The subject(s) in which I am most likely to seek tutoring are
A. mathematics
28.52\%
B. English
18.55\%
C. science
22.02\%
D. social studies
12.86\%
E. other
18.04\%


## Question 15

15. Students should receive school report cards showing
A. group progress of students who receive tutoring
30.85\%
B. gains that tutored students make in subjects 28.44\%
C. number of dropouts and whether they had tutoring 10.03\%
D. comments by students about tutoring experience 25.01\%
E. other (responses)


## Question 16

16. I am willing to volunteer as a tutor
A. in the subjects that I understand well
47.73\%
B. to help students from families who don't speak English
10.28\%
C. to help students with learning disabilities
19.10\%
D. for classmates in my cooperative group
16.84\%
E. other
6.05\%


## APPENDIX E

RESULTS OF TUTORING POLL BY GENDER

Table E1
Frequency and Percent of Demographics by Gender

| Demographic <br> Category |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  | Female ( $n=994$ ) |  | Missing$(n=18)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $n$ | \% of total $N$ | $n$ | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ |  | \% of total $N$ |  | $\%$ of total $N$ |
| Ethnicity |  |  |  |  |  |  |  |  |  |
| Asian |  | 18 | 0.92 | 27 | 1.38 | 0 | 0.00 | 45 | 2.30 |
| Black |  | 197 | 10.05 | 213 | 10.87 | 4 | 0.20 | 414 | 21.12 |
| Hispanic |  | 26 | 1.33 | 40 | 2.04 | 1 | 0.05 | 67 | 3.42 |
| Native Am. |  | 19 | 0.97 | 11 | 0.56 | 0 | 0.00 | 30 | 1.53 |
| White |  | 656 | 33.47 | 655 | 33.42 | 11 | 0.56 | 1322 | 67.45 |
| Other |  | 30 | 1.53 | 40 | 2.04 | 0 | 0.00 | 70 | 3.57 |
| Missing |  | 2 | 0.10 | 8 | 0.41 | 2 | 0.10 | 12 | 0.61 |
|  | Total | 948 | 48.37 | 994 | 50.71 | 18 | 0.92 | 1960 | 100.00 |
| Age |  |  |  |  |  |  |  |  |  |
| 10 |  | 121 | 6.17 | 132 | 6.73 | 4 | 0.20 | 257 | 13.11 |
| 11 |  | 187 | 9.54 | 209 | 10.66 | 5 | 0.26 | 401 | 20.46 |
| 12 |  | 206 | 10.51 | 192 | 9.80 | 3 | 0.15 | 401 | 20.46 |
| 13 |  | 205 | 10.46 | 236 | 12.04 | 3 | 0.15 | 444 | 22.65 |
| 14 |  | 172 | 8.78 | 180 | 9.18 | 2 | 0.10 | 354 | 18.06 |
| 15 |  | 38 | 1.94 | 38 | 1.94 | 0 | 0.00 | 76 | 3.88 |
| Missing |  | 19 | 0.97 | 7 | 0.36 | 1 | 0.05 | 27 | 1.38 |
|  | Total | 948 | 48.37 | 994 | 50.71 | 18 | 0.92 | 1960 | 100.00 |
| Grade |  |  |  |  |  |  |  |  |  |
| 5 |  | 312 | 15.92 | 323 | 16.48 | 7 | 0.36 | 642 | 32.76 |
| 6 |  | 201 | 10.26 | 172 | 8.78 | 4 | 0.20 | 377 | 19.23 |
| 7 |  | 217 | 11.07 | 234 | 11.94 | 3 | 0.15 | 454 | 23.16 |
| 8 |  | 213 | 10.87 | 260 | 13.27 | 2 | 0.10 | 475 | 24.23 |
| Missing |  | 5 | 0.26 | 5 | 0.26 | 2 | 0.10 | 12 | 0.61 |
|  | Total | 948 | 48.37 | 994 | 50.71 | 18 | 0.92 | 1960 | 100.00 |
| School |  |  |  |  |  |  |  |  |  |
| Elementary |  | 299 | 15.26 | 281 | 14.34 | 5 | 0.26 | 585 | 29.85 |
| Middle |  | 216 | 11.02 | 218 | 11.12 | 7 | 0.36 | 441 | 22.50 |
| Junior High |  | 433 | 22.09 | 495 | 25.26 | 6 | 0.31 | 934 | 47.65 |
|  | Total | 948 | 48.37 | 994 | 50.71 | 18 | 0.92 | 1960 | 100.00 |

Table E2
Frequency and Percent of Question Responses by Gender

| Questions and Responses |  | $\begin{aligned} & \text { Female } \\ & (n=994) \end{aligned}$ |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  | Missing$(n=18)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\%$ of total $f$ | $f$ | \% of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help |  | 402 | 14.11 | 355 | 12.46 | 7 | 0.25 | 764 | 26.82 |
| B. deny they have a problem with the subject |  | 283 | 9.93 | 340 | 11.93 | 5 | 0.18 | 628 | 22.04 |
| C. feel embarrassed and refuse to ask for help |  | 407 | 14.29 | 324 | 11.37 | 8 | 0.28 | 739 | 25.94 |
| D. blame their difficulties on poor teachers |  | 249 | 8.74 | 218 | 7.65 | 2 | 0.07 | 469 | 16.46 |
| E. other |  | 153 | 5.37 | 91 | 3.19 | 5 | 0.18 | 249 | 8.74 |
|  | Total | 1,494 | 52.44 | 1,328 | 46.61 | 27 | 0.95 | 2,849 | 100.00 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |  |
| A. it was more convenient and available |  | 294 | 9.95 | 247 | 8.36 | 5 | 0.17 | 546 | 18.48 |
| B. teachers would offer them this option |  | 280 | 9.48 | 232 | 7.85 | 7 | 0.24 | 519 | 17.56 |
| C. they cared more about academic success |  | 449 | 15.19 | 438 | 14.82 | 6 | 0.20 | 893 | 30.22 |
| D. parents were aware that they needed it |  | 426 | 14.42 | 335 | 11.34 | 6 | 0.20 | 767 | 25.96 |
| E. other |  | 137 | 4.64 | 89 | 3.01 | 4 | 0.14 | 230 | 7.78 |
|  | Total | 1,586 | 53.67 | 1,341 | 45.38 | 28 | 0.95 | 2,955 | 100.00 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |  |
| A. shows that I recognize a need for help |  | 597 | 19.35 | 498 | 16.14 | 7 | 0.23 | 1,102 | 35.72 |
| B. would embarrass me in front of friends |  | 145 | 4.70 | 166 | 5.38 | 5 | 0.16 | 316 | 10.24 |
| C. reflects my desire to learn and succeed |  | 449 | 14.55 | 318 | 10.31 | 8 | 0.26 | 775 | 25.12 |
| D. helps meet requirements for graduation |  | 393 | 12.74 | 334 | 10.83 | 5 | 0.16 | 732 | 23.73 |
| E. other |  | 85 | 2.76 | 71 | 2.30 | 4 | 0.13 | 160 | 5.19 |
|  | Total | 1,669 | 54.10 | 1,387 | 44.96 | 29 | 0.94 | 3,085 | 100.00 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |  |
| A. automatically be assigned a tutor |  | 536 | 17.74 | 438 | 14.50 | 10 | 0.33 | 984 | 32.57 |
| B. take monthly practice tests |  | 337 | 11.16 | 277 | 9.17 | 7 | 0.23 | 621 | 20.56 |
| C. go to summer school |  | 267 | 8.84 | 305 | 10.10 | 5 | 0.17 | 577 | 19.10 |
| D. access a computer program for help |  | 267 | 8.84 | 234 | 7.75 | 3 | 0.10 | 504 | 16.68 |
| E. other |  | 191 | 6.32 | 141 | 4.67 | 3 | 0.10 | 335 | 11.09 |
|  | Total | 1,598 | 52.90 | 1,395 | 46.18 | 28 | 0.93 | 3,021 | 100.00 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |  |
| A. right after school |  | 593 | 22.15 | 492 | 18.38 | 10 | 0.37 | 1,095 | 40.90 |
| B. during the evening |  | 133 | 4.97 | 138 | 5.16 | 5 | 0.19 | 276 | 10.31 |
| C. on weekends |  | 151 | 5.64 | 141 | 5.27 | 4 | 0.15 | 296 | 11.06 |
| D. at lunchtime |  | 111 | 4.15 | 105 | 3.92 | 2 | 0.07 | 218 | 8.14 |
| E. before school |  | 271 | 10.12 | 251 | 9.38 | 5 | 0.19 | 527 | 19.69 |
| F. other |  | 181 | 5.60 | 118 | 4.26 | 1 | 0.04 | 300 | 9.90 |
|  | Total | 1,440 | 52.63 | 1,245 | 46.36 | 27 | 1.01 | 2,712 | 100.00 |

Note. Frequency ( $f$ ) indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent $(\%)$ of total f indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

Table E2 continued

| Questions and Responses |  | Female$(n=994)$ |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  | Missing$(n=18)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |  |
| A. they would make fun of me |  | 158 | 6.48 | 273 | 11.19 | 3 | 0.12 | 434 | 17.79 |
| B. they would try to talk me out of it |  | 108 | 4.43 | 143 | 5.86 | 5 | 0.21 | 256 | 10.50 |
| C. they would suggest I drop the course |  | 63 | 2.58 | 92 | 3.77 | 2 | 0.08 | 157 | 6.44 |
| D. they would encourage my efforts |  | 656 | 26.90 | 455 | 18.66 | 7 | 0.29 | 1,118 | 45.84 |
| E. other |  | 274 | 11.23 | 193 | 7.91 | 7 | 0.29 | 474 | 19.43 |
|  | Total | 1,259 | 51.62 | 1,156 | 47.40 | 24 | 0.98 | 2,439 | 100.00 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |  |
| A. they would suggest I drop the class |  | 27 | 0.92 | 38 | 1.29 | 0 | 0.00 | 65 | 2.21 |
| B. they would encourage my efforts |  | 678 | 23.08 | 610 | 20.77 | 14 | 0.48 | 1,302 | 44.33 |
| C. they would allow me to make the decision |  | 501 | 17.06 | 418 | 14.23 | 8 | 0.27 | 927 | 31.56 |
| D. they would question if I really need help |  | 210 | 7.15 | 223 | 7.59 | 5 | 0.17 | 438 | 14.91 |
| E. other |  | 143 | 4.87 | 61 | 2.08 | 1 | 0.03 | 205 | 6.98 |
|  | Total | 1,559 | 53.08 | 1,350 | 45.97 | 28 | 0.95 | 2,937 | 100.00 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |  |
| A. poor listening habits in class |  | 240 | 6.97 | 269 | 7.81 | 6 | 0.17 | 515 | 14.95 |
| B. excessive absences from class |  | 124 | 3.60 | 103 | 2.99 | 3 | 0.09 | 230 | 6.68 |
| C. difficulty focusing because of disruptions |  | 409 | 11.88 | 340 | 9.87 | 8 | 0.23 | 757 | 21.98 |
| D. my teacher doesn't explain material well |  | 294 | 8.54 | 217 | 6.30 | 5 | 0.15 | 516 | 14.98 |
| E. trouble reading or remembering materials |  | 359 | 10.42 | 300 | 8.71 | 6 | 0.17 | 665 | 19.31 |
| F. not passing a section of the state test |  | 199 | 5.78 | 195 | 5.66 | 2 | 0.06 | 396 | 11.50 |
| G. other |  | 221 | 6.42 | 142 | 4.12 | 2 | 0.06 | 365 | 10.60 |
|  | Total | 1,846 | 53.60 | 1,566 | 45.47 | 32 | 0.93 | 3,444 | 100.00 |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |  |  |  |
| A. a small group setting |  | 294 | 11.18 | 274 | 10.42 | 5 | 0.19 | 573 | 21.82 |
| B. one on one with a tutor |  | 697 | 26.50 | 564 | 21.44 | 10 | 0.38 | 1,271 | 48.40 |
| C. computer program or online support |  | 224 | 8.52 | 239 | 9.09 | 1 | 0.04 | 464 | 17.67 |
| D. video lessons to watch and repeat |  | 85 | 3.23 | 112 | 4.26 | 2 | 0.08 | 199 | 7.58 |
| E. other |  | 77 | 2.93 | 41 | 1.94 | 1 | 0.04 | 119 | 4.53 |
|  | Total | 1,377 | 52.36 | 1,230 | 47.15 | 19 | 0.72 | 2,626 | 100.00 |
| 10. If a subject is difficult to understand, I |  |  |  |  |  |  |  |  |  |
| A. ask the teacher questions |  | 730 | 25.46 | 638 | 22.25 | 10 | 0.35 | 1,378 | 48.06 |
| B. meet with my counselor |  | 45 | 1.57 | 73 | 2.55 | 1 | 0.03 | 119 | 4.15 |
| C. ask classmates or friends for help |  | 536 | 18.70 | 447 | 15.59 | 6 | 0.21 | 989 | 34.50 |
| D. seek no help even though I may fail |  | 64 | 2.23 | 86 | 3.00 | 2 | 0.07 | 152 | 5.30 |
| E. other |  | 150 | 5.23 | 75 | 2.62 | 4 | 0.14 | 229 | 7.99 |
|  | Total | 1,525 | 53.19 | 1,319 | 46.01 | 23 | 0.80 | 2,867 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent (\%) of total f indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

