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Examination Of An Independent School's Site-Based Summer Program

Susan W. Keogh
University of New England

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By

Susan W. Keogh

B.A. (University of Florida) 1975
M.Ed. (University of Florida) 1976
Ed.S. (University of Florida) 2010

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Abstract

This study examined the summer program offered by a pre-kindergarten through grade twelve independent school. Three levels of theory, individual, group, and organizational, were utilized to analyze the experiences of students and instructors. The variety of opportunities and instructional design elements, the intentional alignment to the traditional school year, collegial discussions connecting summer learning and the school year, and evidence of the school's mission were examined.

Findings revealed a wide-range of educational experiences and the benefits of continuous learning that are evident the following school year. Class designs incorporated instructional elements supported by individual learning theories. Academic standards and expectations aligned to the traditional school year; summer classes have developed in tandem with curriculum refinements. Instructors valued the opportunities for more frequent collegial discussions and professional development. The school's mission was evident within the academics, leadership, and community. Explicitly communicating these elements increased the perceived and actual value of this program both internally and throughout the community.

Key words: authentic learning, immersion, critical thinking, problem solving, collaboration, inquiry, reflection, summer learning, continuity, service learning, situated learning, classical change theory, social learning, appreciative inquiry, mission-driven

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This dissertation was presented
by

Susan W. Keogh

It was presented on
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and approved by:

Grania Holman, Ed.D. Lead Advisor
University of New England

Ella Benson, Ed.D. Secondary Advisor
University of New England

Denise Nicholson, Ph.D. Affiliate Committee Member

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CHAPTER ONE

INTRODUCTION

Summertime conjures visions of relaxation, recreation, travel, and a departure from school. The origins of summer vacation within the United States can be attributed to historic social trends. During the 1800s, a traditional school year was comprised of 248 days but, as hot summer temperatures drove affluent families to their cooler, country homes, the high rate of absenteeism forced school districts to suspend classes until the milder temperatures of September brought families back to their city homes. This annual migration prompted major school districts to reduce the number of school days in the calendar to allow for extended summer vacations (Fairchild, 2012, p. 13).

Implications of Abbreviated School Years

Studies from Johns Hopkins University reveal that, although students from different socio-economic levels tend to learn at similar rates during the school year, summer learning loss is responsible for measureable and lasting differences in achievement (Donohue & Miller, 2008; Zvoch & Stevens, 2011). Regardless of one's socio-economic level, students who are not academically stimulated over the summer tend to lose 2.6 months of grade equivalency in math computation (Donovan, 2009, p. 115) while regression in reading equates to one or more months of skill knowledge (Winter, 2005, p. 363). This differential loss between math and reading may be attributed to the predominance of reading over math within typical homes (Borman, Benson, & Overman, 2005, p. 132).

Once the school year resumes, the learning rate of students lacking summer learning experiences is comparable to that of their peers but recovery from the skill loss

is unlikely; each summer without academic stimulation widens the performance gap. The cumulative effects of skill loss negatively impact achievement test scores and, if the results of these tests serve as criteria for course placements, the absence of summer learning can be attributed as a major cause for the differences in achievement-dependent outcomes (Alexander, Entwisle, & Olson, 2007, p. 168). In addition to these students not being considered for placement in honors courses, their lack of critical skills negatively impacts their ongoing academic performance. A possible outcome, failure to earn course credit, is often resolved by repeating the same content during summer school. This experience creates negative impressions of summer learning and, had these students been afforded academic stimulation during the summers of childhood, their scholastic achievement and more positive attitudes toward education may have led to greater personal accomplishments and more opportunities for the future.

A typical school year in the United States consists of approximately 175 to 180 days of instruction. Compared to the 240 days in countries such as Japan, Germany, and Israel (Bottorff, 2010, p. 26), mandatory instructional time within the American school system is 75% of the time devoted to education in other countries. America's shorter school year coupled with the potential absence of intellectual stimulation during the extended summer creates an unrecoverable delay in student achievement and ultimately reduces the nation's ability to compete more successfully in the international marketplace (Cooper, Charlton, Valentine & Muhlenbruck, 2000; Rozelle & Mackenzie, 2011).

Benefits of Summer Learning Opportunities

Although negative impressions of summer school exist for some, a change in perspective allows one to realize the rich educational experiences extended summer months allow for both students and teachers. Recognizing the interest and demand for quality summer learning opportunities, schools, universities, and private organizations are responding by offering classes designed for remediation, enrichment, and course acceleration (ISM, 2015). Extensive professional development opportunities are available for teachers including topics of general interest or school/district-based curriculum development. Summer also offers uninterrupted time for teachers to reflect upon their instruction and plan for the upcoming school year. Analyzing data from the school year and summer courses can enrich this planning and guide future instruction. The resulting connection between summers and the traditional school years creates and sustains continuity of learning. Summer provides quality time for students to increase their knowledge and for teachers to build their professional practice (Winter, 2005, p. 401).

Effective summer learning programs consider instructional philosophies and organization structures according to researchers from the Center for Summer Learning at Johns Hopkins University (Bell & Carillo, 2007, p. 45). Intentional planning is foundational to proactive, innovative approaches to summer learning. These qualities are supported and fostered by transformative leadership, collaborative planning, and meticulous, on-going analysis and evaluation of the program's effectiveness, and future refinements (Bell & Carillo, 2007; Shields, 2010).

The context of this study is the summer program offered by an independent pre-kindergarten through twelfth grade day school located in the southeastern United States.

During the 25 years since the program's inception, the researcher has served as the summer director with responsibilities in both management and leadership. Reflections upon characteristics of quality summer programs prompted the researcher to question the evidence of these traits within this context. Observing teacher collaboration, planning, and conferencing prompted additional wonderings as to how instructors view their contributions to and the benefits gained from their participation in the planning, instructional design, and evaluation of the summer program. Elements of transformative leadership in terms of teacher empowerment and creating deep and equitable change were noted (Shields, 2010, p. 563).

Statement of the Problem

The potential value of summer learning opportunities often fails to be recognized. Current literature addresses several designs of summer programs, including remediation, enrichment and academic acceleration (ISM, 2015); single-site programs are often limited to one of these designs and entertain an audience within a narrow grade range or few areas of interest. A significant gap exists in the literature related to school-based programs comprised of multiple designs for a wide span of ages or grade levels and a broad range of interests. Although literature addresses school year to summer alignment for remedial or bridge programs, it fails to address this connection for enrichment programs.

The value of summer programs is often discounted by preconceived ideas that summer school is intended for remediation or course recovery, limited designs for specific audiences, instruction that is not intentionally aligned with school-year curriculum or assessments, summer activities that are not well-planned, and/or programs

that fail to support the sponsoring organization's mission. Although elements of alignment and mission may exist, the value of the program is diminished if these elements are not explicitly stated.

Purpose of the Study

This study examined the current practices of a summer program offered by a pre-kindergarten through grade twelve independent school. Areas examined included the variety of opportunities for a range of ages and interests, intentional alignment to school-based standards and curriculum, collegial discussions refining the connection between the school year and summer, and evidence of the school's mission within the course and program planning, implementation, and evaluation. Data and recommendations from this study were shared with school administrators and summer instructors in order to inform future decisions.

Already an integral part of this independent school, the summer program addressed in this study can increase in value as its diverse offerings, intentional design, and mission-focus are explicitly stated. This program has experienced constant growth during its 25 years of operation, yet an intentional, comprehensive study has never been conducted. The data collected and analyzed are critical in order for strategic, informed decision making to occur. The results of this study serve as a solid baseline to be referenced for future studies and refinements.

Research Questions

Research questions designed to examine the prevailing perceptions of student learning experiences, instructional alignment with the school year standards and

assessments, and elements that support the school's mission guided this study. These questions included:

How do theory-based instructional designs effectively support the mission of the school by promoting the acquisition of greater content knowledge and development of attitudes that inspire and sustain a student's desire to embrace learning through a wide-variety of summer opportunities?

What structures, supports, and incentives should the school have in place to foster the development and build the capacity of collegial teams committed to the design and analysis of a summer curriculum aligned with the school year?

How can explicit communication regarding the variety of classes, intentional alignment of the traditional school year with summer, and commitment to the school's mission increase the perceived and actual value of summer learning and this program while more solidly situating this summer program into the culture of the school?

Conceptual Framework

By assessing theory, research, and the researcher's experience, the conceptual framework of this study organized the examination of the relationship between individual theories focused on learning and group or organizational theories used to explain work teams. Collectively, these multilevel theories framed the significance of and provided guidance for the study (Ravitch & Riggan, 2012, pp. 8-9).

Individual learning theories inform the conceptual framework. Theories at this level concentrate upon cognitive behavior and learning (Anfara & Mertz, 2006, p. xviii) and provide lenses for examining theory-based instructional designs and their effectiveness for promoting the acquisition of greater content knowledge and

development of the attitudes that inspire and sustain a student's desire to embrace learning.

Summer may be viewed either as a brief departure from formal education or an extended timeframe for enriching learning experiences. A departure from school allows summer learning loss or summer slide to occur as learning fails to flow through the metaphorical faucet (Borman, Benson, & Overman, 2005, p. 133). Critical skills are lost and, over multiple years, a cumulative deficit of these skills may result.

Conversely, summer provides extensive and uninterrupted windows of time during which students may become immersed in topics of interest. Focus upon one subject area or topic optimizes opportunities for students to maximize learning as they persistently grapple with problems in order to construct meaning and understandings that are transferable to other contexts and situations (Costa & Kallick, 2008; Rand, 2013). Such experiences, coupled with increased social interaction, are critical for the development of positive attitudes, dedication to self-learning, and intrinsic motivation (Johri & Olds, 2011; Mohr-Schroeder, Miller, Little, Schooler, et al. 2014).

The studies of Dewey, Lave, and Wenger present authentic learning experiences as being more feasible when dedicated time for participation in one class allows for in-depth research and application of knowledge to novel situations (Costa & Kallick, 2008; Johri & Olds, 2011). Extended stays at off-campus research facilities are possible and, while working with experts and mentors, students can engage in authentic inquiry and reflection. These increased levels of engagement foster the desire to take greater ownership of and responsibility for their own learning (Johri & Olds, 2011; Kolb & Kolb, 2015).

Group theories inform the conceptual framework. Group theories address work teams (Anfara & Mertz, 2006, xviii) that may be assembled to refine structures intended to advance student learning, professional practice, and program effectiveness within an organization (Shields. 2010, p. 563). Theoretical perspectives guided the examination of the structures that are currently in place to foster the development of collegial teams formed to align summer curriculum with the school year. These collaborative teams may evolve as members share observations and create understandings through collegial discussions; these discussions may include data analysis. This construction of knowledge through discussion as a social activity enables participants to later transfer and apply newly acquired knowledge in design and communication (Karahan & Ruehrig, 2015, p. 105).

Appreciative inquiry, when employed with action research, allows groups of teachers to build upon the existing knowledge base with additional data gathered within their actual contexts. By collaboratively analyzing the collected data, administrators and teachers are able to ask questions regarding the effectiveness of current practices in terms of intentional planning and alignment, instructional strategies, and evidence of the organization's mission. They are able to influence gradual change in their context (Cooperrider as cited in Coghlan & Brannick, 2014; Shields, 2010) by identifying the structural elements and practices that are effective and determining why they are effective. Change, although gradual, may require intentional deconstruction of long-standing practices and beliefs in order to reconstruct practices that are solidified in deep and equitable change (Shields, 2010, p. 562). The collegial groups are able to author a vision of desired practices and outcomes.

Organizational theories inform the conceptual framework. Organizational theories focus upon institutions and their effectiveness (Anfara & Mertz, 2006, xviii). Organizations that are committed to on-going evaluation and improvement are able to avoid complacency, a condition that can be credited with initiating the failure of many institutions (Kotter, 2012, p. 4). The evaluation or examination of a program can be conducted at varying levels. In terms of management, financial audits of revenue sources and expenditures for materials, support services, advertising, and compensation may convey program sustainability as net income remains constant. Examining leadership, learning experiences, and alignment with mission provides data that more accurately assess the effectiveness of a program and its position within the organization's culture.

Assumptions, Limitations, and Scope

The context of a single independent day school limited the number of participants who were available for the study. Although data from 25 years of the program's performance were available, the number of students who have attended consecutive summers limited longitudinal information.

All students from this school are expected to complete grade specific reading and math assignments during the summer months. Student involvement with summer assignments alone fosters the continuity of learning and mitigates learning loss therefore maintenance of academic skills may be credited to these assignments and not purely to the summer program's learning experiences. Participation in summer programs offered by other organizations as well as travel influence a student's continuity of learning.

It is assumed that faculty members from all academic divisions welcome the opportunity to ensure summer courses are aligned to the school-based standards. This

group was comprised of full-time and adjunct instructors who teach during the summer months on a regular basis, those who have taught a limited number of summer classes, and those who have not taught during the summer months.

Although studying one's own organization can provide actionable feedback, the risk of bias exists. The personal commitment to utilize an objective lens for examination and review was the goal, but emotions such as regret or fear of failure may have been lurking. As the sole director of the program since its inception, vigilant care has been taken by the researcher in order to avoid bias and failure to report comprehensive data. The researcher recognized and accepted the ethical responsibility of maintaining transparency throughout this study. Reflexively, the researcher understood the "significant influence in the development of the research and the engagement of the participants" (Carlson, 2010, p. 1104).

As 2016 was the year for the school's ten-year accreditation visit, faculty-based sub-committees were responsible for designing surveys and reporting the results. A self-study committee tasked with updating information from auxiliary programs, such as the summer program, surveyed all employees. The researcher was invited to provide input into the development of this survey but the committee compiled the results. Removing the researcher from this step of the process eliminated tampering of results or biased reporting.

The scope of the study included perspectives of faculty members who have offered summer classes. Some of these teachers may also have been parents of students who have participated in the summer program. As the researcher examined the vision, structures, and procedures of the summer program, the viewpoints and perspectives of

summer teachers, both short-term and long-term, as well as those who have designed classes and those who have not, guided the study of student experiences. Faculty decisions and actions influence student interest and performance as well as the positioning of the summer program in the overarching school culture.

Interviews with teachers provided rich qualitative data for analysis. As this study was conducted within the researcher's workplace, it was imperative that traps were avoided and trustworthiness was at the highest level. Employing multiple lenses and keeping the relationship between the participants and the researcher as a central concern ensured traps were avoided and trustworthiness was honored. Ethical and mindful collection, analysis, and reporting of data heighten trustworthiness (Carlsen, 2010, p. 1110). Other actions and practices to ensure accurate qualitative data included careful documentation, credibility reviews by readers, and member checking. By allowing those interviewed to approve the researcher's written transcription and interpretation of the experiences shared, the risk of discounting the study was reduced or eliminated. Thick and rich descriptions provided a clear picture of this summer program (Carlsen, 2010, p. 1104).

Rationale and Significance of Study

Other than annual registration data and financial reviews, an in-depth study of this summer program has never been conducted. Goals have historically included the provision of quality academic experiences for students and additional income for teachers along with revenues for the school. Each summer, these goals have been met or exceeded but intentional actions and refinements, based on research and data analysis, must be utilized to sustain and increase the educational value of this program. Administrators,

specifically this study's researcher who is also the program director, must embrace transformative leadership as a means to empower teachers. Data collected throughout this study were used to determine the current awareness and intentional actions to align summer instruction with the traditional year's school-based standards and instruction. Mindfulness of the school's mission was determined.

Strong management has been critical in establishing a solid foundation to sustain this program but leadership will determine its future in terms of the quantity and quality of encouragement given to the teachers to reflect upon their observations and actions, confront obstacles with the determination to prevail, and honor the vision that reflects this organization's mission (Kotter, 2012, p. 28). Areas in which complacency may develop were identified in order to inspire a renewed vision and assemble a guiding coalition (Kotter, 2012, p. 23). The unique qualities of student experiences and teacher opportunities were critical in creating an understanding of how elements of this program are relevant and transferable to other contexts such as similar independent day schools.

Definitions of Terms

Accreditation – an evaluation process completed by a team of educators from similar schools. Areas evaluated include, but are not limited to, mission, governance, finance, program, administration, development, admissions, student services, and school culture (NAIS)

Achievement – the successful attainment of a specific skill or task (Santrock, 2001, p. 469)

Action research – the practice of blending theory and action in order to address critical organizational issues within the context (Coghlan & Brannick, 2014, p. xix)

Appreciative inquiry – action research emanating from positive observations (Coghlan & Brannick, 2014, p. xix)

Authentic learning – learning at higher levels of Bloom's taxonomy by employing the tools, practices, and methods utilized by experts in real-world situations; inquiry and problem solving are key elements (Hoge, 2013, p. 363)

Bridge programs – programs designed to reduce the need for developmental education in college by offering classes with an accelerated design; generally in content areas in which specific knowledge or skills are needed to ensure success (WWC Intervention Report, 2015, p. 1)

Cognitive behavior – ability to integrate, research, analyze, and summarize problems and solve them systematically (Lakonpol, 2015, p. 2807)

Collegial teams –groups of educators joined for the purpose of planning and delivering instruction; these teams provide opportunities for increasing teacher knowledge and contribute to greater teacher morale, productivity, and professional self-esteem (Dearman, 2011, p. 6)

Continuity of learning – learning that is not interrupted by extended time away from school; increases student commitment (Jaaman, 2013, p. 81)

Habits of mind- behaviors reliably exhibited at appropriate times (Costa & Kallick, 2008, p. xii)

Independent school – a school that is not dependent upon the government for financial matters and is instead funded by tuition, donations, and endowments. Decisions are generally school-based. (NAIS)

Inquiry – a method of learning that relies upon student engagement, questioning, and seeking understanding (Coghlan & Brannick, 2014, p. xx.)