Table E2 continued

| Questions and Responses |  | Female$(n=994)$ |  | $\begin{gathered} \text { Male } \\ (n=948) \end{gathered}$ |  | Missing$(n=18)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\%$ of total $f$ | $f$ | \% of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |  |
| A. arrange for help without delay |  | 474 | 20.95 | 405 | 17.90 | 6 | 0.27 | 885 | 39.11 |
| B. put me off and ignore my request |  | 77 | 3.40 | 87 | 3.84 | 2 | 0.09 | 166 | 7.34 |
| C. suggest checking with a counselor |  | 144 | 6.36 | 164 | 7.25 | 6 | 0.27 | 314 | 13.88 |
| D. tell me I should try harder |  | 294 | 12.99 | 279 | 12.33 | 5 | 0.22 | 578 | 25.54 |
| E. other |  | 222 | 9.58 | 150 | 6.47 | 2 | 0.09 | 374 | 14.14 |
|  | Total | 1,211 | 53.28 | 1,085 | 47.79 | 21 | 0.93 | 2,317 | 100.00 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in |  | 560 | 20.48 | 437 | 15.98 | 9 | 0.33 | 1,006 | 36.80 |
| B. another teacher in the same subject area |  | 234 | 8.56 | 238 | 8.71 | 5 | 0.18 | 477 | 17.45 |
| C. someone from a tutoring company |  | 225 | 8.23 | 211 | 7.72 | 3 | 0.11 | 439 | 16.06 |
| D. classmates who know the subject |  | 308 | 11.27 | 311 | 11.38 | 7 | 0.26 | 626 | 22.90 |
| E. other |  | 113 | 4.13 | 73 | 2.67 | 0 | 0.00 | 186 | 6.80 |
|  | Total | 1,440 | 52.67 | 1,270 | 46.45 | 24 | 0.88 | 2,734 | 100.00 |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |  |
| A. at orientation and in the handbook |  | 429 | 14.31 | 315 | 10.51 | 5 | 0.17 | 749 | 24.99 |
| B. on the school Website |  | 503 | 16.78 | 452 | 15.08 | 8 | 0.27 | 963 | 32.13 |
| C. on daily announcements |  | 568 | 18.95 | 491 | 16.38 | 10 | 0.33 | 1,069 | 35.67 |
| D. other |  | 150 | 5.01 | 63 | 2.10 | 3 | 0.10 | 216 | 7.21 |
|  | Total | 1,650 | 55.06 | 1,321 | 44.08 | 26 | 0.87 | 2,997 | 100.00 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |  |
| A. mathematics |  | 435 | 16.27 | 337 | 12.61 | 9 | 0.34 | 781 | 29.22 |
| B. English |  | 230 | 8.60 | 277 | 10.36 | 1 | 0.04 | 508 | 19.00 |
| C. science |  | 353 | 13.21 | 245 | 9.17 | 5 | 0.19 | 603 | 22.56 |
| D. social studies |  | 197 | 7.20 | 150 | 5.48 | 5 | 0.19 | 352 | 13.17 |
| E. other |  | 238 | 8.69 | 251 | 9.17 | 5 | 0.19 | 494 | 16.05 |
|  | Total | 1,453 | 53.97 | 1,260 | 46.78 | 25 | 0.94 | 2,738 | 100.00 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |  |
| A. group progress of tutored students |  | 479 | 16.45 | 411 | 14.12 | 8 | 0.27 | 898 | 30.85 |
| B. gains that tutored students make |  | 416 | 14.29 | 405 | 13.91 | 7 | 0.24 | 828 | 28.44 |
| C. number of dropouts \& if they had tutoring |  | 136 | 4.67 | 154 | 5.29 | 2 | 0.07 | 292 | 10.03 |
| D. comments by students about tutoring |  | 404 | 13.88 | 318 | 10.92 | 6 | 0.21 | 728 | 25.01 |
| E. other |  | 101 | 3.47 | 64 | 2.20 | 0 | 0.00 | 165 | 5.67 |
|  | Total | 1,536 | 52.77 | 1,352 | 46.44 | 23 | 0.79 | 2,911 | 100.00 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well |  | 759 | 25.93 | 629 | 21.49 | 9 | 0.31 | 1,397 | 47.73 |
| B. to help students who don't speak English |  | 165 | 5.64 | 132 | 4.51 | 4 | 0.14 | 301 | 10.28 |
| C. to help students with learning disabilities |  | 326 | 11.14 | 229 | 7.82 | 4 | 0.14 | 559 | 19.10 |
| D. for classmates in my cooperative group |  | 257 | 8.78 | 231 | 7.89 | 5 | 0.17 | 493 | 16.84 |
| E. other |  | 94 | 3.21 | 82 | 2.80 | 1 | 0.03 | 177 | 6.05 |
|  | Total | 1,601 | 54.70 | 1,303 | 44.52 | 23 | 0.79 | 2,927 | 100.00 |

Note. Frequency (f) indicates how many times that item response was chosen; it does not reflect the number of participants (n). Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $\mathrm{N}=1,960$ ). Percent (\%) of total f indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

## APPENDIX F

## RESULTS OF TUTORING POLL BY ETHNICITY

Table F1
Frequency and Percent of Demographics by Ethnicity

Table F2
Frequency and Percent of Question Responses by Ethnicity

| Questions and Responses |  | $\begin{gathered} \text { Asian } \\ (n=45) \end{gathered}$ |  | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  | Hispanic$(n=67)$ |  | Native Am.$(n=30)$ |  | $\begin{gathered} \text { White } \\ (n=1,322) \end{gathered}$ |  | $\begin{aligned} & \text { Other } \\ & (n=70) \end{aligned}$ |  | Missing$(n=12)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\%$ of <br> total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help |  | 20 | 0.70 | 179 | 6.28 | 18 | 0.63 | 16 | 0.56 | 500 | 17.55 | 27 | 0.95 | 4 | 0.14 | 764 | 26.82 |
| B. deny they have a problem with the subject |  | 11 | 0.39 | 124 | 4.35 | 25 | 0.88 | 6 | 0.21 | 432 | 15.16 | 23 | 0.81 | 7 | 0.25 | 628 | 22.04 |
| C. feel embarrassed and refuse to ask for help |  | 17 | 0.60 | 147 | 5.16 | 28 | 0.98 | 12 | 0.42 | 504 | 17.69 | 29 | 1.02 | 2 | 0.07 | 739 | 25.94 |
| D. blame their difficulties on poor teachers |  | 13 | 0.46 | 86 | 3.02 | 13 | 0.46 | 5 | 0.18 | 333 | 11.69 | 16 | 0.56 | 3 | 0.11 | 469 | 16.46 |
| E. other |  | 5 | 0.18 | 39 | 1.37 | 8 | 0.28 | 2 | 0.07 | 181 | 6.35 | 11 | 0.39 | 3 | 0.11 | 249 | 8.74 |
|  | Total | 66 | 2.32 | 575 | 20.18 | 92 | 3.23 | 41 | 1.44 | 1,950 | 68.45 | 106 | 3.72 | 19 | 0.67 | 2,849 | 100.00 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. it was more convenient and available |  | 16 | 0.54 | 104 | 3.52 | 14 | 0.47 | 9 | 0.30 | 383 | 12.96 | 15 | 0.51 | 5 | 0.17 | 546 | 18.48 |
| B. teachers would offer them this option |  | 13 | 0.44 | 114 | 3.86 | 19 | 0.64 | 9 | 0.30 | 340 | 11.51 | 18 | 0.61 | 6 | 0.20 | 519 | 17.56 |
| C. they cared more about academic success |  | 22 | 0.74 | 166 | 5.62 | 26 | 0.88 | 10 | 0.34 | 635 | 21.49 | 30 | 1.02 | 4 | 0.14 | 893 | 30.22 |
| D. parents were aware that they needed it |  | 18 | 0.61 | 145 | 4.91 | 26 | 0.88 | 11 | 0.37 | 533 | 18.04 | 31 | 1.05 | 3 | 0.10 | 767 | 25.96 |
| E. other |  | 6 | 0.20 | 43 | 1.46 | 10 | 0.34 | 3 | 0.10 | 155 | 5.25 | 11 | 0.37 | 2 | 0.07 | 230 | 7.78 |
|  | Total | 75 | 2.54 | 572 | 19.36 | 95 | 3.21 | 42 | 1.42 | 2,046 | 69.24 | 105 | 3.55 | 20 | 0.68 | 2,955 | 100.00 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. shows that I recognize a need for help |  | 31 | 1.00 | 242 | 7.84 | 33 | 1.07 | 11 | 0.36 | 742 | 24.05 | 35 | 1.13 | 8 | 0.26 | 1,102 | 35.72 |
| B. would embarrass me in front of friends |  | 8 | 0.26 | 54 | 1.75 | 12 | 0.39 | 13 | 0.42 | 217 | 7.03 | 11 | 0.36 | 1 | 0.03 | 316 | 10.24 |
| C. reflects my desire to learn and succeed |  | 18 | 0.58 | 152 | 4.93 | 26 | 0.84 | 5 | 0.16 | 530 | 17.18 | 36 | 1.17 | 8 | 0.26 | 775 | 25.12 |
| D. helps meet requirements for graduation |  | 17 | 0.55 | 145 | 4.70 | 14 | 0.45 | 6 | 0.19 | 514 | 16.66 | 31 | 1.00 | 5 | 0.16 | 732 | 23.73 |
| E. other |  | 2 | 0.06 | 29 | 0.94 | 11 | 0.36 | 4 | 0.13 | 107 | 3.47 | 5 | 0.16 | 2 | 0.06 | 160 | 5.19 |
|  | Total | 76 | 2.46 | 622 | 20.16 | 96 | 3.11 | 39 | 1.26 | 2,110 | 68.40 | 118 | 3.82 | 24 | 0.78 | 3,085 | 100.00 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. automatically be assigned a tutor |  | 26 | 0.86 | 219 | 7.25 | 25 | 0.83 | 13 | 0.43 | 665 | 22.01 | 33 | 1.09 | 3 | 0.10 | 984 | 33.12 |
| B. take monthly practice tests |  | 19 | 0.63 | 103 | 3.41 | 19 | 0.63 | 7 | 0.23 | 441 | 14.60 | 29 | 0.96 | 3 | 0.10 | 621 | 20.90 |
| C. go to summer school |  | 12 | 0.40 | 137 | 4.53 | 24 | 0.79 | 12 | 0.40 | 368 | 12.18 | 20 | 0.66 | 4 | 0.13 | 577 | 19.42 |
| D. access a computer program for help |  | 16 | 0.53 | 86 | 2.85 | 12 | 0.40 | 8 | 0.26 | 360 | 11.92 | 19 | 0.63 | 3 | 0.10 | 504 | 16.96 |
| E. other |  | 7 | 0.23 | 52 | 1.72 | 15 | 0.50 | 6 | 0.20 | 237 | 7.85 | 13 | 0.43 | 5 | 0.17 | 335 | 9.59 |
|  | Total | 80 | 2.65 | 597 | 19.76 | 95 | 3.14 | 46 | 1.52 | 2,071 | 68.55 | 114 | 3.77 | 18 | 0.60 | 3,021 | 100.00 |

[^0] many times (f) that response item was chosen out of the total frequency of responses for a question (total f).
Table F2 continued

| Questions and Responses |  | $\begin{aligned} & \text { Asian } \\ & (n=45) \end{aligned}$ |  | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  | Hispanic$(n=67)$ |  | Native Am.$(n=30)$ |  | $\begin{gathered} \text { White } \\ (n=1,322) \end{gathered}$ |  | $\begin{aligned} & \text { Other } \\ & (n=70) \end{aligned}$ |  | Missing$(n=12)$ |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\begin{gathered} \text { \% of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{aligned} & \text { \% of } \\ & \text { total } f \end{aligned}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \text { \% of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \operatorname{total} f \end{gathered}$ |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. right after school |  | 34 | 1.25 | 256 | 9.43 | 33 | 1.22 | 16 | 0.58 | 708 | 26.10 | 41 | 1.51 | 7 | 0.26 | 1,095 | 40.35 |
| B. during the evening |  | 5 | 0.18 | 70 | 2.59 | 13 | 0.48 | 7 | 0.26 | 167 | 6.15 | 9 | 0.33 | 5 | 0.18 | 276 | 10.17 |
| C. on weekends |  | 13 | 0.47 | 64 | 2.36 | 10 | 0.37 | 8 | 0.29 | 178 | 6.56 | 21 | 0.77 | 2 | 0.07 | 296 | 11.00 |
| D. at lunchtime |  | 6 | 0.22 | 36 | 1.32 | 7 | 0.26 | 3 | 0.11 | 151 | 5.56 | 12 | 0.44 | 3 | 0.11 | 218 | 8.09 |
| E. before school |  | 10 | 0.36 | 105 | 3.87 | 12 | 0.44 | 7 | 0.26 | 367 | 13.53 | 21 | 0.77 | 5 | 0.18 | 527 | 19.41 |
| F. other |  | 3 | 0.11 | 43 | 1.58 | 13 | 0.48 | 6 | 0.22 | 223 | 8.22 | 9 | 0.33 | 3 | 0.11 | 300 | 11.12 |
|  | Total | 71 | 2.59 | 574 | 21.15 | 88 | 3.25 | 47 | 1.72 | 1,794 | 66.12 | 113 | 4.15 | 25 | 0.91 | 2,712 | 100.00 |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. they would make fun of me |  | 9 | 0.37 | 101 | 4.14 | 19 | 0.78 | 9 | 0.37 | 284 | 11.64 | 10 | 0.41 | 2 | 0.08 | 434 | 17.79 |
| B. they would try to talk me out of it |  | 6 | 0.25 | 43 | 1.76 | 12 | 0.49 | 9 | 0.37 | 170 | 6.97 | 14 | 0.57 | 2 | 0.08 | 256 | 10.50 |
| C. they would suggest I drop the course |  | 5 | 0.21 | 28 | 1.15 | 5 | 0.21 | 7 | 0.29 | 101 | 4.14 | 10 | 0.41 | 1 | 0.04 | 157 | 6.44 |
| D. they would encourage my efforts |  | 25 | 1.03 | 233 | 9.55 | 36 | 1.48 | 14 | 0.57 | 760 | 31.16 | 43 | 1.76 | 7 | 0.29 | 1,118 | 45.84 |
| E. other |  | 11 | 0.45 | 92 | 3.77 | 12 | 0.49 | 6 | 0.25 | 333 | 13.65 | 15 | 0.62 | 5 | 0.21 | 474 | 19.43 |
|  | Total | 56 | 2.30 | 497 | 20.38 | 84 | 3.44 | 45 | 1.85 | 1,648 | 67.57 | 92 | 3.77 | 17 | 0.70 | 2,439 | 100.00 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. they would suggest I drop the class |  | 4 | 0.14 | 15 | 0.51 | 7 | 0.24 | 4 | 0.14 | 29 | 0.99 | 5 | 0.17 | 1 | 0.03 | 65 | 2.21 |
| B. they would encourage my efforts |  | 27 | 0.92 | 257 | 8.75 | 36 | 1.23 | 18 | 0.61 | 912 | 31.05 | 44 | 1.50 | 8 | 0.27 | 1,302 | 44.33 |
| C. they would allow me to make the decision |  | 23 | 0.78 | 177 | 6.03 | 24 | 0.82 | 11 | 0.37 | 653 | 22.23 | 32 | 1.09 | 7 | 0.24 | 927 | 31.56 |
| D. they would question if I really need help |  | 11 | 0.37 | 89 | 3.03 | 16 | 0.54 | 8 | 0.27 | 288 | 9.81 | 23 | 0.78 | 3 | 0.10 | 438 | 14.91 |
| E. other |  | 5 | 0.17 | 43 | 1.46 | 8 | 0.27 | 4 | 0.14 | 139 | 4.73 | 4 | 0.14 | 2 | 0.07 | 205 | 6.98 |
|  | Total | 70 | 2.38 | 581 | 19.78 | 91 | 3.10 | 45 | 1.53 | 2,021 | 68.81 | 108 | 3.68 | 21 | 0.72 | 2,937 | 100.00 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. poor listening habits in class |  | 19 | 0.55 | 97 | 2.82 | 15 | 0.44 | 6 | 0.17 | 350 | 10.16 | 21 | 0.61 | 7 | 0.20 | 515 | 14.95 |
| B. excessive absences from class |  | 9 | 0.26 | 51 | 1.48 | 4 | 0.12 | 7 | 0.20 | 144 | 4.18 | 13 | 0.38 | 2 | 0.06 | 230 | 6.68 |
| C. difficulty focusing because of disruptions |  | 17 | 0.49 | 144 | 4.18 | 23 | 0.67 | 13 | 0.38 | 529 | 15.36 | 28 | 0.81 | 3 | 0.09 | 757 | 21.98 |
| D. my teacher doesn't explain material well |  | 15 | 0.44 | 100 | 2.90 | 18 | 0.52 | 5 | 0.15 | 355 | 10.31 | 20 | 0.58 | 3 | 0.09 | 516 | 14.98 |
| E. trouble reading or remembering materials |  | 15 | 0.44 | 135 | 3.92 | 17 | 0.49 | 10 | 0.29 | 450 | 13.07 | 29 | 0.84 | 9 | 0.26 | 665 | 19.31 |
| F. not passing a section of the state test |  | 10 | 0.29 | 76 | 2.21 | 13 | 0.38 | 3 | 0.09 | 280 | 8.13 | 12 | 0.35 | 2 | 0.06 | 396 | 11.50 |
| G. other |  | 7 | 0.20 | 66 | 1.92 | 11 | 0.32 | 5 | 0.15 | 262 | 7.61 | 11 | 0.32 | 3 | 0.09 | 365 | 10.60 |
|  | Total | 92 | 2.67 | 669 | 19.43 | 101 | 2.93 | 49 | 1.42 | 2,370 | 68.82 | 134 | 3.89 | 29 | 0.84 | 3,444 | 100.00 |