Instructional design – the practice of creating instructional experiences that make the acquisition of knowledge effective and engaging; understanding which instructional methods are appropriate for helping learners achieve objectives across a range of topics (McIver, 2016, p. 63)

Instructional strategies – instructional activities designed to engage students with planned resources and guidance in order to meet course objectives; purposeful activities to engage learners in acquiring new behaviors or knowledge (Shyyan, 2008, p. 148)

Remediation – the process of providing additional support or instruction to reduce the gap between actual and expected performance; process of leading learners to an awareness and the correction of their errors; intended to correct deficiencies (Ajogbeje, 2012, p. 153)

Standard – a level of quality or attainment; in the context of a school, standards are written and designed as proficiency benchmarks to measure student achievement (Bandeira, 2013, p. 1)

Transformative leadership – a form of leadership in which the leader is accountable for identifying required change, crafting a vision to guide the change process, and implementing the steps required (Shields, 2010, p. 564)

Conclusion

The surveys and interviews with teachers provided insight into the level at which planning and instruction align with the school-based standards and the school's mission.

The instructors' responses provided the perspective of a parent if their children had participated in this summer program. Learning theories support and align with the characteristics of successful summer programs while group theories address the dynamics of collaborative curriculum design teams and development of emerging teacher leaders. Organizational theories focus upon an institution's effectiveness and commitment to excellence. Teachers are more committed to ensuring the success of decisions when they are allowed and encouraged to be a part of this process (York-Barr & Duke, 2004, p. 258). Interview data encouraged continued questioning and analysis of this summer program. This authentic action learning, supported by critical analysis and reflection, may be employed to expand student learning opportunities, initiate and sustain the process of increasing teacher leadership, and firmly situate the summer program within the school's culture (Corley & Thorne, 2006; Costa & Kallick, 2008).

Summer learning experiences planned with intention and aligned with the school-year curriculum and expectations provide the most meaningful enrichment and development of conceptual understandings (ISM, 2015). These mission-driven programs are sustained by the momentum created by engaging course offerings, meaningful instruction, and on-going evaluation. By situating summer programs as the continuum or link between traditional school years, the resulting alignment provides more opportunities for students to explore learning and make discoveries more meaningfully and consistently (ISM, 2015). As a result, the perceived value of summer learning increases.

The following chapter builds upon the theories discussed in this introduction. An extensive review of current, scholarly literature provided relevant historical background information and connected selected theories with the purpose of this study and the

research questions related to summer learning experiences for students, faculty involvement in the design and refinements of the summer program, and how the value of the program can be increased by explicitly communicating its established position within the school's culture.

The methodology of this study is described in Chapter Three. The results from an open-ended survey distributed by an in-house accreditation self-study team to all employees included both quantitative and qualitative data. Respondents were asked to list the three greatest strengths of the summer program and three areas for continuous improvement. The researcher, who was not a member of this self-study team, coded the responses in order to reveal emerging trends. Survey questions, both closed- and open-ended, were sent to teachers who have proposed and/or taught summer classes. These questions sought information regarding currently employed instructional strategies and designs, perceptions of existing teacher leadership opportunities, and evidence of the school's mission within the summer program. In addition, a random sample of teachers who have been instrumental in designing courses were interviewed. These interviews captured their motivation to create new courses, their perceptions as to how their courses have evolved, and their vision for their continued development.

Chapter Four includes the analysis method and results of the qualitative and quantitative data collected for this study. These results were presented as emerging themes, program elements that warrant preservation or minor refinements, and elements or procedures demanding immediate corrective action. Results were summarized through connections to the purpose of this study.

Chapter Five presents an overview of the study and an interpretation of the conclusions and answers to the research questions. Recommendations for future action and further study are followed by the significance of this study.

CHAPTER TWO

LITERATURE REVIEW

Despite the detrimental impact on learning caused by extended time away from school and instruction, a lengthy summer vacation continues as a tradition embraced by our society (Zvoch & Stephens, 2011, p. 650). Educational institutions throughout the nation have considered alternatives to the prevailing, traditional school-year calendar. These options include yearlong school calendars that provide time for more uninterrupted instruction with multi-week breaks at regular intervals and summer programs designed for enrichment or remediation (Cooper, 2003, p. 3).

This review of the literature provides a history of the traditional school-year calendar utilized in the United States, a synthesis of documented research that addresses summer learning loss, characteristics of effective summer learning programs, and a theoretical framework developed from a range of disciplines and levels. Within this framework, individual, group, and organizational theories are applied to student learning, curriculum design, and teacher leadership within mission-driven organizations.

Gaps in the current literature and recommendations for further study are provided. Additional research examines ways in which mission-driven summer programs can increase their value through intentional design to maximize student benefits and the roles teachers play in addressing the critical need to align school year and summer standards, assessments, and activities.

Current literature addresses several designs of summer programs, including remediation, enrichment and academic acceleration (ISM, 2015); single-site programs are often limited to one of these designs and entertain an audience within a narrow age range

or few areas of interest. A significant gap exists in the literature related to school-based programs comprised of multiple designs for a wide span of ages or grade levels and a broad range of interests. Additionally, although literature addresses school year to summer alignment for remedial or bridge programs, it fails to address this connection in enrichment programs.

The value of summer programs is often discounted for multiple reasons. These reasons include preconceived ideas that summer school is intended only for remediation or course recovery, limited designs for specific audiences, summer instruction that is not intentionally aligned with the school-year curriculum or assessments, summer activities that are not well planned, and programs that fail to support the sponsoring organization's mission. Although elements of alignment and mission may exist, the value of the program is diminished if these elements are not explicitly stated.

Purpose of the Study

This study examined the current practices of a summer program offered by a pre-kindergarten through grade twelve independent school located in the southeastern United States. Areas examined include the variety of courses for a range of ages and interests, evidence of instructional design elements, intentional alignment to school-based standards and curriculum, collegial discussions intended to connect and refine the school year and summer instruction, and evidence of the school's mission within the planning, implementation, and evaluation. Data and recommendations from this study shared with school administrators and summer instructors communicate current perceptions and serve as baseline data for future studies.

Already an integral part of this independent school, the summer program addressed in this study can increase in value as its diverse offerings, intentional design, and mission-focus are explicitly stated. This program has experienced constant growth during its 25 years of operation yet an intentional, comprehensive study has never been conducted. The data collected and analyzed are critical in order for future strategic, informed decision making to occur.

The review of scholarly literature within this chapter first presents the history of the traditional school-year calendar of the United States followed by a conceptual framework of individual, group, and organizational theories supported by relevant research connecting these theories to practice. Emerging themes from these theories are related to the study's purpose and research questions.

Reestablishing Summer Learning

The structure of the current school year calendar is a carryover from the societal influences and early history of the United States. A common belief is that this country's agrarian heritage is the major reason our school years are interrupted by lengthy summer vacations. Historian Kenneth Gold (2002) clarifies this misconception by sharing the needs of both rural and urban schools during the 1800s. Rural school schedules were dependent on crop cycles therefore schools were closed in the autumn and spring, not the summer. Urban schools were also in session during the summer but, before air conditioning, those of financial means traveled to cooler regions in June, July, and August to escape the oppressive heat of the cities. As a result, the increased absences prompted the cancellation of school during most of the summer. New York City schools in the mid-1800s had been in session 248 days per year but, with this academic calendar

change, the number of school days was reduced to 180 (Gold as cited in Fairchild, 2012, p. 13). By the 1900s, schools throughout the nation initiated annual standardized testing which prompted the adoption of a more consistent countrywide school year calendar (Cooper, Nye, Charlton, Lindsay & Greathouse, 1996, p. 228). This calendar, with the extended summer break, remains in place today even though research supports the value of uninterrupted educational experiences (Bottorff, 2010; Donovan, 2009).

The typical school year calendar in the United States consists of approximately 175 to 180 days of instruction. This is compared to 240 days in countries such as Japan, Germany, and Israel (Alexander, Entwisle, & Olson, 2007; Bottorff, 2010). Summer vacation in the United States accounts for eight to ten consecutive weeks or forty to fifty days of non-instructional time. When compared to countries with longer school years, students in the United States are attending school only 75% of the time devoted to one year's instruction in other countries. In terms of instructional hours, the average school year in the United States consists of 799 hours, a significant difference when compared to 861 in Finland, 911 in The Netherlands, 928 in Japan, and 1079 in Korea (McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011). The shorter school year of the United States coupled with the absence of intellectual stimulation during the extended summer vacation creates an often-unrecoverable delay in student achievement and ultimately reduces our ability to compete more successfully in the international marketplace (Cooper, Charlton, Valentine & Muhlenbruck, 2000; Rozelle & Mackenzie, 2011; Smink, 2007).

In an attempt to reduce the amount of instructional time lost during summer vacation, districts have proposed and experimented with modified school calendars. Also

referred to as year-round school, one format is based on 45 days of instruction followed by ten days of vacation. Theoretically, the continuity of learning is preserved while families still have the luxury of time for vacation. Although learning loss may be alleviated by a year-round school schedule, this is a drastic change for our society. The change may be educationally beneficial but teachers and parents must be consulted and agree to the modified calendar (Winter, 2005, p. 401).

Until summer is recognized as a critical link between traditional school years and a time during which learning can be continuous, learning loss will continue to plague the academic advancement of those whose summers are a departure from learning.

Summer Learning Loss

The summer break creates lost instructional time. The extended time away from school during the summer creates a negative impact on student learning. The absence of instruction tends to generate the greatest loss in rote skills or traditionally memorized information such as mathematical facts and spelling words. Skills dependent upon procedural knowledge decline at a faster rate than those that are more reliant upon conceptual understanding (Borman, Benson & Overman, 2005; Burgin & Hughes, 2008; McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, Cross, 2011). Cognitively, retention of factual and procedural knowledge requires more consistent practice whereas conceptual understanding requires authentic rehearsal (Cooper, 2003, p. 3).

During the summer, students of all socioeconomic levels tend to regress more in math skills than reading; this may be partially attributed to the predominance of reading over math within typical homes (Cooper, Charlton, Valentine, & Muhlenbruck, 2000, p. 7). This summer loss usually equates to one or more months of reduced knowledge

(Borman, Benson, & Overman, 2005, p. 132). Students from middle and upper socioeconomic levels tend to show growth in overall reading skills while all groups decline in reading comprehension skills (Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996; ERIC Development Team, 2003). Studies from Johns Hopkins University reveal that, although students from different socioeconomic levels tend to learn at similar rates during the school year, summer learning loss is responsible for the measurable and cumulative differences in achievement between the extremes of the socioeconomic spectrum (Donohue & Miller, 2008; Zvoch & Stevens, 2011). It should be noted that fall and summer testing dates are often used by studies to delineate school year and summer learning. This practice, which ultimately truncates one month of learning at both the beginning and end of a school year, overstates summer learning and understates the school year learning (Alexander, Entwisle, & Olson, 2007, p. 168).

Summer learning loss delays the start of each school year's planned instruction as the first days are devoted to re-teaching and reviewing the previous grade's content. The resulting delay in beginning the planned, grade level instruction creates a challenge and unrealistic expectations for teachers who are tasked with ensuring student mastery of their grade's intended yearlong curriculum (Bottorff, 2010, p. 15). Varying degrees of summer learning loss within one class further compounds the instructional challenges.

The lack of summer learning interrupts the establishment of foundational skills therefore, with the passing of each school year, a cumulative deficit increases (McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011). Academically, the greatest loss in literacy occurs in the primary grades; this becomes increasingly evident as students entering grade four are expected to read and comprehend more expository and

informational text. Without the solid establishment of narrative reading strategies, the transition into expository reading becomes difficult (Burgin & Hughes, 2008; Fello, 2010).

Developing social skills and learning to follow classroom routines are integral parts of the learning that occurs in the primary grades. The interruptions caused by extended summer vacations create a regression of social skills and reduced automaticity in following daily routines. Shorter vacations are beneficial in the primary grades as the regression of social skills and routines or "social slippage" is reduced; this phenomenon is evident in districts that have adopted a modified, year-round school schedule (Winter, 2005, p. 406).

The cumulative effect of summer loss is substantial by the end of sixth grade. The frequency of high school failures and the dropout rate have also been linked to the lack of educational summer experiences (Zvoch & Stevens, 2011, p. 651). Those who have experienced summer learning experiences are more likely to be placed on track for college than their counterparts who have not participated in summer learning opportunities.

The summer break creates a discontinuity of learning. Discontinuity of school-based learning experiences in the summer months compromises academic development and limits opportunities for students to extend their knowledge. School-based summer programs can provide the continuity of learning and engaging experiences for students to explore topics of interest and employ skills such as collaboration, creative problem solving, and innovation (Beer, Le Blanc, & Miller, 2008; Chin & Harrington, 2009; Costa

& Kallick, 2008; Erdogan, 2011; Fello, 2010; Hirsch, Berliner-Heyman, Cano, Kimmel, & Carpinelli, 2011; Johri & Olds, 2011; Smink, 2007).

Characteristics of Effective Summer Programs

Researchers from Johns Hopkins University's Center for Summer Learning compiled factors or characteristics critical to the success of summer programs. In regards to instructional approaches to design, accelerated learning is intentional, instructors proactively plan instruction to mitigate summer learning loss, and leaders are dedicated to the positive development of youth. In terms of the overarching program design, empowering leadership, collaborative planning, relevant professional development, and the creation of mutually beneficial community partnerships are critical. A commitment to sustainability is evidenced by continual program evaluation and appropriate responses to these results and feedback (Bell & Carrillo, 2007; Berlin, Dworkin, Eames, Menconi, & Perkins, 2007).

Instructional Design

The mission of the sponsoring school or organization must be honored throughout the planning stages and actual implementation of a summer program. Summer learning experiences should align with school standards and assessments and not be isolated from the curriculum and expectations of the traditional school year (Borman as cited in Cooper, Charlton, Valentine, & Muhlenbruck 2000; Garland & Garland, 2006; McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011; Stake & Mares, 2005; Varney, Janoudi, Aslam, & Graham, 2012; Zvoch & Stevens, 2011). An underlying perception of separation minimizes the importance and value of summer learning experiences and by proactively aligning summer experiences to school year

expectations, the continuity of learning is preserved (Fairchild, McLaughlin, & Brady as cited in McREL International, 2012) and value is apparent.

Instructional design includes appropriate assessments**.** Student performance and program effectiveness are more accurately determined if summer assessments are similar or identical to those utilized during the school year. A summer literacy program utilizing the district's existing assessment procedures provides continuity with the subsequent school year. Comparing the previous year's writing samples with summer artifacts provides tangible evidence needed to assess student performance, validate the effectiveness of the summer program, and inform the following year's teachers (Burgin & Hughes, 2008, p. 57). Reading and writing samples utilized to plan individualized instruction include not only objective feedback but also observed student behaviors. Even though direct measures such as these are extremely informative, few studies utilize this data to evaluate program effectiveness.

Instructional design can focus on supporting development of prerequisite skills. Summer programs may provide the prerequisite skills required for successful performance within a content area. By introducing the principles of science content such as chemistry and appropriate laboratory procedures, students are better prepared for the rigors of courses offered during the subsequent school year (Garland & Garland, 2006, p. 1701). Summer science enrichment classes focused upon the understanding of content, development of skills, and establishment of positive attitudes toward science provide supporting evidence to substantiate the importance of standards alignment with the school year curriculum and expectations (Garland & Garland, 2006; McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011; Stake & Mares, 2005;

Varney, Janoudi, Aslam, & Graham, 2012; Zvoch & Stevens, 2011). Exit surveys completed by students at the end of summer classes often reveal the overall effectiveness of a summer program. One valuable data point is the student perception of a summer class's long-term effectiveness by using his/her own school's expectations as benchmarks (Stake & Mares, 2005).

Effective summer programs not only interface with the school year curriculum but also enhance traditional studies. Interest in theme or content-specific classes such as a summer LEGO robotics camp often inspires students to pursue further studies and careers in engineering. Additionally, as the level of student engagement increases, significant gains in standardized math and science scores become evident (Nugent, Barker, Grandgenett & Adamchuk, 2010, p. 404).

Summer enrichment, although often viewed as a departure from the rigidity of the school year curriculum, provides more sustainable, long-term benefits when connected to the school year expectations and instruction (Varney, Janoudi, Aslam, & Graham, 2012, p. 79). In addition, the engaging nature of summer learning activities creates more relevance for students. As a result, concepts and skills learned during the summer tend to efficiently transfer to the following school year (Smink, 2007, p. 43).

Program Design

At any grade level, student attendance, the quality of instructors and instruction, and the level at which the summer teachers communicate with the previous year's teachers and the following year's teachers impact a program's effectiveness (Zvoch & Stephens, 2011, p. 653). Well-designed summer programs offering quality, intentional instruction by highly trained teachers and utilizing meaningful assessment with

actionable data are able to overcome the obstacles created by inadequate planning, poor instruction, and ineffective teachers (Bottorff, 2010; Fairchild, 2012; Young, Worrell, Gabelko, 2011; Zvoch & Stevens, 2011). Successful summer programs evolve from and are sustained by a common vision centered upon the needs of their immediate audience, the students. Primary program goals should include both short-term and long-term increases in student performance; these performance measures must be shared with the key stakeholders, parents, students, and teachers (McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011) as their participation is critical (Borman as cited in Cooper, Charlton, Valentine, & Muhlenbruck, 2000, p. 122).