[^1] response on each question, which demonstrates why the total number of responses is larger than the sample
many times ( $f$ ) that response item was chosen out of the total frequency of responses for a question (total $f$ ).
Table F2 continued

| Questions and Responses |  | $\begin{aligned} & \text { Asian } \\ & (n=45) \end{aligned}$ |  | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  | Hispanic$(n=67)$ |  | Native Am.$(n=30)$ |  | $\begin{aligned} & \text { White } \\ & (n=1,322) \end{aligned}$ |  | Other$(n=70)$ |  | Missing$(n=12)$ |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \operatorname{total} f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. a small group setting |  | 3 | 0.11 | 103 | 3.85 | 19 | 0.71 | 19 | 0.71 | 441 | 16.49 | 29 | 1.08 | 7 | 0.26 | 621 | 23.21 |
| B. one on one with a tutor |  | 31 | 1.16 | 280 | 10.47 | 35 | 1.31 | 15 | 0.56 | 866 | 32.38 | 35 | 1.31 | 9 | 0.34 | 1,271 | 47.52 |
| C. computer program or online support |  | 13 | 0.49 | 89 | 3.32 | 18 | 0.67 | 7 | 0.26 | 310 | 11.59 | 26 | 0.97 | 1 | 0.04 | 464 | 17.34 |
| D. video lessons to watch and repeat |  | 8 | 0.30 | 38 | 1.42 | 8 | 0.30 | 6 | 0.22 | 122 | 4.56 | 17 | 0.63 | 0 | 0.00 | 199 | 7.43 |
| E. other |  | 2 | 0.19 | 21 | 0.67 | 4 | 0.19 | 6 | 0.26 | 80 | 2.99 | 4 | 0.15 | 2 | 0.00 | 119 | 4.45 |
|  | Total | 57 | 2.24 | 531 | 19.73 | 84 | 3.17 | 53 | 2.02 | 1,819 | 68.01 | 111 | 4.14 | 19 | 0.63 | 2,674 | 100.00 |
| 10. If a subject is difficult to understand, I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. ask the teacher questions |  | 30 | 1.05 | 314 | 10.95 | 46 | 1.60 | 10 | 0.35 | 921 | 32.12 | 51 | 1.78 | 6 | 0.21 | 1,378 | 48.06 |
| B. meet with my counselor |  | 7 | 0.24 | 28 | 0.98 | 2 | 0.07 | 7 | 0.24 | 63 | 2.20 | 10 | 0.35 | 2 | 0.07 | 119 | 4.15 |
| C. ask classmates or friends for help |  | 29 | 1.01 | 152 | 5.30 | 32 | 1.12 | 16 | 0.56 | 716 | 24.97 | 37 | 1.29 | 7 | 0.24 | 989 | 34.50 |
| D. seek no help even though I may fail |  | 4 | 0.14 | 32 | 1.12 | 4 | 0.14 | 5 | 0.17 | 98 | 3.42 | 9 | 0.31 | 0 | 0.00 | 152 | 5.30 |
| E. other |  | 5 | 0.17 | 28 | 0.98 | 9 | 0.31 | 6 | 0.21 | 176 | 6.14 | 2 | 0.07 | 3 | 0.10 | 229 | 7.99 |
|  | Total | 75 | 2.62 | 554 | 19.32 | 93 | 3.24 | 44 | 1.53 | 1,974 | 68.85 | 109 | 3.80 | 18 | 0.63 | 2,867 | 100.00 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. arrange for help without delay |  | 29 | 1.25 | 192 | 8.28 | 19 | 0.82 | 14 | 0.60 | 600 | 25.89 | 29 | 1.28 | 2 | 0.09 | 885 | 38.21 |
| B. put me off and ignore my request |  | 5 | 0.22 | 38 | 1.64 | 7 | 0.30 | 7 | 0.30 | 95 | 4.10 | 11 | 0.49 | 3 | 0.13 | 166 | 7.18 |
| C. suggest checking with a counselor |  | 10 | 0.43 | 58 | 2.50 | 22 | 0.95 | 4 | 0.17 | 205 | 8.84 | 13 | 0.57 | 2 | 0.09 | 314 | 13.55 |
| D. tell me I should try harder |  | 14 | 0.62 | 139 | 6.00 | 20 | 0.88 | 6 | 0.25 | 369 | 15.93 | 26 | 1.15 | 4 | 0.18 | 578 | 25.01 |
| E. other |  | 4 | 0.17 | 52 | 2.24 | 10 | 0.43 | 5 | 0.22 | 290 | 12.51 | 10 | 0.40 | 3 | 0.09 | 374 | 16.06 |
|  | Total | 62 | 2.69 | 479 | 20.66 | 78 | 3.38 | 36 | 1.54 | 1,559 | 67.27 | 89 | 3.89 | 14 | 0.57 | 2,317 | 100.00 |
| 12. Iprefer a tutor to be |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in |  | 26 | 0.95 | 209 | 7.64 | 34 | 1.24 | 13 | 0.48 | 690 | 25.24 | 29 | 1.06 | 5 | 0.18 | 1,006 | 36.80 |
| B. another teacher in the same subject area |  | 14 | 0.51 | 105 | 3.84 | 15 | 0.55 | 12 | 0.44 | 311 | 11.38 | 18 | 0.66 | 2 | 0.07 | 477 | 17.45 |
| C. someone from a tutoring company |  | 11 | 0.40 | 92 | 3.37 | 17 | 0.62 | 5 | 0.18 | 291 | 10.64 | 18 | 0.66 | 5 | 0.18 | 439 | 16.06 |
| D. classmates who know the subject |  | 14 | 0.51 | 96 | 3.51 | 17 | 0.62 | 7 | 0.26 | 462 | 16.90 | 28 | 1.02 | 2 | 0.07 | 626 | 22.90 |
| E. other |  | 6 | 0.22 | 34 | 1.24 | 8 | 0.29 | 5 | 0.18 | 123 | 4.50 | 6 | 0.22 | 4 | 0.15 | 186 | 6.80 |
|  | Total | 71 | 2.60 | 536 | 19.60 | 91 | 3.33 | 42 | 1.54 | 1,877 | 68.65 | 99 | 3.62 | 18 | 0.66 | 2,734 | 100.00 |

[^2]Table F2 continued

| Questions and Responses |  | $\begin{gathered} \text { Asian } \\ (n=45) \end{gathered}$ |  | $\begin{gathered} \text { Black } \\ (n=414) \end{gathered}$ |  | $\begin{gathered} \text { Hispanic } \\ (n=67) \end{gathered}$ |  | Native Am.$(n=30)$ |  | $\begin{gathered} \text { White } \\ (n=1,322) \end{gathered}$ |  | $\begin{aligned} & \text { Other } \\ & (n=70) \end{aligned}$ |  | $\begin{aligned} & \text { Missing } \\ & (n=12) \end{aligned}$ |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \operatorname{total} f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \operatorname{total} f \end{gathered}$ |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. at orientation and in the handbook |  | 19 | 0.63 | 136 | 4.54 | 24 | 0.80 | 10 | 0.33 | 526 | 17.55 | 32 | 1.07 | 2 | 0.07 | 749 | 24.99 |
| B. on the school Website |  | 28 | 0.93 | 179 | 5.97 | 23 | 0.77 | 12 | 0.40 | 683 | 22.79 | 32 | 1.07 | 6 | 0.20 | 963 | 32.13 |
| C. on daily announcements |  | 25 | 0.83 | 247 | 8.24 | 29 | 0.97 | 11 | 0.37 | 712 | 23.76 | 38 | 1.27 | 7 | 0.23 | 1,069 | 35.67 |
| D. other |  | 3 | 0.10 | 26 | 0.87 | 12 | 0.40 | 5 | 0.17 | 157 | 5.24 | 9 | 0.30 | 4 | 0.13 | 216 | 7.21 |
|  | Total | 75 | 2.50 | 588 | 19.62 | 88 | 2.94 | 38 | 1.27 | 2,078 | 69.34 | 111 | 3.70 | 19 | 0.63 | 2,997 | 100.00 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. mathematics |  | 13 | 0.49 | 171 | 6.40 | 24 | 0.90 | 12 | 0.45 | 531 | 19.87 | 25 | 0.94 | 5 | 0.19 | 781 | 29.22 |
| B. English |  | 17 | 0.64 | 99 | 3.70 | 20 | 0.75 | 13 | 0.49 | 340 | 12.72 | 18 | 0.67 | 1 | 0.04 | 508 | 19.00 |
| C. science |  | 16 | 0.60 | 149 | 5.57 | 19 | 0.71 | 14 | 0.52 | 382 | 14.29 | 19 | 0.71 | 4 | 0.15 | 603 | 22.56 |
| D. social studies |  | 12 | 0.45 | 78 | 2.92 | 14 | 0.52 | 8 | 0.30 | 219 | 8.19 | 20 | 0.75 | 1 | 0.04 | 352 | 13.17 |
| E. other |  | 10 | 0.34 | 72 | 2.13 | 17 | 0.64 | 5 | 0.19 | 367 | 12.05 | 18 | 0.60 | 5 | 0.11 | 494 | 16.05 |
|  | Total | 68 | 2.51 | 569 | 20.73 | 94 | 3.52 | 52 | 1.95 | 1,839 | 67.12 | 100 | 3.67 | 16 | 0.52 | 2,738 | 100.00 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. group progress of tutored students |  | 20 | 0.69 | 211 | 7.25 | 27 | 0.93 | 12 | 0.41 | 590 | 20.27 | 33 | 1.13 | 5 | 0.17 | 898 | 30.85 |
| B. gains that tutored students make |  | 25 | 0.86 | 162 | 5.57 | 27 | 0.93 | 10 | 0.34 | 576 | 19.79 | 24 | 0.82 | 4 | 0.14 | 828 | 28.44 |
| C. number of dropouts \& if they had tutoring |  | 7 | 0.24 | 62 | 2.13 | 11 | 0.38 | 4 | 0.14 | 191 | 6.56 | 14 | 0.48 | 3 | 0.10 | 292 | 10.03 |
| D. comments by students about tutoring |  | 12 | 0.41 | 124 | 4.26 | 6 | 0.21 | 23 | 0.79 | 523 | 17.97 | 30 | 1.03 | 10 | 0.34 | 728 | 25.01 |
| E. other |  | 4 | 0.14 | 20 | 0.69 | 5 | 0.17 | 6 | 0.21 | 123 | 4.23 | 6 | 0.21 | 1 | 0.03 | 165 | 5.67 |
|  | Total | 68 | 2.34 | 579 | 19.89 | 76 | 2.61 | 55 | 1.89 | 2,003 | 68.81 | 107 | 3.68 | 23 | 0.79 | 2,911 | 100.00 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well |  | 35 | 1.20 | 283 | 9.67 | 43 | 1.47 | 16 | 0.55 | 971 | 33.17 | 43 | 1.47 | 6 | 0.20 | 1,397 | 47.73 |
| B. to help students who don't speak English |  | 15 | 0.51 | 70 | 2.39 | 18 | 0.61 | 5 | 0.17 | 177 | 6.05 | 13 | 0.44 | 3 | 0.10 | 301 | 10.28 |
| C. to help students with learning disabilities |  | 14 | 0.48 | 126 | 4.30 | 11 | 0.38 | 14 | 0.48 | 365 | 12.47 | 22 | 0.75 | 7 | 0.24 | 559 | 19.10 |
| D. for classmates in my cooperative group |  | 15 | 0.51 | 87 | 2.97 | 17 | 0.58 | 5 | 0.17 | 346 | 11.82 | 17 | 0.58 | 6 | 0.20 | 493 | 16.84 |
| E. other |  | 3 | 0.10 | 23 | 0.79 | 7 | 0.24 | 5 | 0.17 | 131 | 4.48 | 7 | 0.24 | 1 | 0.03 | 177 | 6.05 |
|  | Total | 82 | 2.80 | 589 | 20.12 | 96 | 3.28 | 45 | 1.54 | 1,990 | 67.99 | 102 | 3.48 | 23 | 0.79 | 2,927 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one
response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of total findicates the percentage of how response on each question, which demonstrates why the total number of responses is larger than the sample
many times (f) that response item was chosen out of the total frequency of responses for a question (total f .

## APPENDIX G

RESULTS OF TUTORING POLL BY AGE
Table G1
Frequency and Percent of Demographics by Age

Table G2
Frequency and Percent of Question Responses by Age

| Questions and Responses |  | $\begin{gathered} 10 \\ (n=257) \end{gathered}$ |  | $\begin{gathered} 11 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 12 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 13 \\ (n=444) \end{gathered}$ |  | $\begin{gathered} 14 \\ (n=354) \end{gathered}$ |  | $\begin{gathered} 15 \\ (n=76) \end{gathered}$ |  | Missing$(n=27)$ |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\begin{gathered} \% \text { of } \\ \operatorname{total} f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \begin{array}{c} \% \text { of } \\ \text { total } f \end{array} \\ \hline \end{gathered}$ |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help |  | 110 | 3.86 | 174 | 6.11 | 156 | 5.48 | 154 | 5.41 | 136 | 4.77 | 24 | 0.84 | 10 | 0.35 | 764 | 26.82 |
| B. deny they have a problem with the subject |  | 68 | 2.39 | 105 | 3.69 | 126 | 4.42 | 155 | 5.44 | 136 | 4.77 | 27 | 0.95 | 11 | 0.39 | 628 | 22.04 |
| C. feel embarrassed and refuse to ask for help |  | 75 | 2.63 | 146 | 5.12 | 168 | 5.90 | 191 | 6.70 | 128 | 4.49 | 19 | 0.67 | 12 | 0.42 | 739 | 25.94 |
| D. blame their difficulties on poor teachers |  | 23 | 0.81 | 54 | 1.90 | 88 | 3.09 | 151 | 5.30 | 125 | 4.39 | 19 | 0.67 | 9 | 0.32 | 469 | 16.46 |
| E. other |  | 48 | 1.68 | 64 | 2.25 | 45 | 1.58 | 48 | 1.68 | 28 | 0.98 | 8 | 0.28 | 8 | 0.28 | 249 | 8.74 |
|  | Total | 324 | 11.37 | 543 | 19.06 | 583 | 20.46 | 699 | 24.53 | 553 | 19.41 | 97 | 3.40 | 50 | 1.76 | 2,849 | 100.00 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. it was more convenient and available |  | 40 | 1.35 | 80 | 2.71 | 104 | 3.52 | 165 | 5.58 | 124 | 4.20 | 23 | 0.78 | 10 | 0.34 | 546 | 18.48 |
| B. teachers would offer themthis option |  | 74 | 2.50 | 98 | 3.32 | 120 | 4.06 | 116 | 3.93 | 79 | 2.67 | 20 | 0.68 | 12 | 0.41 | 519 | 17.56 |
| C. they cared more about academic success |  | 89 | 3.01 | 145 | 4.91 | 197 | 6.67 | 231 | 7.82 | 193 | 6.53 | 29 | 0.98 | 9 | 0.30 | 893 | 30.22 |
| D. parents were aware that they needed it |  | 107 | 3.62 | 158 | 5.35 | 149 | 5.04 | 183 | 6.19 | 137 | 4.64 | 20 | 0.68 | 13 | 0.44 | 767 | 25.96 |
| E. other |  | 38 | 1.29 | 60 | 2.03 | 48 | 1.62 | 43 | 1.46 | 27 | 0.91 | 6 | 0.20 | 8 | 0.27 | 230 | 7.78 |
|  | Total | 348 | 11.78 | 541 | 18.31 | 618 | 20.91 | 738 | 24.97 | 560 | 18.95 | 98 | 3.32 | 52 | 1.76 | 2,955 | 100.00 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. shows that I recognize a need for help |  | 120 | 3.89 | 203 | 6.58 | 211 | 6.84 | 295 | 9.56 | 222 | 7.20 | 40 | 1.30 | 11 | 0.36 | 1,102 | 35.72 |
| B. would embarrass me in front of friends |  | 36 | 1.17 | 70 | 2.27 | 65 | 2.11 | 68 | 2.20 | 54 | 1.75 | 12 | 0.39 | 11 | 0.36 | 316 | 10.24 |
| C. reflects my desire to learn and succeed |  | 75 | 2.43 | 139 | 4.51 | 159 | 5.15 | 204 | 6.61 | 162 | 5.25 | 24 | 0.78 | 12 | 0.39 | 775 | 25.12 |
| D. helps meet requirements for graduation |  | 90 | 2.92 | 132 | 4.28 | 154 | 4.99 | 183 | 5.93 | 144 | 4.67 | 18 | 0.58 | 11 | 0.36 | 732 | 23.73 |
| E. other |  | 18 | 0.58 | 43 | 1.39 | 36 | 1.17 | 30 | 0.97 | 19 | 0.62 | 6 | 0.19 | 8 | 0.26 | 160 | 5.19 |
|  | Total | 339 | 10.99 | 587 | 19.03 | 625 | 20.26 | 780 | 25.28 | 601 | 19.48 | 100 | 3.24 | 53 | 1.72 | 3,085 | 100.00 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. automatically be assigned a tutor |  | 101 | 3.34 | 187 | 6.19 | 192 | 6.36 | 261 | 8.64 | 195 | 6.45 | 35 | 1.16 | 13 | 0.43 | 984 | 33.12 |
| B. take monthly practice tests |  | 76 | 2.52 | 101 | 3.34 | 124 | 4.10 | 175 | 5.79 | 114 | 3.77 | 21 | 0.70 | 10 | 0.33 | 621 | 20.90 |
| C. go to summer school |  | 51 | 1.69 | 105 | 3.48 | 134 | 4.44 | 135 | 4.47 | 115 | 3.81 | 26 | 0.86 | 11 | 0.36 | 577 | 19.42 |
| D. access a computer program for help |  | 58 | 1.92 | 88 | 2.91 | 98 | 3.24 | 127 | 4.20 | 109 | 3.61 | 13 | 0.43 | 11 | 0.36 | 504 | 16.96 |
| E. other |  | 65 | 2.15 | 85 | 2.81 | 74 | 2.45 | 54 | 1.79 | 39 | 1.29 | 8 | 0.26 | 10 | 0.33 | 335 | 9.59 |
|  | Total | 351 | 11.62 | 566 | 18.74 | 622 | 20.59 | 752 | 24.89 | 572 | 18.93 | 103 | 3.41 | 55 | 1.82 | 3,021 | 100.00 |

[^3]Table G2 continued

| Questions and Responses |  | $\begin{gathered} 10 \\ (n=257) \end{gathered}$ |  | $\begin{gathered} 11 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 12 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 13 \\ (n=444) \end{gathered}$ |  | $\begin{gathered} 14 \\ (n=354) \end{gathered}$ |  | $\begin{gathered} 15 \\ (n=76) \end{gathered}$ |  | Missing$(n=27)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \hline \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{aligned} & \% \text { of } \\ & \text { total } f \end{aligned}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ | $f$ | $\begin{aligned} & \% \text { of } \\ & \text { total } f \end{aligned}$ | $f$ | $\begin{aligned} & \% \text { of } \\ & \text { total } f \end{aligned}$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. right after school |  | 149 | 5.57 | 238 | 8.89 | 229 | 8.55 | 245 | 9.15 | 186 | 6.95 | 39 | 1.46 | 9 | 0.34 | 1,095 | 40.90 |
| B. during the evening |  | 41 | 1.53 | 50 | 1.87 | 61 | 2.28 | 55 | 2.05 | 52 | 1.94 | 7 | 0.26 | 10 | 0.37 | 276 | 10.31 |
| C. on weekends |  | 40 | 1.49 | 50 | 1.87 | 67 | 2.50 | 58 | 2.17 | 60 | 2.24 | 11 | 0.41 | 10 | 0.37 | 296 | 11.06 |
| D. at lunchtime |  | 19 | 0.71 | 28 | 1.05 | 40 | 1.49 | 64 | 2.39 | 45 | 1.68 | 15 | 0.56 | 7 | 0.26 | 218 | 8.14 |
| E. before school |  | 35 | 1.31 | 113 | 4.22 | 99 | 3.70 | 127 | 4.74 | 118 | 4.41 | 24 | 0.90 | 11 | 0.41 | 527 | 19.69 |
| F. other |  | 49 | 1.61 | 66 | 2.02 | 65 | 2.20 | 65 | 2.17 | 40 | 1.34 | 7 | 0.26 | 8 | 0.30 | 300 | 9.90 |
|  | Total | 333 | 12.22 | 545 | 19.91 | 561 | 20.73 | 614 | 22.67 | 501 | 18.57 | 103 | 3.85 | 55 | 2.05 | 2,712 | 100.00 |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. they would make fun of me |  | 44 | 1.80 | 102 | 4.18 | 78 | 3.20 | 95 | 3.90 | 87 | 3.57 | 22 | 0.90 | 6 | 0.25 | 434 | 17.79 |
| B. they would try to talk me out of it |  | 28 | 1.15 | 45 | 1.85 | 39 | 1.60 | 65 | 2.67 | 53 | 2.17 | 18 | 0.74 | 8 | 0.33 | 256 | 10.50 |
| C. they would suggest I drop the course |  | 10 | 0.41 | 21 | 0.86 | 25 | 1.03 | 43 | 1.76 | 41 | 1.68 | 10 | 0.41 | 7 | 0.29 | 157 | 6.44 |
| D. they would encourage my efforts |  | 148 | 6.07 | 224 | 9.18 | 248 | 10.17 | 253 | 10.37 | 195 | 8.00 | 36 | 1.48 | 14 | 0.57 | 1,118 | 45.84 |
| E. other |  | 75 | 3.08 | 96 | 3.94 | 107 | 4.39 | 107 | 4.39 | 65 | 2.67 | 14 | 0.57 | 10 | 0.41 | 474 | 19.43 |
|  | Total | 305 | 12.51 | 488 | 20.01 | 497 | 20.38 | 563 | 23.08 | 441 | 18.08 | 100 | 4.10 | 45 | 1.85 | 2,439 | 100.00 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. they would suggest I drop the class |  | 3 | 0.10 | 6 | 0.20 | 5 | 0.17 | 18 | 0.61 | 19 | 0.65 | 8 | 0.27 | 6 | 0.20 | 65 | 2.21 |
| B. they would encourage my efforts |  | 161 | 5.48 | 262 | 8.92 | 267 | 9.09 | 309 | 10.52 | 244 | 8.31 | 43 | 1.46 | 16 | 0.54 | 1,302 | 44.33 |
| C. they would allow me to make the decision |  | 113 | 3.85 | 162 | 5.52 | 205 | 6.98 | 227 | 7.73 | 171 | 5.82 | 36 | 1.23 | 13 | 0.44 | 927 | 31.56 |
| D. they would question if I really need help |  | 63 | 2.15 | 102 | 3.47 | 95 | 3.23 | 75 | 2.55 | 80 | 2.72 | 13 | 0.44 | 10 | 0.34 | 438 | 14.91 |
| E. other |  | 39 | 1.33 | 45 | 1.53 | 45 | 1.53 | 48 | 1.63 | 17 | 0.58 | 3 | 0.10 | 8 | 0.27 | 205 | 6.98 |
|  | Total | 379 | 12.90 | 577 | 19.65 | 617 | 21.01 | 677 | 23.05 | 531 | 18.08 | 103 | 3.51 | 53 | 1.80 | 2,937 | 100.00 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. poor listening habits in class |  | 55 | 1.60 | 97 | 2.82 | 91 | 2.64 | 136 | 3.95 | 105 | 3.05 | 23 | 0.67 | 8 | 0.23 | 515 | 14.95 |
| B. excessive absences from clas s |  | 14 | 0.41 | 29 | 0.84 | 40 | 1.16 | 58 | 1.68 | 64 | 1.86 | 16 | 0.46 | 9 | 0.26 | 230 | 6.68 |
| C. difficulty focusing because of dis ruptions |  | 101 | 2.93 | 145 | 4.21 | 153 | 4.44 | 184 | 5.34 | 138 | 4.01 | 24 | 0.70 | 12 | 0.35 | 757 | 21.98 |
| D. my teacher doesn't explain material well |  | 19 | 0.55 | 60 | 1.74 | 90 | 2.61 | 172 | 4.99 | 138 | 4.01 | 26 | 0.75 | 11 | 0.32 | 516 | 14.98 |
| E. trouble reading or remembering materials |  | 78 | 2.26 | 116 | 3.37 | 140 | 4.07 | 171 | 4.97 | 127 | 3.69 | 21 | 0.61 | 12 | 0.35 | 665 | 19.31 |
| F. not passing a section of the state test |  | 40 | 1.16 | 72 | 2.09 | 86 | 2.50 | 98 | 2.85 | 76 | 2.21 | 18 | 0.52 | 6 | 0.17 | 396 | 11.50 |
| G. other |  | 69 | 2.00 | 90 | 2.61 | 92 | 2.67 | 65 | 1.89 | 34 | 0.99 | 8 | 0.23 | 7 | 0.20 | 365 | 10.60 |
|  | Total | 376 | 10.92 | 609 | 17.68 | 692 | 20.09 | 884 | 25.67 | 682 | 19.80 | 136 | 3.95 | 65 | 1.89 | 3,444 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to
choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of
total findicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).
Table G2 continued