Effective program design is influenced by transformative leaders. Elements of transformative leadership connect educational experiences and effectively bring about change in one's context. Transformative leaders are willing to take risks and are able to form critical professional relationships in order to actualize a concrete vision (Shields, 2010, p. 570). Before acting, these leaders analyze and reflect upon available data with the intent to ensure students are successful in mastering the knowledge and understandings within the formal curriculum. Transformative leaders design and implement effective learning opportunities intended to foster the development of contributing citizens. Historic organizational practices and beliefs may be deconstructed and then reconstructed in order to effect deep and equitable change (Shields, 2010, p. 562).

Within the context of the summer program under study, elements of transformative leadership may be evident as a developing, yet shared, vision guides teams of teachers to more intentionally plan summer learning experiences that address student

needs, respond to interests, and are carefully aligned with the school-year standards. Additionally, collaborative planning and more in-depth reflective analysis of data from both the traditional school year and the summer will provide indicators of effectiveness related to past instruction and guidance for future instruction.

Community partnerships are an essential dimension of effective education. Mutually beneficial relationships with neighboring colleges and universities provide valuable teaching experiences for graduate students and quality instruction for school-aged students. These symbiotic relationships allow school districts to offer effective summer programs yielding significantly improved student performance while providing authentic pre-service training for graduate students. Graduate students improve their professional practice while ensuring quality instruction for students who otherwise may not have access to summer learning opportunities (Burgin & Hughes, 2008; Fello, 2010; Hirsch et al., 2011; Newman & Hubner, 2012; Stake & Mares, 2005; Varney, Janoudi, Aslam, & Graham, 2012). "Students and Teachers Achieving Reading Success" (S.T.A.R.S.) was designed to increase student performance while improving their attitudes toward expository reading. Graduate students from Indiana University provided the resources and designed the instructional methods and strategies for the students. Engaging lessons encouraged student attendance that, along with quality instruction, increased the level of reading performance. Students benefitted from the instruction that was provided at no cost to the families and graduate students earned college credit while collaboratively designing and presenting themed, expository units of study (Fello, 2010, p. 23). A University of Florida program was designed to provide practical field experience for graduate students while offering a literacy-based summer program for low

performing elementary-age students. Through these university initiatives, participating elementary students grew academically and the graduate students gained a better understanding of program design, effective instruction, and utilization of assessments for guiding instruction (Burgin & Hughes, 2008, p. 55).

Different academic departments within a single university may provide summer opportunities for school-age students. Graduate students from the University of Alabama's Program of Gifted and Talented partnered with faculty members from the university's College of Engineering to design and offer summer science courses to interested and eligible middle school students. Student teachers and instructors from the Engineering Department presented engaging activities and rigorous instruction throughout the course in order to raise the challenge level of the science content and instruction thereby improving the interns' competency and confidence in teaching accelerated content. Participants were challenged by the presence of an actual engineer in the classroom and hands-on laboratory activities providing authentic experiences. Quantitative and qualitative data confirmed the value of this program; the collaborative partnership between the student interns and faculty members from the College of Engineering created a greater level of challenge for the participating gifted students. The mentoring by the engineers coupled with the knowledge of instructional design and teaching of the graduate students provided a valuable summer experience for the middle school students (Newman & Hubner, 2012, p. 103).

Leadership development through service learning is possible through community partnerships. The collaborative actions of school-based instructors and community leaders create experiences for students to plan and execute authentic service projects.

Multi-summer student participation generates formative data employed to foster the development of student leaders as well as the programming (Bowman, Brandenberger, Mick, & Smedley, 2010, p. 23).

Summer enrichment courses may be designed to raise student interest in careers and civic responsibility. Collaborative planning and co-instruction with college professors, classroom teachers, and community leaders advance the knowledge and understanding of students and classroom teachers. Both students and teachers grow academically through opportunities such as these (Varney, Janoudi, Aslam, & Graham, 2012, p. 81).

Effective summer programming leads to increased engagement. Research in human development reveals that students tend to be more engaged in learning experiences that occur away from traditional school year classes. Summer experiences are generally ungraded and designed for enjoyment and enrichment. According to studies within the neurosciences, there is a direct correlation between fun and learning. As the level of fun increases, the level of learning increases; the opposite is also true. Kohn stated that engaged students are more highly motivated and feel minimal stress that allows information to freely flow through the affective filter of the amygdala. The results are cognition at higher levels, greater connections, and frequent ‘aha’ moments (as cited in Smink, 2007, p. 40).

Theories relevant to the study

A blend of multiple theories provided new insights by including individual theories focused on learning and group or organizational theories to explain work teams and emergent leaders. The interconnectivity between the theories relevant to this study

supported the value of intentional alignment of school year and summer learning. As learning experiences are enriched, teachers are motivated to create new and innovative classes. Reciprocity exists between the learning experiences and innovative course design. Teacher leadership flourishes as course design expands and students benefit. The synergy created at this level situates an effective program within an organization's culture.

Faucet theory serves as a metaphorical term to describe the learning cycle created by summer vacation. During the school year, the faucet is on and students progress academically as expected. Once summer arrives, this faucet of learning is turned off for some and the summer learning loss or slide begins. Regardless of one's socioeconomic level, students who are not academically stimulated over the summer months tend to lose 2.6 months of grade level equivalency in math computation (Donovan, 2009, p. 10). As academics and enrichment opportunities are not as accessible to students in low socioeconomic areas, the instructional faucet is turned off during the summer and the achievement gap between diverse socioeconomic groups increases (Bottorff, 2010; McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011; Donovan, 2009; Zvoch & Stevens, 2011). The creation and availability of quality summer learning experiences are critical to the mitigation of this seasonal learning loss that impacts available instructional time, individual achievement, and long-term school performance.

Situated learning theory describes authentic, situation learning experiences. Successful summer programs address not only skills and course content but also the habits and attitudes utilized by successful students throughout school and future careers. Situated learning theory, derived from the studies of Dewey, Lave, and Wenger,

promotes interaction and collaboration within authentic learning experiences (Johri & Olds, 2011, p. 160). With intentionally limited structure, students engaged in informal learning innovatively solve realistic problems and, through inquiry, begin to generalize and apply prior knowledge to novel situations. This level of engagement encourages students to take responsible risks through greater ownership of their own learning (Costa & Kallick, 2008, pp. 186-187). Experiences such as these, coupled with increased social interaction through cooperative learning are critical for the development of traits such as positive attitudes, dedication to self-learning, and intrinsic motivation that are necessary for success in the workplace (Cooper, Charlton, Valentine, & Muhlenbruck, 2000; Johri & Olds, 2011; Mohr-Schroeder, Miller, Little, Schooler, et al. 2014).

Service learning is a contemporary term for community-based learning experiences. Derived from Dewey's experiential learning theory, service learning supports the importance of the learning process, Lewin's participatory learning, and Kolb's extension of Dewey's original learning theory. Service learning theory facilitates learning by incorporating inquiry and reflection into the fundamental principles of continuous learning, building upon previous experiences, and interaction with one's environment (Giles & Eyler, 1994, p. 79). Lewin's participatory learning theory is evidenced in summer learning opportunities as student interactions increase their ability to concisely share knowledge and experiences leading to greater cognitive development (Missingham, 2013, p. 35). Each of these theories emanated from Kolb's advancement of Dewey's theory in that learning is a process for creating knowledge; experiences with problem solving and decision-making are foundational (Kolb & Kolb, 2015, p. 43).

Service learning provides a utilitarian model for the development of student leaders. As students are immersed in continued service learning, more opportunities for critical decision-making begin to foster a developing sense of ownership and commitment to civic responsibility. Transformative in nature, students strive for equity and social justice through experiences requiring the understanding of complex tasks that ultimately foster intellectual development (Bowman, Brandenberger, Mick, & Smedley, 2010, p. 23).

Instructional philosophies and practices emanating from these theories support the types of learning experiences evidenced within effective summer programs. Successful summer programs address not only skills and course content but also the habits and attitudes utilized by successful students throughout school and future careers. Academically-based summer programs that successfully instill the habits and attitudes critical to ensuring a student's ongoing pursuit of knowledge are characterized by instruction that encourages exploration, inquiry, and discovery (Beer, Le Blanc & Miller, 2008; Chin & Harrington, 2009; Costa & Kallick, 2008; Erdogan, 2011; Fello, 2010; Hirsch et al., 2011; Johri & Olds, 2011; Stake & Mares, 2005). The immersion of students in topics of current interest, areas of potential interests, or community service facilitates the establishment and further development of habits and attitudes that sustain the commitment required for future study, research, and beneficial civic actions.