| Questions and Responses |  | $\begin{gathered} 10 \\ (n=257) \end{gathered}$ |  | $\begin{gathered} 11 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 12 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 13 \\ (n=444) \end{gathered}$ |  | $\begin{gathered} 14 \\ (n=354) \end{gathered}$ |  | $\begin{gathered} 15 \\ (n=76) \end{gathered}$ |  | Missing$(n=27)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | $\begin{aligned} & \text { \% of } \\ & \text { total } f \end{aligned}$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | $\begin{aligned} & \text { \% of } \\ & \text { total } f \end{aligned}$ |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. a small group setting |  | 54 | 2.05 | 104 | 3.96 | 140 | 5.33 | 132 | 5.02 | 110 | 4.19 | 25 | 0.95 | 8 | 0.30 | 573 | 21.79 |
| B. one on one with a tutor |  | 155 | 5.90 | 268 | 10.20 | 260 | 9.89 | 294 | 11.19 | 233 | 8.87 | 45 | 1.71 | 16 | 0.61 | 1,271 | 48.33 |
| C. computer program or online support |  | 46 | 1.75 | 94 | 3.58 | 88 | 3.27 | 125 | 4.76 | 88 | 3.35 | 16 | 0.61 | 7 | 0.27 | 464 | 17.64 |
| D. video lessons to watch and repeat |  | 22 | 0.84 | 30 | 1.14 | 32 | 1.22 | 48 | 1.83 | 46 | 1.75 | 9 | 0.34 | 12 | 0.46 | 199 | 7.57 |
| E. other |  | 42 | 1.41 | 31 | 1.03 | 21 | 1.07 | 9 | 0.34 | 4 | 0.42 | 5 | 0.19 | 7 | 0.23 | 119 | 4.68 |
|  | Total | 319 | 11.95 | 527 | 19.90 | 541 | 20.78 | 608 | 23.14 | 481 | 18.57 | 100 | 3.81 | 50 | 1.86 | 2,626 | 100.00 |
| 10. If a subject is difficult to understand, I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. ask the teacher questions |  | 187 | 6.52 | 275 | 9.59 | 289 | 10.08 | 320 | 11.16 | 251 | 8.75 | 43 | 1.50 | 13 | 0.45 | 1,378 | 48.06 |
| B. meet with my counselor |  | 13 | 0.45 | 16 | 0.56 | 14 | 0.49 | 28 | 0.98 | 31 | 1.08 | 9 | 0.31 | 8 | 0.28 | 119 | 4.15 |
| C. ask classmates or friends for help |  | 96 | 3.35 | 178 | 6.21 | 239 | 8.34 | 249 | 8.69 | 184 | 6.42 | 28 | 0.98 | 15 | 0.52 | 989 | 34.50 |
| D. seek no help even though I may fail |  | 11 | 0.38 | 22 | 0.77 | 25 | 0.87 | 37 | 1.29 | 37 | 1.29 | 12 | 0.42 | 8 | 0.28 | 152 | 5.30 |
| E. other |  | 45 | 1.57 | 66 | 2.30 | 48 | 1.67 | 42 | 1.46 | 15 | 0.52 | 6 | 0.21 | 7 | 0.24 | 229 | 7.99 |
|  | Total | 352 | 12.28 | 557 | 19.43 | 615 | 21.45 | 676 | 23.58 | 518 | 18.07 | 98 | 3.42 | 51 | 1.78 | 2,867 | 100.00 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. arrange for help without delay |  | 96 | 4.24 | 181 | 8.00 | 160 | 7.07 | 206 | 9.10 | 199 | 8.79 | 35 | 1.55 | 8 | 0.35 | 885 | 39.11 |
| B. put me off and ignore my request |  | 7 | 0.31 | 24 | 1.06 | 21 | 0.93 | 40 | 1.77 | 48 | 2.12 | 14 | 0.62 | 12 | 0.53 | 166 | 7.34 |
| C. suggest checking with a counselor |  | 38 | 1.68 | 58 | 2.56 | 73 | 3.23 | 62 | 2.74 | 59 | 2.61 | 15 | 0.66 | 9 | 0.40 | 314 | 13.88 |
| D. tell me I should try harder |  | 85 | 3.76 | 119 | 5.26 | 124 | 5.48 | 129 | 5.70 | 84 | 3.71 | 27 | 1.19 | 10 | 0.44 | 578 | 25.54 |
| E. other |  | 63 | 2.08 | 82 | 2.61 | 95 | 3.93 | 84 | 3.18 | 38 | 1.68 | 6 | 0.35 | 6 | 0.31 | 374 | 14.14 |
|  | Total | 289 | 12.06 | 464 | 19.49 | 473 | 20.64 | 521 | 22.49 | 428 | 18.91 | 97 | 4.37 | 45 | 2.03 | 2,317 | 100.00 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. my teacher whose class I amstruggling in |  | 116 | 4.24 | 201 | 7.35 | 214 | 7.83 | 240 | 8.78 | 191 | 6.99 | 34 | 1.24 | 10 | 0.37 | 1,006 | 36.80 |
| B. another teacher in the same subject area |  | 52 | 1.90 | 85 | 3.11 | 104 | 3.80 | 113 | 4.13 | 97 | 3.55 | 16 | 1.24 | 10 | 0.37 | 477 | 17.45 |
| C. someone from a tutoring company |  | 65 | 2.38 | 77 | 2.82 | 78 | 2.85 | 104 | 3.80 | 86 | 3.15 | 18 | 1.24 | 11 | 0.40 | 439 | 16.06 |
| D. classmates who know the subject |  | 69 | 2.52 | 107 | 3.91 | 158 | 5.78 | 153 | 5.60 | 108 | 3.95 | 23 | 1.24 | 8 | 0.29 | 626 | 22.90 |
| E. other |  | 35 | 1.28 | 52 | 1.90 | 40 | 1.46 | 32 | 1.17 | 14 | 0.51 | 7 | 0.26 | 6 | 0.22 | 186 | 6.80 |
|  | Total | 337 | 12.33 | 522 | 19.09 | 594 | 21.73 | 642 | 23.48 | 496 | 18.14 | 98 | 3.58 | 45 | 1.65 | 2,734 | 100.00 |

[^4]Table G2 continued

| Questions and Responses |  | $\begin{gathered} 10 \\ (n=257) \end{gathered}$ |  | $\begin{gathered} 11 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 12 \\ (n=401) \end{gathered}$ |  | $\begin{gathered} 13 \\ (n=444) \end{gathered}$ |  | $\begin{gathered} 14 \\ (n=354) \end{gathered}$ |  | $\begin{gathered} 15 \\ (n=76) \end{gathered}$ |  | Missing$(n=27)$ |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. at orientation and in the handbook |  | 61 | 2.04 | 130 | 4.34 | 158 | 5.27 | 197 | 6.57 | 170 | 5.67 | 23 | 0.77 | 10 | 0.33 | 749 | 24.99 |
| B. on the school Website |  | 146 | 4.87 | 193 | 6.44 | 196 | 6.54 | 215 | 7.17 | 172 | 5.74 | 29 | 0.97 | 12 | 0.40 | 963 | 32.13 |
| C. on daily announcements |  | 103 | 3.44 | 189 | 6.31 | 223 | 7.44 | 293 | 9.78 | 208 | 6.94 | 41 | 1.37 | 12 | 0.40 | 1,069 | 35.67 |
| D. other |  | 44 | 1.47 | 61 | 2.04 | 53 | 1.77 | 33 | 1.10 | 12 | 0.40 | 6 | 0.20 | 7 | 0.23 | 216 | 7.21 |
|  | Total | 354 | 11.81 | 573 | 19.12 | 630 | 21.02 | 738 | 24.62 | 562 | 18.75 | 99 | 3.30 | 41 | 1.37 | 2,997 | 100.00 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. mathematics |  | 109 | 4.08 | 152 | 5.69 | 154 | 5.76 | 170 | 6.36 | 151 | 5.65 | 35 | 1.31 | 10 | 0.37 | 781 | 29.22 |
| B. English |  | 51 | 1.91 | 82 | 3.07 | 89 | 3.33 | 160 | 5.99 | 92 | 3.44 | 21 | 0.79 | 13 | 0.49 | 508 | 19.00 |
| C. science |  | 57 | 2.13 | 99 | 3.70 | 120 | 4.49 | 145 | 5.42 | 143 | 5.35 | 29 | 1.08 | 10 | 0.37 | 603 | 22.56 |
| D. social studies |  | 47 | 1.76 | 91 | 3.40 | 86 | 3.22 | 58 | 2.17 | 47 | 1.76 | 13 | 0.49 | 10 | 0.37 | 352 | 13.17 |
| E. other |  | 108 | 3.37 | 135 | 4.15 | 115 | 3.85 | 79 | 2.32 | 41 | 1.68 | 9 | 0.34 | 7 | 0.34 | 494 | 16.05 |
|  | Total | 372 | 13.24 | 559 | 20.01 | 564 | 20.65 | 612 | 22.26 | 474 | 17.88 | 107 | 4.00 | 50 | 1.95 | 2,738 | 100.00 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. group progress of tutored students |  | 102 | 3.50 | 176 | 6.05 | 188 | 6.46 | 217 | 7.45 | 173 | 5.94 | 32 | 1.10 | 10 | 0.34 | 898 | 30.85 |
| B. gains that tutored students make |  | 81 | 2.78 | 147 | 5.05 | 182 | 6.25 | 218 | 7.49 | 159 | 5.46 | 29 | 1.00 | 12 | 0.41 | 828 | 28.44 |
| C. number of dropouts \& if they had tutoring |  | 26 | 0.89 | 48 | 1.65 | 53 | 1.82 | 72 | 2.47 | 66 | 2.27 | 15 | 0.52 | 12 | 0.41 | 292 | 10.03 |
| D. comments by students about tutoring |  | 99 | 3.40 | 148 | 5.08 | 154 | 5.29 | 169 | 5.81 | 134 | 4.60 | 16 | 0.55 | 8 | 0.27 | 728 | 25.01 |
| E. other |  | 34 | 1.17 | 42 | 1.44 | 33 | 1.13 | 32 | 1.10 | 20 | 0.69 | 2 | 0.07 | 2 | 0.07 | 165 | 5.67 |
|  | Total | 342 | 11.75 | 561 | 19.27 | 610 | 20.95 | 708 | 24.32 | 552 | 18.96 | 94 | 3.23 | 44 | 1.51 | 2,911 | 100.00 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well |  | 177 | 6.05 | 288 | 9.84 | 307 | 10.49 | 317 | 10.83 | 258 | 8.81 | 40 | 1.37 | 10 | 0.34 | 1,397 | 47.73 |
| B. to help students who don't speak English |  | 34 | 1.16 | 46 | 1.57 | 66 | 2.25 | 70 | 2.39 | 60 | 2.05 | 15 | 0.51 | 10 | 0.34 | 301 | 10.28 |
| C. to help students with learning disabilities |  | 70 | 2.39 | 122 | 4.17 | 117 | 4.00 | 128 | 4.37 | 94 | 3.21 | 16 | 0.55 | 12 | 0.41 | 559 | 19.10 |
| D. for classmates in my cooperative group |  | 57 | 1.95 | 96 | 3.28 | 106 | 3.62 | 131 | 4.48 | 77 | 2.63 | 17 | 0.58 | 9 | 0.31 | 493 | 16.84 |
| E. other |  | 30 | 1.02 | 39 | 1.33 | 38 | 1.30 | 35 | 1.20 | 25 | 0.85 | 4 | 0.14 | 6 | 0.20 | 177 | 6.05 |
|  | Total | 368 | 12.57 | 591 | 20.19 | 634 | 21.66 | 681 | 23.27 | 514 | 17.56 | 92 | 3.14 | 47 | 1.61 | 2,927 | 100.00 |

[^5]
## APPENDIX H

RESULTS OF TUTORING POLL BY GRADE

Table H1
Frequency and Percent of Demographics by Grade

| Demographic Category | hic $\quad \begin{array}{r}5 \\ (n= \\ \hline\end{array}$ | $=642 \text { ) }$ | $\begin{array}{r} 6 \\ (n= \end{array}$ | $=377)$ | $\begin{array}{r} 7 \\ (n= \end{array}$ | $=454)$ | $\begin{array}{r} 8 \\ (n= \end{array}$ | $=475)$ |  | issing $=12)$ | $\begin{gathered} \text { To } \\ (N= \end{gathered}$ | tal $=1,960)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \% \text { of } \\ \text { totalN } \end{gathered}$ | $n$ | $\begin{aligned} & \% \text { of } \\ & \text { totaN } \end{aligned}$ | $n$ | $\% \text { of }$ totalN | $n$ | \% of totaN |  | \% of totalN |  | \% of totaN |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 312 | 15.92 | 201 | 10.26 | 217 | 11.07 | 213 | 10.87 | 5 | 0.26 | 948 | 48.3 |
| Female | 323 | 16.48 |  |  | 234 | 11.94 | 260 | 13.27 | 5 | 0.26 | 994 | 50.7 |
| Missing | 7 | 0.36 | 4 | 0.20 | 3 | 0.15 | 2 | 0.10 | 2 | 0.10 |  | 0.92 |
| Total642 |  | 32.76 | 377 | 19.23 | 454 | 23.16 | 475 | 24.23 | 12 | 0.61 | 1,9601 | 00.0 |
| Ethnicity |  |  |  |  |  |  |  |  |  |  |  |  |
| Asian | 11 | 0.56 | 8 | 0.41 | 10 | 0.51 | 14 | 0.71 | 2 | 0.10 | 45 | 2.30 |
| Black | 116 | 5.92 | 74 | 3.78 | 114 | 5.82 | 108 | 5.51 | 2 | 0.10 | 414 | 21.12 |
| Hispanic | 17 | 0.87 | 17 | 0.87 | 15 | 0.77 | 17 | 0.87 | 1 | 0.05 | 67 | 3.42 |
| Native Am. | m. 9 | 0.46 | 6 | 0.31 | 6 | 0.31 | 7 | 0.36 | 2 | 0.10 | 30 | 1.53 |
| White | 458 | 23.37 | 256 | 13.06 | 295 | 15.05 | 310 | 15.82 | 3 | 0.15 | 1,322 | 67.4 |
| Other | 27 | 1.38 | 12 | 0.61 | 11 | 0.56 | 19 | 0.97 | 1 | 0.05 | 70 | 3.57 |
| Missing | 4 | 0.20 | 4 | 0.20 | 3 | 0.15 | 0 | 0.00 | 1 | 0.05 | 12 | 0.61 |
|  | Total642 | 32.76 | 377 | 19.23 | 454 | 23.16 | 475 | 24.23 | 12 | 0.611 | 1,9601 | 100.0 |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  | 13.06 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 0.05 | 257 | 13.1 |
| 11 |  | 16.22 | 78 | 3.98 | 1 | 0.05 | 0 | 0.00 | 0 | 0.00 | 397 | 20.2 |
| 12 | 58 | 2.96 | 246 | 12.55 | 96 | 4.90 | 1 | 0.05 | 4 | 0.20 | 405 | 20.6 |
| 13 | 3 | 0.15 | 44 | 2.24 | 296 | 15.10 | 100 | 5.10 | 1 | 0.05 | 444 | 22.6 |
| 14 | 2 | 0.10 | 3 | 0.15 | 54 | 2.76 | 292 | 14.90 | 3 | 0.15 | 354 | 18.0 |
| 15 | 0 | 0.00 | 1 | 0.05 | 4 | 0.20 | 70 | 3.57 | 1 | 0.05 | 76 | 3.88 |
| Missing | 5 | 0.26 | 5 | 0.26 | 3 | 0.15 | 12 | 0.61 | 2 | 0.10 | 27 | 1.38 |
|  | Total642 | 32.76 | 377 | 19.23 | 454 | 23.16 | 475 | 24.23 | 12 | 0.611 | 1,9601 | 0100.0 |
| School |  |  |  |  |  |  |  |  |  |  |  |  |
| Elementary | ry 376 | 19.18 | 203 | 10.36 | 2 | 0.10 | 0 | 0.00 | 4 | 0.20 | 585 | 29.8 |
| Middle | 261 | 13.32 | 170 | 8.67 | 4 | 0.20 | 4 | 0.20 | 2 | 0.10 | 441 | 22.5 |
| Junior High | gh 5 | 0.26 | 4 | 0.20 | 448 | 22.86 | 471 | 24.03 | 6 | 0.31 | 934 | 47.6 |
|  | Total642 | 32.76 | 377 | 19.23 | 454 | 23.16 | 475 | 24.23 | 12 | 0.611 | 1,9601 | 100.0 |

Table H2
Frequency and Percent of Question Responses by Grade

|  |  | $\begin{gathered} 5 \\ (n=642) \end{gathered}$ |  | $(\mathrm{n}=377)$ |  | $\begin{gathered} 7 \\ (n=454) \end{gathered}$ |  | $\begin{gathered} 8 \\ (n=475) \end{gathered}$ |  | Missing$(n=12)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Questions and Responses |  |  | $\%$ of total $f$ |  | \% of <br> total $f$ |  | $\%$ of <br> total $f$ |  | $\%$ of <br> total $f$ |  | $\%$ of <br> otal $f$ |  | $\%$ of <br> total $f$ |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help |  | 282 | 9.90 | 141 | 4.95 | 167 | 5.86 | 169 | 5.93 | 5 | 0.18 | 764 | 26.82 |
| B. deny they have a problem with the subject |  | 162 | 5.69 | 126 | 4.42 | 157 | 5.51 | 180 | 6.32 | 3 | 0.11 | 628 | 22.04 |
| C. feel embarrassed and refuse to ask for help |  | 209 | 7.34 | 163 | 5.72 | 189 | 6.63 | 177 | 6.21 | 1 | 0.04 | 739 | 25.94 |
| D. blame their difficulties on poor teachers |  | 66 | 2.32 | 86 | 3.02 | 134 | 4.70 | 181 | 6.35 | 2 | 0.07 | 469 | 16.46 |
| E. other |  | 108 | 3.79 | 45 | 1.58 | 53 | 1.86 | 37 | 1.30 | 6 | 0.21 | 249 | 8.74 |
|  | Total | 827 | 29.03 | 561 | 19.69 | 700 | 24.57 | 744 | 26.11 | 17 | 0.60 | 2,849 | 100.00 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. it was more convenient and available |  | 120 | 4.06 | 88 | 2.98 | 164 | 5.55 | 173 | 5.85 | 1 | 0.03 | 546 | 18.48 |
| B. teachers would offer them this option |  | 171 | 5.79 | 111 | 3.76 | 118 | 3.99 | 114 | 3.86 | 5 | 0.17 | 519 | 17.56 |
| C. they cared more about academic success |  | 221 | 7.48 | 177 | 5.99 | 237 | 8.02 | 255 | 8.63 | 3 | 0.10 | 893 | 30.22 |
| D. parents were aware that they needed it |  | 253 | 8.56 | 146 | 4.94 | 189 | 6.40 | 176 | 5.96 | 3 | 0.10 | 767 | 25.96 |
| E. other |  | 97 | 3.28 | 49 | 1.66 | 51 | 1.73 | 29 | 0.98 | 4 | 0.14 | 230 | 7.78 |
|  | Total | 862 | 29.17 | 571 | 19.32 | 759 | 25.69 | 747 | 25.28 | 16 | 0.54 | 2,955 | 100.00 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. shows that I recognize a need for help |  | 305 | 9.89 | 197 | 6.39 | 307 | 9.95 | 289 | 9.37 | 4 | 0.13 | 1,102 | 35.72 |
| B. would embarrass me in front of friends |  | 110 | 3.57 | 66 | 2.14 | 59 | 1.91 | 78 | 2.53 | 3 | 0.10 | 316 | 10.24 |
| C. reflects my desire to learn and succeed |  | 193 | 6.26 | 143 | 4.64 | 220 | 7.13 | 216 | 7.00 | 3 | 0.10 | 775 | 25.12 |
| D. helps meet requirements for graduation |  | 211 | 6.84 | 142 | 4.60 | 191 | 6.19 | 186 | 6.03 | 2 | 0.06 | 732 | 23.73 |
| E. other |  | 62 | 2.01 | 36 | 1.17 | 35 | 1.13 | 21 | 0.68 | 6 | 0.19 | 160 | 5.19 |
|  | Total | 881 | 28.56 | 584 | 18.93 | 812 | 26.32 | 790 | 25.61 | 18 | 0.58 | 3,085 | 100.00 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 270 | 8.94 | 174 | 5.76 | 270 | 8.94 | 262 | 8.67 | 8 | 0.26 | 984 | 32.57 |
| B. take monthly practice tests |  | 175 | 5.79 | 109 | 3.61 | 184 | 6.09 | 152 | 5.03 | 1 | 0.03 | 621 | 20.56 |
| C. go to summer school |  | 145 | 4.80 | 131 | 4.34 | 150 | 4.97 | 149 | 4.93 | 2 | 0.07 | 577 | 19.10 |
| D. access a computer program for help |  | 141 | 4.67 | 88 | 2.91 | 124 | 4.10 | 148 | 4.90 | 3 | 0.10 | 504 | 16.68 |
| E. other |  | 148 | 4.90 | 76 | 2.52 | 57 | 1.89 | 42 | 1.39 | 12 | 0.40 | 335 | 11.09 |
|  | Total | 879 | 29.10 | 578 | 19.13 | 785 | 25.98 | 753 | 24.93 | 26 | 0.86 | 3,021 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants $(n)$.
Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent $(\%)$ of total findicates the percentage of how many times ( f$)$ that response item was chosen out of the total frequency of responses for a question (total f ).

Table H2 continued

| Questions and Responses |  | $\begin{gathered} 5 \\ (n=642) \end{gathered}$ |  | $\begin{gathered} 6 \\ (n=377) \end{gathered}$ |  | $\begin{gathered} 7 \\ (n=454) \end{gathered}$ |  | $\begin{gathered} 8 \\ (n=475) \end{gathered}$ |  | Missing$(n=12)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\%$ of <br> total $f$ |  | $\%$ of <br> total $f$ |  | $\%$ of <br> total $f$ |  | $\%$ of <br> total $f$ |  |  |  | $\%$ of <br> total $f$ |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. right after school |  | 367 | 13.71 | 214 | 7.99 | 258 | 9.64 | 252 | 9.41 | 4 | 0.15 | 1,095 | 40.90 |
| B. during the evening |  | 89 | 3.32 | 56 | 2.09 | 62 | 2.32 | 68 | 2.54 | 1 | 0.04 | 276 | 10.31 |
| C. on weekends |  | 95 | 3.55 | 54 | 2.02 | 72 | 2.69 | 72 | 2.69 | 3 | 0.11 | 296 | 11.06 |
| D. at lunchtime |  | 50 | 1.87 | 32 | 1.20 | 60 | 2.24 | 74 | 2.76 | 2 | 0.07 | 218 | 8.14 |
| E. before school |  | 140 | 5.23 | 97 | 3.62 | 129 | 4.82 | 159 | 5.94 | 2 | 0.07 | 527 | 19.69 |
| F. other |  | 116 | 3.59 | 65 | 2.20 | 66 | 2.20 | 48 | 1.79 | 5 | 0.11 | 300 | 9.90 |
|  | Total | 857 | 31.27 | 518 | 19.13 | 647 | 23.91 | 673 | 25.14 | 17 | 0.56 | 2,712 | 100.00 |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. they would make fun of me |  | 136 | 5.58 | 92 | 3.77 | 91 | 3.73 | 115 | 4.72 | 0 | 0.00 | 434 | 17.79 |
| B. they would try to talk me out of it |  | 68 | 2.79 | 49 | 2.01 | 61 | 2.50 | 78 | 3.20 | 0 | 0.00 | 256 | 10.50 |
| C. they would suggest I drop the course |  | 34 | 1.39 | 26 | 1.07 | 42 | 1.72 | 52 | 2.13 | 3 | 0.12 | 157 | 6.44 |
| D. they would encourage my efforts |  | 365 | 14.97 | 207 | 8.49 | 275 | 11.28 | 267 | 10.95 | 4 | 0.16 | 1,118 | 45.84 |
| E. other |  | 163 | 6.68 | 109 | 4.47 | 116 | 4.76 | 79 | 3.24 | 7 | 0.29 | 474 | 19.43 |
|  | Total | 766 | 31.41 | 483 | 19.80 | 585 | 23.99 | 591 | 24.23 | 14 | 0.57 | 2,439 | 100.00 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. they would suggest I drop the class |  | 15 | 0.51 | 6 | 0.20 | 7 | 0.24 | 36 | 1.23 | 1 | 0.03 | 65 | 2.21 |
| B. they would encourage my efforts |  | 397 | 13.52 | 249 | 8.48 | 325 | 11.07 | 326 | 11.10 | 5 | 0.17 | 1,302 | 44.33 |
| C. they would allow me to make the decision |  | 262 | 8.92 | 185 | 6.30 | 255 | 8.68 | 224 | 7.63 | 1 | 0.03 | 927 | 31.56 |
| D. they would question if I really need help |  | 155 | 5.28 | 96 | 3.27 | 93 | 3.17 | 90 | 3.06 | 4 | 0.14 | 438 | 14.91 |
| E. other |  | 86 | 2.93 | 46 | 1.57 | 42 | 1.43 | 27 | 0.92 | 4 | 0.14 | 205 | 6.98 |
|  | Total | 915 | 31.15 | 582 | 19.82 | 722 | 24.58 | 703 | 23.94 | 15 | 0.51 | 2,937 | 100.00 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. poor listening habits in class |  | 141 | 4.10 | 94 | 2.73 | 128 | 3.72 | 149 | 4.33 | 3 | 0.09 | 515 | 14.96 |
| B. excessive absences from class |  | 40 | 1.16 | 32 | 0.93 | 67 | 1.95 | 89 | 2.58 | 2 | 0.06 | 230 | 6.68 |
| C. difficulty focusing because of disruptions |  | 232 | 6.74 | 146 | 4.24 | 188 | 5.46 | 186 | 5.40 | 5 | 0.15 | 757 | 21.99 |
| D. my teacher doesn't explain material well |  | 77 | 2.24 | 70 | 2.03 | 174 | 5.05 | 193 | 5.61 | 2 | 0.06 | 516 | 14.99 |
| E. trouble reading or remembering materials |  | 185 | 5.37 | 131 | 3.80 | 180 | 5.23 | 166 | 4.82 | 3 | 0.09 | 665 | 19.31 |
| F. not passing a section of the state test |  | 108 | 3.14 | 69 | 2.00 | 113 | 3.28 | 106 | 3.08 | 0 | 0.00 | 396 | 11.50 |
| G. other |  | 152 | 4.41 | 96 | 2.79 | 67 | 1.95 | 42 | 1.22 | 7 | 0.20 | 364 | 10.57 |
|  | Total | 935 | 27.16 | 638 | 18.53 | 917 | 26.63 | 931 | 27.04 | 22 | 0.64 | 3,443 | 100.00 |

Note. Frequency ( $f$ ) indicates how many times that item response was chosen; it does not reflect the number of participants $(n)$.
Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent $(\%)$ of total $f$ indicates the percentage of how many times $(f)$ that response item was chosen out of the total frequency of responses for a question (total f ).