Group and Organizational Theories

Fullan's classical change theory describes climates in which capacity building is possible. As a shared vision is formalized and authentic ownership develops within teacher teams, a comprehensive plan and framework for on-going improvement are

solidified (Fullan, 2006, pp. 10-11).This theory can be utilized to create and support a climate in which teachers are encouraged to more intentionally align summer classes with the school-year curriculum while being inspired to create innovative classes and incorporate new instructional strategies. The creation and sustenance of such collaborative environments increase the quality of instruction and, ultimately, the academic gains made by the participating students. Attitudes are positively impacted, innovation thrives, and students benefit from these outcomes.

The creation and presentation of these experiences are greater and more meaningful if led by teachers responsible for course designs. Teacher ownership in planning and instruction is as important as students' ownership of their learning (Lotter, Yow & Peters, 2014, p. 10). Fullan's classical change theory (2006) supports the creation and sustenance of building capacity of teacher teams within environments that liberate teachers to design and implement innovative courses. Elements of a learning organization become more evident as teachers continually utilize instructional elements that adapt to the needs of the students; continuous experimentation and feedback become part of the process (Senge as cited in Gallo, 2006, p. 767).

The design and implementation of a summer program present unique opportunities for teacher leadership whether one is creating theme-based cross-curricular classes, tailoring existing curriculum to more closely meet the immediate and long-term needs of students, or aligning instruction to the school's standards. Teachers understand the needs of their students and administration must encourage and support teachers interested in creating and developing summer classes that develop the skills, refine the practices, and establish the habits for immediate and long-term success. Without these

skills and behaviors, students will not effectively meet future course expectations (Wenk, 2005, p. 45).

Experienced classroom teachers know their grade level's curriculum and the increased expectations of the subsequent grade levels. This knowledge, when coupled with their understanding of each student's strengths and weaknesses, provides a foundation for a summer class. Encouragement and support from administration are critical.

Action research and data collection conducted during the school year provide justification and evidence needed by the administration to approve teacher-designed summer courses. The data collected, along with the knowledge of each grade's expectations, can be employed to ensure the alignment of the summer curriculum with the school year instruction and standards (Bell & Carrillo, 2007, p. 47). Data collected during the summer may be utilized to guide instruction during the summer and the following school year as well as determine the effectiveness of the summer class (Burgin & Hughes, 2008, p. 62). Merging school year and summer data provides teachers with a more seamless, comprehensive report of student growth. The continuity of data collected provides a robust picture of individual student performance as well as guidance for the upcoming school year. As more students remain academically active during the summer months, skill review becomes less intrusive on the next year's instructional time. Students attending summer classes benefit from continuous, uninterrupted learning. Teachers develop their professional practice as they are involved in instructional design and data analysis. The emergent teacher leadership skills build the capacity of the school

throughout the year and collaborative planning allows each teacher's voice to be heard while faculty members feel supported (Bell & Carrillo, 2007, p. 47).

As summer learning opportunities continue to evolve, it is critical for classroom teachers to be actively involved in the design, implementation, and data analysis of both remedial and enrichment classes. Their understanding of classroom expectations, grade level and subject area curriculum, along with the knowledge of the habits students need in order to achieve success, provide the foundation and structure for class development. Extensive research in this area is not available; course development by master teachers and analysis with further study by teacher researchers will contribute significant knowledge in this area.

Evidence of Individual Learning Theories

Authentic learning is a hallmark of effective summer enrichment. Science topics are common themes for summer enrichment opportunities. Students motivated by curiosity and discovery are intrigued by nature's power (Costa & Kallick, 2008, p. 186) therefore, themed science classes are well attended. Authentic learning experiences promote the development of more extensive content knowledge coupled with a greater depth of conceptual and theoretical understanding. Women in Engineering and Technology, (FEMME), is sponsored each summer by the Center for Pre-College Programs at New Jersey Institute of Technology. Participants gain a deeper understanding of conceptual understandings in science and engineering-related careers through classroom instruction, laboratory experiments, and field trips. Research shows that girls who participate in programs such as this develop more positive attitudes and

greater awareness of the opportunities available in the field of engineering (Hirsch et al., 2011, p. 1306).

The goals established by Louisiana Tech's Explorers Camp are intended to inform low socioeconomic students about college opportunities. While attending a summer learning camp, students participate in authentic and engaging learning experiences within select content areas. Increasing subject knowledge, developing career awareness and aspirations, and planning for college admissions are the goals of this on-campus residential summer program (Beer, Le Blanc, & Miller, 2008, p. 931).

University of Alabama's Summer Enrichment Workshop illustrates the effectiveness of authentic learning experiences. Middle school students identified as gifted and talented participate in three-week workshops designed to expand each student's scientific literacy and worldview of science while providing opportunities to engage in authentic scientific inquiry and research.

Science instruction for elementary students during the school year is often limited to textbooks, worksheets, and simplistic experiments. As a result, attitudes of students toward science may diminish and, by middle school, interests have waned due to the contrived instruction that has been presented. The authenticity of opportunities such as the Summer Enrichment Workshop captures and rekindles student interest in science (Newman & Hubner, 2012, p. 103).

Although standards for science classes should align with those of the traditional school year, the presentation such as that of the summer workshop provides the innovative instruction that is often sacrificed during the school year. This is true in Michigan State University's Technology-Assisted Science, Engineering, and

Mathematics (TASEM) summer program which is based upon the premise that problems related to math and science are not always well-defined and students must confront authentic questions and problems that do not fit a prescribed mold. TASEM offers authentic scenarios incorporating inquiry and mentoring by highly trained teachers. The authenticity of each learning experience increases student interest in science while extending content and process knowledge (Varney, Janoudi, Aslam, & Graham, 2012, p. 78).

The mastery of skills and development of conceptual understandings are more likely to occur when students are actively engaged in authentic, experiential learning. Washington DC's Higher Achievement is an example of a summer program that builds upon foundational skills and conceptual understanding to foster curiosity and discovery, individual qualities critical to future success (Smink, 2007, p. 44).

Authentic learning experiences themselves are valuable and effective in establishing deeper conceptual understandings, providing relevance, and modeling potential careers. The lifelong impact of authentic learning experiences is enhanced when students are immersed in specific topics.

Immersion is a hallmark of effective summer learning. Summer is a time during which rigorous content can be presented through engaging activities (Smink, 2007, p. 42). A unique quality of summer enrichment is that students can become totally immersed in topics of interest. InnerSpark, a residential program for high school students, allows artistically talented students representing a broad range of socioeconomic and ethnic backgrounds to participate in an intensive training program for the arts. Areas of focus within this highly selective program include visual arts, animation, creative writing,

dance, filmmaking, music, and theatre. Students are immersed in their medium within an environment that encourages creativity and the pursuit of one's artistic passions. This immersion allows each student to reach the creative flow described by Csikszentmihalyi (1990). Teachers, visiting artists, and fellow students provide constant support and feedback. Positive mentoring and meaningful feedback are critical to sustaining the motivation needed to further develop a student's artistic and creative talents (Chin & Harrington, 2009, p. 17).

Immersion within the field of science encourages the development of not only content knowledge, but also a more extensive and reflective understanding of nature's delicate balance. Mehmet Erdogan (2011) described the greater depth of nature education as compared to environmental education. Nature education includes a heightened awareness and sensitivity to nature in its entirety; it is not limited to environmental literacy and stewardship. Participation in this type of course allows students to critically observe cause and effect relationships; hands-on activities facilitate each student's ability to integrate theory with practice. Quantitative data reveal that participants in this type of program increase their scientific knowledge and develop a more thoughtful and sensitive attitude toward nature.

Younger students should also have the advantages gleaned through immersion within a specified area or science topic. Out-of-door science camps provide opportunities for learning, exploration, and discovery that often do not occur within the traditional school year. Engagement through hands-on experimentation, interactions with living organisms, and developing relevant research questions are several of the benefits resulting from immersion within this content area (Scott & Matthews, 2012, p. 61).

Preparation for a high school chemistry class, participation in a summer engineering enrichment class, learning with university mentors, or creating within the Technology-Assisted Science, Engineering, and Mathematics (TASEM) program are several previously cited summer opportunities in which students may become immersed in topics of interest (Garland & Garland, 2006; Hirsch et al., 2011; Newman & Hubner, 2012; Varney, Janoudi, Aslam, & Graham, 2012).

Opportunities for students to view and learn from their peers as exemplars are evident in immersion-based learning (Bowman, Brandenberger, Mick, & Smedley, 2010, p. 28).The focus created by immersion generates more extensive and complex understandings of concepts and theories. The creation of connections is more likely as a single focus directs reflection and emergent questions. These questions may be easily answered and, if not, critical thinking and problem solving skills must be employed.