Table H2 continued

| Questions and Responses |  | $\begin{gathered} 5 \\ (n=642) \end{gathered}$ |  | $\begin{gathered} 6 \\ (n=377) \end{gathered}$ |  | $\begin{gathered} 7 \\ (n=454) \end{gathered}$ |  | $\begin{gathered} 8 \\ (n=475) \end{gathered}$ |  | Missing$(n=12)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | f | $\%$ of <br> total $f$ |  | $\%$ of <br> total $f$ |  |  |  |  |  | $\%$ of <br> talalf | $f$ | $\%$ of <br> total $f$ |
| 9. IfI were to seek help, I would prefer |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. a small group setting |  | 147 | 5.59 | 138 | 5.25 | 130 | 4.94 | 157 | 5.97 | 1 | 0.04 | 573 | 21.79 |
| B. one on one with a tutor |  | 401 | 15.25 | 249 | 9.47 | 318 | 12.09 | 298 | 11.33 | 5 | 0.19 | 1,271 | 48.33 |
| C. computer program or online support |  | 139 | 5.29 | 87 | 3.31 | 121 | 4.60 | 116 | 4.41 | 1 | 0.04 | 464 | 17.64 |
| D. video lessons to watch and repeat |  | 58 | 2.21 | 35 | 1.33 | 43 | 1.63 | 60 | 2.28 | 3 | 0.11 | 199 | 7.57 |
| E. other |  | 73 | 2.59 | 22 | 0.95 | 8 | 0.46 | 12 | 0.61 | 4 | 0.08 | 119 | 4.68 |
|  | Total | 818 | 30.91 | 531 | 20.30 | 620 | 23.73 | 643 | 24.60 | 14 | 0.46 | 2,626 | 100.00 |
| 10. Ifa subject is difficult to understand, I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. ask the teacher questions |  | 448 | 15.63 | 265 | 9.24 | 340 | 11.86 | 323 | 11.27 | 2 | 0.07 | 1,378 | 48.06 |
| B. meet with my counselor |  | 33 | 1.15 | 16 | 0.56 | 25 | 0.87 | 43 | 1.50 | 2 | 0.07 | 119 | 4.15 |
| C. ask classmates or friends for help |  | 261 | 9.10 | 217 | 7.57 | 253 | 8.82 | 254 | 8.86 | 4 | 0.14 | 989 | 34.50 |
| D. seek no help even though I may fail |  | 35 | 1.22 | 31 | 1.08 | 28 | 0.98 | 56 | 1.95 | 2 | 0.07 | 152 | 5.30 |
| E. other |  | 108 | 3.77 | 48 | 1.67 | 41 | 1.43 | 25 | 0.87 | 7 | 0.24 | 229 | 7.99 |
|  | Total | 885 | 30.87 | 577 | 20.13 | 687 | 23.96 | 701 | 24.45 | 17 | 0.59 | 2,867 | 100.00 |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. arrange for help without delay |  | 253 | 11.17 | 137 | 6.05 | 234 | 10.33 | 258 | 11.39 | 3 | 0.13 | 885 | 39.06 |
| B. put me off and ignore my request |  | 39 | 1.72 | 21 | 0.93 | 31 | 1.50 | 70 | 3.09 | 5 | 0.22 | 166 | 7.46 |
| C. suggest checking with a counselor |  | 102 | 4.50 | 56 | 2.47 | 75 | 3.31 | 80 | 3.53 | 1 | 0.04 | 314 | 13.86 |
| D. tell me I should try harder |  | 203 | 8.96 | 124 | 5.47 | 119 | 5.25 | 129 | 5.69 | 3 | 0.13 | 578 | 25.51 |
| E. other |  | 136 | 4.63 | 102 | 3.84 | 79 | 3.31 | 52 | 2.29 | 5 | 0.04 | 374 | 14.12 |
|  | Total | 733 | 30.98 | 440 | 18.76 | 538 | 23.70 | 589 | 25.99 | 17 | 0.57 | 2,317 | 100.00 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in |  | 300 | 10.97 | 186 | 6.80 | 270 | 9.88 | 246 | 9.00 | 4 | 0.15 | 1,006 | 36.80 |
| B. another teacher in the same subject area |  | 141 | 5.16 | 89 | 3.26 | 111 | 4.06 | 133 | 4.86 | 3 | 0.11 | 477 | 17.45 |
| C. someone froma tutoring company |  | 141 | 5.16 | 84 | 3.07 | 93 | 3.40 | 119 | 4.35 | 2 | 0.07 | 439 | 16.06 |
| D. classmates who know the subject |  | 169 | 6.18 | 151 | 5.52 | 151 | 5.52 | 152 | 5.56 | 3 | 0.11 | 626 | 22.90 |
| E. other |  | 83 | 3.04 | 42 | 1.54 | 33 | 1.21 | 22 | 0.80 | 6 | 0.22 | 186 | 6.80 |
|  | Total |  | 30.50 | 552 | 20.19 | 658 | 24.07 | 672 | 24.58 | 18 | 0.66 | 2,734 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants $(n)$.
Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent $(\%)$ of total $f$ indicates the percentage of how many times $(f)$ that response item was chosen out of the total frequency of responses for a question (total f ).

Table H2 continued

| Questions and Responses |  | $\begin{gathered} 5 \\ (n=642) \end{gathered}$ |  | $\begin{gathered} 6 \\ (n=377) \end{gathered}$ |  | $\begin{gathered} 7 \\ (n=454) \end{gathered}$ |  | $\begin{gathered} 8 \\ (n=475) \end{gathered}$ |  | Missing$(n=12)$ |  | $\begin{gathered} \text { Total } \\ (N=1,960) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | f | $\%$ of <br> total $f$ |  | \% of <br> total $f$ |  | $\%$ of <br> total $f$ | f | $\begin{aligned} & \% \text { of } \\ & \text { total } f \end{aligned}$ |  | $\%$ of <br> talal $f$ | $f$ | $\%$ of <br> total $f$ |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. at orientation and in the handbook |  | 174 | 5.81 | 139 | 4.64 | 206 | 6.87 | 225 | 7.51 | 5 | 0.17 | 749 | 24.99 |
| B. on the school Website |  | 323 | 10.78 | 181 | 6.04 | 225 | 7.51 | 230 | 7.67 | 4 | 0.13 | 963 | 32.13 |
| C. on daily announcements |  | 288 | 9.61 | 194 | 6.47 | 291 | 9.71 | 294 | 9.81 | 2 | 0.07 | 1,069 | 35.67 |
| D. other |  | 101 | 3.37 | 56 | 1.87 | 34 | 1.13 | 20 | 0.67 | 5 | 0.17 | 216 | 7.21 |
|  | Total | 886 | 29.56 | 570 | 19.02 | 756 | 25.23 | 769 | 25.66 | 16 | 0.53 | 2,997 | 100.00 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. mathematics |  | 257 | 9.61 | 140 | 5.24 | 185 | 6.92 | 196 | 7.33 | 3 | 0.11 | 781 | 29.22 |
| B. English |  | 134 | 5.01 | 75 | 2.81 | 179 | 6.70 | 118 | 4.41 | 2 | 0.07 | 508 | 19.00 |
| C. science |  | 154 | 5.76 | 102 | 3.82 | 144 | 5.39 | 202 | 7.56 | 1 | 0.04 | 603 | 22.56 |
| D. social studies |  | 145 | 5.42 | 75 | 2.81 | 70 | 2.62 | 60 | 2.24 | 2 | 0.07 | 352 | 13.17 |
| E. other |  | 228 | 7.11 | 132 | 4.30 | 77 | 2.43 | 52 | 2.06 | 5 | 0.15 | 494 | 16.05 |
|  | Total | 918 | 32.92 | 524 | 18.97 | 655 | 24.06 | 628 | 23.61 | 13 | 0.45 | 2,738 | 100.00 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. group progress of tutored students |  | 259 | 8.90 | 181 | 6.22 | 225 | 7.73 | 232 | 7.97 | 1 | 0.03 | 898 | 30.85 |
| B. gains that tutored students make |  | 210 | 7.21 | 170 | 5.84 | 247 | 8.49 | 198 | 6.80 | 3 | 0.10 | 828 | 28.44 |
| C. number of dropouts \& if they had tutoring |  | 79 | 2.71 | 49 | 1.68 | 69 | 2.37 | 92 | 3.16 | 3 | 0.10 | 292 | 10.03 |
| D. comments by students about tutoring |  | 223 | 7.66 | 149 | 5.12 | 185 | 6.36 | 168 | 5.77 | 3 | 0.10 | 728 | 25.01 |
| E. other |  | 78 | 2.68 | 36 | 1.24 | 25 | 0.86 | 23 | 0.79 | 3 | 0.10 | 165 | 5.67 |
|  | Total | 849 | 29.17 | 585 | 20.10 | 751 | 25.80 | 713 | 24.49 | 13 | 0.45 | 2,911 | 100.00 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well |  | 432 | 14.76 | 293 | 10.01 | 333 | 11.38 | 335 | 11.45 | 4 | 0.14 | 1,397 | 47.73 |
| B. to help students who don't speak English |  | 80 | 2.73 | 58 | 1.98 | 84 | 2.87 | 79 | 2.70 | 0 | 0.00 | 301 | 10.28 |
| C. to help students with learning disabilities |  | 185 | 6.32 | 112 | 3.83 | 136 | 4.65 | 121 | 4.13 | 5 | 0.17 | 559 | 19.10 |
| D. for classmates in my cooperative group |  | 136 | 4.65 | 113 | 3.86 | 130 | 4.44 | 114 | 3.89 | 0 | 0.00 | 493 | 16.84 |
| E. other |  | 70 | 2.39 | 41 | 1.40 | 30 | 1.02 | 33 | 1.13 | 3 | 0.10 | 177 | 6.05 |
|  | Total | 903 | 30.85 | 617 | 21.08 | 713 | 24.36 | 682 | 23.30 | 12 | 0.41 | 2,927 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants $(n)$.
Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent $(\%)$ of total findicates the percentage of how many times ( f$)$ that response item was chosen out of the total frequency of responses for a question (total f ).

## APPENDIX I

RESULTS OF TUTORING POLL BY SCHOOL

Table I1
Frequency and Percent of Demographics by School

| Demographic Category |  | Elementary$(n=585)$ |  | $\begin{gathered} \text { Middle } \\ (n=441) \end{gathered}$ |  | Junior High$(n=934)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $n$ | $\%$ of total $N$ | $n$ | $\begin{aligned} & \text { \% of } \\ & \text { total } N \end{aligned}$ | $n$ | $\begin{gathered} \% \text { of } \\ \text { total } N \end{gathered}$ | $n$ | $\begin{aligned} & \text { \% of } \\ & \text { total } N \end{aligned}$ |
| Gender |  |  |  |  |  |  |  |  |  |
| Male |  | 299 | 15.26 | 216 | 11.02 | 433 | 22.09 | 948 | 48.37 |
| Female |  | 281 | 14.34 | 218 | 11.12 | 495 | 25.26 | 994 | 50.71 |
| Missing |  | 5 | 0.26 | 7 | 0.36 | 6 | 0.31 | 18 | 0.92 |
|  | Total | 585 | 29.85 | 441 | 22.50 | 934 | 47.65 | 1,960 | 100.00 |
| Ethnicity |  |  |  |  |  |  |  |  |  |
| Asian |  | 15 | 0.77 | 3 | 0.15 | 27 | 1.38 | 45 | 2.30 |
| Black |  | 88 | 4.49 | 106 | 5.41 | 220 | 11.22 | 414 | 21.12 |
| Hispanic |  | 22 | 1.12 | 13 | 0.66 | 32 | 1.63 | 67 | 3.42 |
| Native Am. |  | 9 | 0.46 | 4 | 0.20 | 17 | 0.87 | 30 | 1.53 |
| White |  | 421 | 21.48 | 297 | 15.15 | 604 | 30.82 | 1,322 | 67.45 |
| Other |  | 25 | 1.28 | 15 | 0.77 | 30 | 1.53 | 70 | 3.57 |
| Missing |  | 5 | 0.26 | 3 | 0.15 | 4 | 0.20 | 12 | 0.61 |
|  | Total | 585 | 29.85 | 441 | 22.50 | 934 | 47.65 | 1,960 | 100.00 |
| Age |  |  |  |  |  |  |  |  |  |
| 10 |  | 212 | 10.82 | 45 | 2.30 | 0 | 0.00 | 257 | 13.11 |
| 11 |  | 192 | 9.80 | 208 | 10.61 | 1 | 0.05 | 401 | 20.46 |
| 12 |  | 157 | 8.06 | 148 | 7.55 | 95 | 4.85 | 400 | 20.46 |
| 13 |  | 20 | 1.02 | 31 | 1.58 | 393 | 20.05 | 444 | 22.65 |
| 14 |  | 0 | 0.00 | 7 | 0.36 | 347 | 17.70 | 354 | 18.06 |
| 15 |  | 1 | 0.05 | 0 | 0.00 | 75 | 3.83 | 76 | 3.88 |
| Missing |  | 3 | 0.15 | 2 | 0.10 | 23 | 1.12 | 27 | 1.38 |
|  | Total | 585 | 48.37 | 441 | 0.92 | 934 | 50.71 | 1,960 | 100.00 |
| Grade |  |  |  |  |  |  |  |  |  |
| 5 |  | 376 | 19.18 | 261 | 13.32 | 5 | 0.26 | 642 | 32.76 |
| 6 |  | 203 | 10.36 | 170 | 8.67 | 4 | 0.20 | 377 | 19.23 |
| 7 |  | 2 | 0.10 | 4 | 0.20 | 448 | 22.86 | 454 | 23.16 |
| 8 |  | 0 | 0.00 | 4 | 0.20 | 471 | 24.03 | 475 | 24.23 |
| Missing |  | 4 | 0.20 | 2 | 0.10 | 6 | 0.31 | 12 | 0.61 |
|  | Total | 585 | 29.85 | 441 | 22.50 | 934 | 47.65 | 1,960 | 100.00 |