As students are immersed in content areas of interest, the opportunities for critical thinking and problem solving become more frequent. Summer learning experiences provide opportunities that differ from a traditional school setting. The misalignment that exists between the content learned and processes utilized in a traditional classroom and what students need to know for future success can be reduced within summer learning opportunities (Akcaoglu, 2014, p. 584). Real world problems are presented; extended, uninterrupted time allows for research, collaboration, reflection, and intensive utilization of critical thinking skills (Costa & Kallick, 2008; Smink, 2007). Students are encouraged to persevere and think about their own thinking (Akcaoglu, 2014, p. 584).

Critical dialogue with primary-aged students opens the door to conversations beyond sharing toys and taking turns; it teaches them how to read the world and create

the meaning of social justice. Written from events and observations within a summer program, verbal role-playing is an effective strategy to help students view and understand multiple perspectives. Continuing questions guide critical inquiry so that our youngest children begin to think in more complex ways (Kuby, 2011, p. 36).

Critical thinking and problem solving are encouraged within highly effective summer programs. In preparation for high school at an independent all-girls school in California, students practice problem solving during conferences with their instructors. This one-on-one dialogue allows the students to take reasonable academic risks without fear of ridicule by peers; the instructors are able to more accurately determine each student's level of understanding and encourage yet a deeper level of understanding by posing more tailored questions designed to promote critical thinking and effective problem solving strategies (Garland & Garland, 2006, p. 1699).

Summer science programs for gifted and talented students provide challenging scenarios designed to generate careful reflection and supporting research, ultimately resulting in opportunities for critical thinking and problem solving independently or collaboratively with peers. The Technology-Assisted Science, Engineering, and Mathematics (TASEM) program encourages collaborative critical thinking and problem solving with peers as well as mentors (Varney, Janoudi, Aslam, & Graham, 2012, p. 79).

Summer enrichment programs, although not without intentional structure and timeframes, capitalize on the benefits gained from smaller classes and extended schedules; students are able to engage in reflection, think flexibly, form connections, and make inferences leading to meaningful critical thinking and problem solving (Costa & Kallick, 2008, pp. 21-22). Problem solving experiences can be situated within the

creation of game designs; these challenges, resulting in relevant artifacts, encourage students to employ critical processes required to solve problem similar to what they will encounter throughout life. These processes include system analysis and design, decision-making, and troubleshooting (Akcaoglu, 2014, pp. 585-586).

Exemplar summer programs provide learning opportunities that are not easily delivered within most traditional school year schedules. Authentic experiences within the sciences create engaging activities that allow students to develop a greater depth of understanding. The authenticity of the experiences creates a stronger connection between what a student knows and what a student wants to discover. Students are willing to take responsible risks and remain receptive to continuous learning (Costa & Kallick 2008, pp. 37-38). Learning is no longer limited to memorizing isolated facts or procedures. Immersion within an area of interest minimizes or eliminates the distractions that often delay or prevent the formation of meaningful connections between key concepts and theories or the creation of a unique work of art. The formation and retention of complex concepts and ideas require persistence and dedication to process (Costa & Kallick, 2008, p. 18). Students need time to organize their current knowledge and understandings, make connections between the related items, and then utilize this information to advance their critical thinking and refine their problem solving skills. Collectively, this is a time-consuming process and oftentimes the traditional school schedule does not provide the time needed for one to thoroughly work through this process. Summer programs, however, allow for the time and guidance required to maximize one's learning. Summer experiences promote creative and productive thinking, enhance motivation, and establish self-confidence that has lifelong implications (Hany & Grosch, 2007, p. 523).

Lifelong implications of individual enrichment

Stemming learning loss and reducing the likelihood of persistent academic deficits is, in itself, a positive outcome of summer enrichment programs. One's lifelong success may be positively impacted as the implications of summer learning opportunities extend beyond academics and into enduring attitudes (Donohue & Miller, 2008). Johns Hopkins' Beginning School Study revealed that twenty-two year olds who did not have earlier summer learning opportunities were more likely to not complete high school or, if accepted to college, not complete the requirements of a four-year degree (Donohue & Miller, 2008; McCombs, Augustine, Schwartz, Bodilly, McInnis, Lichter, & Cross, 2011). The lifelong implications of summer learning loss are real.

Conversely, exposure to and participation in summer enrichment may set a student on a trajectory to opportunities and careers previously unimagined. Louisiana Technological University's GEAR UP program was designed to develop educational and career aspirations via its leadership component. By increasing student awareness regarding college planning, participants are in a more favorable position for college acceptance and graduation (Beer, Le Blanc, & Miller, 2008, p. 931). Peer critiques are a unique feature of California's Innerspark. High school students participating in these critiques are better prepared for similar experiences in college art classes (Chin & Harrington, 2009, p. 17). Although not strongly substantiated, Erdogan's (2011) nature education program was designed to enhance each student's understandings and establish responsible lifelong attitudes and behaviors toward one's environment.

A summer program for gifted students in Germany was designed to not only enhance each student's knowledge but also develop his/her personality and establish an

enduring network of peers. Participants were surveyed ten years later in order to determine if they felt the earlier establishment of self-confidence and self-efficacy had impacted their professional achievement and relationships. A majority of the respondents stated that this summer enrichment experience had positively impacted their overall educational achievement, their research and productivity, as well as their life achievements (Hany & Grosch, 2007, p. 521).

Effective summer programs recognize the link between academic achievement and youth development (Bell & Carrillo, 2007, p. 46). Students search for a sense of purpose and opportunities for leadership. Athletic camps are not limited to the development of physical strength, agility, and strategic decisions related to a particular sport; effective leadership training may be an unexpected benefit. Developing empowerment enriches team dynamics intended to support the group (Berlin, Dworkin, Eames, Menconi, & Perkins, 2007, p. 102). The resulting attitudes and habits of effective leaders are transferable into contexts beyond athletics.

Transformative learning experiences such as those offered through Concordia Language Villages provide the context and structures for students to listen with empathy and serve others (Costa & Kallick, 2008, pp. 20-21). Throughout this process, students discover their personal talents and realize the positive impact the employment of these talents has upon others. Situated learning theory supports the experiential learning that leads to a positive identity, increases social awareness, and employs critical thinking; the end result is sustained independence and effective leadership skills (Dahl, 2009, p. 233).

Summer learning experiences provide the benefit of longer periods of time in which students can be immersed in more specific and specialized topics. Collaboration

and social interaction enrich learning as students become more actively engaged by constructing meaning. Their increased ownership is expanded through the intrinsic motivation that drives continued interest and facilitates the transfer of knowledge to novel situations. A growth mindset is able to prevail over a fixed mindset; instead of focusing solely on grades, students pursue their passion for topics of interest (Christenson et al., 2008; Dweck, 2006).

Group Theories and Teacher Leadership

Teacher leadership is essential to summer program development. As summer programs provide innovative learning experiences for students, the same opportunities are available to educators. Successful design and implementation of summer programs depend upon teacher input. Fullan's classical change theory describes contexts in which innovation is encouraged and celebrated. Communities of practice provide a context in which teachers who possess similar interests in instructional design can share their resources and ideas. With the development of summer learning experiences as the focus, members impart relevant knowledge and eventually, the group identifies leaders as those who have added value to the community and its purpose. Although leaders may emerge, the role of opportunity tends to be shared in varying degrees with all members (Printy, 2008, p. 193). Social learning theory supports the mutually held purpose of designing curriculum for summer learning (Printy, 2008 p. 202). Teacher knowledge and awareness of student needs guide members of the community in the design of relevant activities.

Transformative leadership was evidenced in the design of a Dover, New Hampshire middle school summer program. Working within a short window of time, a long-standing team of teachers created a cross-curricular program that honored the

mission of the school and utilized community resources to actively engage students in meaningful, relevant learning experiences. The teachers "transformed the status quo by developing and implementing a new vision for summer school and creating a new standard for academic integration, teacher leadership, and community engagement in the middle school" (Kelleher, 2003, p. 22). Individual student goals were based on existing data and summer achievements were shared with the next year's teachers.

The impact of collaborative environments is not limited to student learning as teachers, many of whom are emergent leaders, flourish as instructional designers when tasked with work that can transform an existing structure. High standards and expectations are preserved, yet learning experiences are given life and teacher leaders emerge. Developing collegial groups engage in on-going analysis and evaluation of student progress and program effectiveness. These discoveries coupled with action research support intentional planning and assessments that more accurately align with the school year curriculum and expectations.

Organizational Theories and Communicated Value

Strategic planning is critical for a summer program's value to be recognized by students and teachers. Although a single approved model for summer programs does not exist, it remains imperative that the designers, instructors, and leaders are dedicated to a quality product that meets the needs of students and their families. As the sponsoring organization's mission is honored and a vision is established, the explicit communication of these elements increases the value of the program (Bell & Carrillo, 2007, p. 48).