Table I2
Frequency and Percent of Question Responses by School

| Questions and Responses |  | Elementary$(n=585)$ |  | Middle$(n=441)$ |  | Junior High$(n=934)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 1. Most students I know who need tutoring |  |  |  |  |  |  |  |  |  |
| A. recognize their need and will ask for help |  | 216 | 7.65 | 209 | 7.40 | 339 | 12.01 | 764 | 26.82 |
| B. deny they have a problem with the subject |  | 156 | 5.52 | 132 | 4.67 | 340 | 12.04 | 628 | 22.04 |
| C. feel embarrassed and refuse to ask for help |  | 233 | 8.25 | 140 | 4.96 | 366 | 12.96 | 739 | 25.94 |
| D. blame their difficulties on poor teachers |  | 91 | 3.22 | 61 | 2.16 | 317 | 11.23 | 469 | 16.46 |
| E. other |  | 84 | 2.95 | 68 | 2.39 | 97 | 3.40 | 249 | 8.74 |
|  | Total | 780 | 27.59 | 610 | 21.58 | 1459 | 51.64 | 2,849 | 100.00 |
| 2. More students would seek tutoring if |  |  |  |  |  |  |  |  |  |
| A. it was more convenient and available |  | 111 | 3.76 | 96 | 3.25 | 339 | 11.47 | 546 | 18.48 |
| B. teachers would offer them this option |  | 168 | 5.69 | 113 | 3.82 | 238 | 8.05 | 519 | 17.56 |
| C. they cared more about academic success |  | 209 | 7.07 | 194 | 6.57 | 490 | 16.58 | 893 | 30.22 |
| D. parents were aware that they needed it |  | 222 | 7.51 | 176 | 5.96 | 369 | 12.49 | 767 | 25.96 |
| E. other |  | 89 | 3.01 | 55 | 1.86 | 86 | 2.91 | 230 | 7.78 |
|  | Total | 799 | 27.04 | 634 | 21.46 | 1522 | 51.51 | 2,955 | 100.00 |
| 3. Seeking help from a tutor |  |  |  |  |  |  |  |  |  |
| A. shows that I recognize a need for help |  | 271 | 8.78 | 235 | 7.62 | 596 | 19.32 | 1,102 | 35.72 |
| B. would embarrass me in front of friends |  | 97 | 3.14 | 79 | 2.56 | 140 | 8.88 | 316 | 10.24 |
| C. reflects my desire to learn and succeed |  | 187 | 6.06 | 150 | 4.86 | 438 | 14.20 | 775 | 25.12 |
| D. helps meet requirements for graduation |  | 197 | 6.39 | 156 | 5.06 | 379 | 12.29 | 732 | 23.73 |
| E. other |  | 50 | 1.62 | 46 | 1.49 | 64 | 2.07 | 160 | 5.19 |
|  | Total | 802 | 26.00 | 666 | 21.59 | 1617 | 52.41 | 3,085 | 100.00 |
| 4. When students fail a class or a test required to graduate, they should |  |  |  |  |  |  |  |  |  |
| A. automatically be assigned a tutor |  | 227 | 7.51 | 223 | 7.38 | 534 | 17.68 | 984 | 32.57 |
| B. take monthly practice tests |  | 148 | 4.90 | 131 | 4.34 | 342 | 11.32 | 621 | 20.56 |
| C. go to summer school |  | 148 | 4.90 | 130 | 4.30 | 299 | 9.90 | 577 | 19.10 |
| D. access a computer program for help |  | 121 | 4.01 | 109 | 3.61 | 274 | 9.07 | 504 | 16.68 |
| E. other |  | 155 | 5.13 | 70 | 2.32 | 110 | 3.64 | 335 | 11.09 |
|  | Total | 799 | 26.45 | 663 | 21.95 | 1559 | 51.61 | 3,021 | 100.00 |
| 5. The most convenient time for me to attend tutoring sessions is |  |  |  |  |  |  |  |  |  |
| A. right after school |  | 347 | 12.79 | 237 | 8.85 | 511 | 18.84 | 1,095 | 40.38 |
| B. during the evening |  | 79 | 2.91 | 65 | 2.43 | 132 | 4.87 | 276 | 10.18 |
| C. on weekends |  | 79 | 2.91 | 71 | 2.65 | 146 | 5.38 | 296 | 10.91 |
| D. at lunchtime |  | 37 | 1.36 | 43 | 1.61 | 138 | 5.09 | 218 | 8.04 |
| E. before school |  | 92 | 3.39 | 145 | 5.42 | 290 | 10.69 | 527 | 19.43 |
| F. other |  | 119 | 4.39 | 61 | 2.25 | 120 | 4.42 | 300 | 11.06 |
|  | Total | 753 | 27.77 | 622 | 22.97 | 1337 | 49.30 | 2,712 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question, which
demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of total f indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

Table I2 continued

| Questions and Responses |  | Elementary$(n=585)$ |  | Middle$(n=441)$ |  | Junior High$(n=934)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | $\%$ of total $f$ | $f$ | $\%$ of total $f$ | $f$ | \% of total $f$ | $f$ | $\%$ of total $f$ |
| 6. If I told my friends that I was going to get tutoring |  |  |  |  |  |  |  |  |  |
| A. they would make fun of me |  | 133 | 5.45 | 93 | 3.81 | 208 | 8.53 | 434 | 17.79 |
| B. they would try to talk me out of it |  | 62 | 2.54 | 55 | 2.26 | 139 | 5.70 | 256 | 10.50 |
| C. they would suggest I drop the course |  | 28 | 1.15 | 32 | 1.31 | 97 | 3.98 | 157 | 6.44 |
| D. they would encourage my efforts |  | 315 | 12.92 | 261 | 10.70 | 542 | 22.22 | 1,118 | 45.84 |
| E. other |  | 167 | 6.85 | 104 | 4.26 | 203 | 8.32 | 474 | 19.43 |
|  | Total | 705 | 28.91 | 545 | 22.35 | 1189 | 48.75 | 2,439 | 100.00 |
| 7. If I told my parents that I was going to get tutoring |  |  |  |  |  |  |  |  |  |
| A. they would suggest I drop the class |  | 7 | 0.24 | 12 | 0.41 | 46 | 1.57 | 65 | 2.21 |
| B. they would encourage my efforts |  | 365 | 12.43 | 286 | 9.74 | 651 | 22.17 | 1,302 | 44.33 |
| C. they would allow me to make the decision |  | 250 | 8.51 | 199 | 6.78 | 478 | 16.28 | 927 | 31.56 |
| D. they would question if I really need help |  | 146 | 4.97 | 107 | 3.64 | 185 | 6.30 | 438 | 14.91 |
| E. other |  | 81 | 2.76 | 47 | 1.60 | 77 | 2.62 | 205 | 6.98 |
|  | Total | 849 | 28.91 | 651 | 22.17 | 1437 | 48.93 | 2,937 | 100.00 |
| 8. The reasons I would seek a tutor are |  |  |  |  |  |  |  |  |  |
| A. poor listening habits in class |  | 130 | 3.77 | 105 | 3.05 | 280 | 8.13 | 515 | 14.95 |
| B. excessive absences from class |  | 34 | 0.99 | 38 | 1.10 | 158 | 4.59 | 230 | 6.68 |
| C. difficulty focusing because of disruptions |  | 221 | 6.42 | 161 | 4.67 | 375 | 10.89 | 757 | 21.98 |
| D. my teacher doesn't explain material well |  | 85 | 2.47 | 65 | 1.89 | 366 | 10.63 | 516 | 14.98 |
| E. trouble reading or remembering materials |  | 165 | 4.79 | 151 | 4.38 | 349 | 10.13 | 665 | 19.31 |
| F. not passing a section of the state test |  | 89 | 2.58 | 86 | 2.50 | 221 | 6.42 | 396 | 11.50 |
| G. other |  | 155 | 4.50 | 94 | 2.73 | 116 | 3.37 | 365 | 10.60 |
|  | Total | 879 | 25.52 | 700 | 20.33 | 1865 | 54.15 | 3,444 | 100.00 |
| 9. If I were to seek help, I would prefer |  |  |  |  |  |  |  |  |  |
| A. a small group setting |  | 150 | 5.70 | 134 | 5.10 | 289 | 10.99 | 573 | 21.82 |
| B. one on one with a tutor |  | 356 | 13.54 | 298 | 11.33 | 617 | 23.46 | 1,271 | 48.40 |
| C. computer program or online support |  | 134 | 5.10 | 91 | 3.46 | 239 | 9.09 | 464 | 17.67 |
| D. video lessons to watch and repeat |  | 54 | 2.05 | 36 | 1.37 | 109 | 4.14 | 199 | 7.58 |
| E. other |  | 68 | 1.94 | 26 | 0.99 | 25 | 2.70 | 119 | 4.53 |
|  | Total | 762 | 28.33 | 585 | 22.24 | 1279 | 50.38 | 2,626 | 100.00 |
| 10. If a subject is difficult to understand, I |  |  |  |  |  |  |  |  |  |
| A. ask the teacher questions |  | 389 | 13.57 | 325 | 11.34 | 664 | 23.16 | 1,378 | 48.06 |
| B. meet with my counselor |  | 17 | 0.59 | 31 | 1.08 | 71 | 2.48 | 119 | 4.15 |
| C. ask classmates or friends for help |  | 304 | 10.60 | 175 | 6.10 | 510 | 17.79 | 989 | 34.50 |
| D. seek no help even though I may fail |  | 34 | 1.19 | 31 | 1.08 | 87 | 3.03 | 152 | 5.30 |
| E. other |  | 105 | 3.66 | 51 | 1.78 | 73 | 2.55 | 229 | 7.99 |
|  | Total | 849 | 29.61 | 613 | 21.38 | 1405 | 49.01 | 2,867 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Partcipants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of total findicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

Table I2 continued

| Questions and Responses |  | Elementary$(n=585)$ |  | $\begin{gathered} \text { Middle } \\ (n=441) \end{gathered}$ |  | Junior High$(n=934)$ |  | Total$(N=1,960)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | \% of total $f$ | $f$ | $\begin{gathered} \% \text { of } \\ \text { total } f \end{gathered}$ |
| 11. When I request tutoring, my teacher(s) |  |  |  |  |  |  |  |  |  |
| A. arrange for help without delay |  | 208 | 9.19 | 188 | 8.31 | 489 | 21.61 | 885 | 39.11 |
| B. put me off and ignore my request |  | 32 | 1.41 | 26 | 1.15 | 108 | 4.77 | 166 | 7.34 |
| C. suggest checking with a counselor |  | 76 | 3.36 | 80 | 3.54 | 158 | 6.98 | 314 | 13.88 |
| D. tell me I should try harder |  | 187 | 8.26 | 140 | 6.19 | 251 | 11.09 | 578 | 25.54 |
| E. other |  | 167 | 5.97 | 73 | 2.43 | 134 | 5.74 | 374 | 14.14 |
|  | Total | 670 | 28.19 | 507 | 21.61 | 1140 | 50.20 | 2,317 | 100.00 |
| 12. I prefer a tutor to be |  |  |  |  |  |  |  |  |  |
| A. my teacher whose class I am struggling in |  | 283 | 10.35 | 209 | 7.64 | 514 | 18.80 | 1,006 | 36.80 |
| B. another teacher in the same subject area |  | 116 | 4.24 | 114 | 4.17 | 247 | 9.03 | 477 | 17.45 |
| C. someone from a tutoring company |  | 132 | 4.83 | 91 | 3.33 | 216 | 7.90 | 439 | 16.06 |
| D. classmates who know the subject |  | 178 | 6.51 | 142 | 5.19 | 306 | 11.19 | 626 | 22.90 |
| E. other |  | 76 | 2.78 | 48 | 1.76 | 62 | 2.27 | 186 | 6.80 |
|  | Total | 785 | 28.71 | 604 | 22.09 | 1345 | 49.20 | 2,734 | 100.00 |
| 13. My school should let students know about tutoring |  |  |  |  |  |  |  |  |  |
| A. at orientation and in the handbook |  | 181 | 6.04 | 133 | 4.44 | 435 | 14.51 | 749 | 24.99 |
| B. on the school Website |  | 315 | 10.51 | 190 | 6.34 | 458 | 15.28 | 963 | 32.13 |
| C. on daily announcements |  | 225 | 7.51 | 261 | 8.71 | 583 | 19.45 | 1,069 | 35.67 |
| D. other |  | 105 | 3.50 | 49 | 1.63 | 62 | 2.07 | 216 | 7.21 |
|  | Total | 826 | 27.56 | 633 | 21.12 | 1538 | 51.32 | 2,997 | 100.00 |
| 14. The subject(s) in which I am most likely to seek tutoring are |  |  |  |  |  |  |  |  |  |
| A. mathematics |  | 243 | 9.09 | 157 | 5.87 | 381 | 14.25 | 781 | 29.22 |
| B. English |  | 130 | 4.86 | 79 | 2.96 | 299 | 11.19 | 508 | 19.00 |
| C. science |  | 116 | 4.34 | 140 | 5.24 | 347 | 12.98 | 603 | 22.56 |
| D. social studies |  | 107 | 4.00 | 113 | 4.23 | 132 | 4.94 | 352 | 13.17 |
| E. other |  | 192 | 7.18 | 113 | 4.23 | 124 | 4.64 | 429 | 16.05 |
|  | Total | 788 | 29.48 | 602 | 22.52 | 1283 | 48.00 | 2,673 | 100.00 |
| 15. Students should receive school report cards showing |  |  |  |  |  |  |  |  |  |
| A. group progress of tutored students |  | 245 | 8.42 | 198 | 6.80 | 455 | 15.63 | 898 | 30.85 |
| B. gains that tutored students make |  | 208 | 7.15 | 172 | 5.91 | 448 | 15.39 | 828 | 28.44 |
| C. number of dropouts \& if they had tutoring |  | 61 | 2.10 | 63 | 2.16 | 168 | 5.77 | 292 | 10.03 |
| D. comments by students about tutoring |  | 228 | 7.83 | 145 | 4.98 | 355 | 12.20 | 728 | 25.01 |
| E. other |  | 75 | 2.58 | 37 | 1.27 | 53 | 1.82 | 165 | 5.67 |
|  | Total | 817 | 28.07 | 615 | 21.13 | 1479 | 50.81 | 2,911 | 100.00 |
| 16. I am willing to volunteer as a tutor |  |  |  |  |  |  |  |  |  |
| A. in the subjects that I understand well |  | 418 | 14.28 | 310 | 10.59 | 669 | 22.86 | 1,397 | 47.73 |
| B. to help students who don't speak English |  | 68 | 2.32 | 69 | 2.36 | 164 | 5.60 | 301 | 10.28 |
| C. to help students with learning disabilities |  | 148 | 5.06 | 151 | 5.16 | 260 | 8.88 | 559 | 19.10 |
| D. for classmates in my cooperative group |  | 135 | 4.61 | 111 | 3.79 | 247 | 8.44 | 493 | 16.84 |
| E. other |  | 74 | 2.53 | 35 | 1.20 | 68 | 2.32 | 177 | 6.05 |
|  | Total | 843 | 28.80 | 676 | 23.10 | 1408 | 48.10 | 2,927 | 100.00 |

Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of total $f$ indicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).


[^0]:    Note. Frequency $(f)$ indicates how many times that item res ponse was chosen; it does not reflect the number of participants $(n)$. Participants were allowed to choose more than one
    response on each question, which demonstrates why the total number of responses is larger than the sample size $(N=1,960)$. Percent (\%) of total f indicates the percentage of how

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[^2]:    Note. Frequency $(f)$ indicates how many times that item response was chosen; it does not reflect the number of participants ( $n$ ). Participants were allowed to choose more than one many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

[^3]:    choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of total $f$ indicates the percentage of how many times ( $f$ ) that response item was chosen out of the total frequency of responses for a question (total f).

[^4]:    choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent $(\%)$ of total findicates the percentage of how many times (f) that response item was chosen out of the total frequency of responses for a question (total f).

[^5]:    choose more than one response on each question, which demonstrates why the total number of responses is larger than the sample size ( $N=1,960$ ). Percent (\%) of total $f$ indicates the percentage of how many times ( $f$ ) that response item was chosen out of the total frequency of responses for a question (total f).