The profile of our society is changing as more parents enter the workforce. Summer programs should not be viewed as simply childcare but rather beneficial,

engaging learning opportunities. Organizations such as Summer Term Education Program for Upward Performance (STEP UP) are instrumental in reforming summer learning as a national priority (Smink, 2007, p. 38). Equal access to summer learning experiences can reduce the increasing gap that forms between the achievement levels of students from lower socioeconomic levels that historically have been unable to attend and benefit from the summer learning experiences and by those of higher socioeconomic means who are able to participate in quality programs. The successes of such summer programs increase their visibility within the community leading to greater acceptance, participation, and support.

Conclusion and Further Study

This literature review has stated the rationale for quality summer learning opportunities with a focus on topic-related enrichment. It is critical that, regardless of the program's vision and intent, all instruction and assessment must be purposeful. Innovative instruction and assessments must align with the school year curriculum and provide opportunities for critical thinking and problem solving. Themed-courses should be designed so that the benefits of immersion are recognized.

The link between academic achievement and youth development fosters greater motivation for students to learn and creates a heightened sense of belonging (Bell & Carrillo, 2007, p. 46). Academically-based summer programs that successfully instill the habits and attitudes critical to ensuring a student's ongoing pursuit of knowledge are characterized by instruction that encourages exploration, inquiry, and discovery (Beer, Le Blanc & Miller, 2008; Chin & Harrington, 2009; Erdogan, 2011; Fello, 2010; Hirsch et al., 2011; Johri & Olds, 2011; Stake & Mares, 2005). The immersion of students into

topics of current interest or areas of interests yet to develop facilitates the establishment and further development of habits and attitudes that sustain the commitment and persistence required for further study and research (Costa & Kallick 2008, pp. 18-19). Focused study of science topics promotes the development of skills such as observation, collaboration, communication, and technical writing. As students connect concepts to their own contexts, the increased personal relevance creates greater interest and motivation; the pursuit of further learning and understanding is initiated (Yull, 2008, p. 61).

Well-planned instructional designs effectively promote the acquisition and sustainability of greater content knowledge needed to develop self-confidence and inspire a student's desire to pursue advanced studies. Designs that intentionally encourage active student participation create contexts in which collaboration, critical thinking, problem solving, responsible risk-taking, and developing leadership skills are evident. Programs designed for specialized audiences allow students to discover, appreciate, and cultivate lasting relationships with others who possess similar talents and interests. Connections such as these often provide the avenues for more advanced topic-related studies (Beer, Le Blanc & Miller, 2008; Fello, 2010; Hirsch et al., 2011; Kuby, 2011; Newman & Hubner, 2012; Varney, Janoudi, Aslam, & Graham, 2012; Young, Worrell & Gabelko, 2011).

Teachers, whether full-time classroom teachers or graduate students, are instrumental in the development and evaluation of summer learning experiences. They are important assets for designing, implementing, and evaluating summer learning opportunities. Those interested and passionate about providing highly effective and engaging summer classes are able to employ their leadership skills to design, promote,

and teach new course offerings. As researchers, teachers are able to design studies, gather quantitative and qualitative data, and analyze results that can be utilized to guide instruction during the summer and subsequent school year. The data collected can also be utilized to evaluate the effectiveness of summer classes (Burgin & Hughes, 2008; Fello, 2010; Hirsch et al., 2011; Newman & Hubner, 2012). University students improve their professional practice through collaboration with peers, classroom teachers, and university instructors. Summer programs provide opportunities to apply theoretical practices in authentic contexts. Personal reflections emanating from student discussions provoke ideas for leading future discussions with students and colleagues. Teachers acutely aware of students' academic and behavioral needs become leaders when given the freedom to take responsible risks and create a tailored curriculum that addresses standards as well as the lifelong habits and attitudes that impact future student success (Costa & Kallick, 2008, p. 59).

Well-designed summer programs offer unique opportunities for both students and teachers. The lifelong implications of developmentally appropriate skill advancement and content mastery supported by positive academic attitudes of self-confidence and an awareness of research and career opportunities are examples of the benefits gleaned from quality summer enrichment opportunities. Although the advantages are supported by current research, continued studies are needed to validate the short-term and long-term gains that thereby create a prevailing mindset that embraces aggressive development and widespread availability of educationally productive summer enrichment opportunities.

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine an established summer program sponsored by a pre-kindergarten through grade twelve independent school. Within current literature, a gap exists in the study of mission-driven, school-based summer programs designed for a wide-range of ages and interests that offer enrichment courses intentionally aligned to the expectations and standards of the site's traditional school year.

Research Questions

How do theory-based instructional designs effectively support the mission of the school by promoting the acquisition of greater content knowledge and development of attitudes that inspire and sustain a student's desire to embrace learning through a wide-variety of summer opportunities?

What structures, supports, and incentives should the school have in place to foster the development and build the capacity of collegial teams committed to the design and analysis of a summer curriculum aligned with the school year?

How can explicit communication regarding the variety of classes, intentional alignment of the traditional school year with summer, and commitment to the school's mission increase the perceived and actual value of summer learning and more powerfully situate this program into the culture of the school?

This chapter includes the rationale for the predominantly qualitative research that was enriched by quantitative data analysis. The setting of the study can be more accurately described by including the demographics of the school-wide student body,

accomplishments of a recent graduating class, and faculty information. A history of the summer program studied includes an overview of typical classes offered each year and a brief summary of recent enrollment and student data as well as financial figures. After the discussion of the researcher's accessibility to this context, the participants and sampling strategy are described. The data section summarizes the information needed to answer the research questions, the data collection methods including survey and interview questions, and data analysis with interpretation. Participant rights, ethical considerations, trustworthiness, and potential limitations and delimitations precede the chapter summary.

The methodology employed a mixed model approach with an emphasis on qualitative data. An accreditation self-study committee distributed and collected the results of an all-employee survey designed to capture commendations of and recommendations for the program. The annual call for summer class proposals, sent electronically to all employees and adjunct instructors, was followed by a survey intended to further inform this study. The researcher conducted interviews with teachers who have designed and refined classes. Finally, historic information related to attendance figures and classes attended provided quantitative data. The blend of qualitative and quantitative data provided a more robust understanding of this summer program.

Setting

This study examined the summer program offered by a non-residential, admission-based pre-kindergarten through twelfth grade independent day school located in the southeastern United States. During the school year, more than 1,940 students matriculate on the 42-acre lakefront campus. Founded in 1970, this school attracts a diverse student population from the metropolitan area and surrounding counties. The

students who embrace and model the culture personify and enrich this school's context and, since students did not directly participating in this study, the researcher is included their information in the setting portion of this chapter.

At the time the study was conducted, 790 students were in pre-kindergarten through sixth grade, 353 in seventh and eighth grades, and 784 in grades nine through twelve. 71.92% were White/Caucasian, 6.46% Asian/American, 6.46% Indian, 5.89% Hispanic/Latina, 4.29% Black/African-American, 3.98% Multiracial, .21% Native American, .10% Unclassified, and .67% other. All prospective students must meet the established admission criteria. Children applying for entrance to pre-kindergarten through fourth grade complete a standardized admissions test; applicants for grades five through 12 complete the Independent School Entrance Examination (ISEE). Interviews are required for students applying to grades nine through twelve.

The 2015-2016 school year tuition fees were: pre-kindergarten $11,000, kindergarten $12,500, grades one through five $15,500, grade six $17,500 and grades seven through twelve $19,000.

Students participate in exceptional programs intended to cultivate their intellect and character. In 2013-2014, this school had eight National Merit Finalists, nine National Merit Semifinalists, 18 Commended Scholars, one National Achievement Scholar, four National Hispanic Scholars, 63 AP Scholars, 42 AP Scholars with Honors, 100 AP Scholars with Distinction, and 27 National AP Scholars. The 2014 graduating class of 194 students completed 31,751 community service hours and was awarded a total of $10,322,100 in college scholarships. During the same year, students at this school

completed 1.033 Advanced Placement exams in 25 subjects. 59% of the scores were four or five and 83% of the scores were three or above.

Since introduced in 1992, this summer program has offered a wide-range of opportunities in academics, enrichment, and athletics for students entering pre-kindergarten through grade 12. These summer learning opportunities align with the school's mission statement, vision, and curriculum by cultivating the intellect and character of every student. Each summer, approximately 1000 students participate in the program. 90% of the summer participants attend this school during the traditional year.

Students pursue topics of special interest that may or may not be presented during the school year; a majority of the classes align with the school-based standards and instructional practices. Classes that do not explicitly align to the standards are intended for entertainment; expectations for appropriate social behaviors remain constant across all summer opportunities. Summer classes for elementary or Lower School students include academic enrichment in math, science, technology, and grade level introductions. Additional offerings for this age group include art, creative writing, music, and themed-classes. Middle School students have the opportunity to complete a required semester of *Speech* or participate in weeklong classes such as math enrichment and leadership. Upper School students may complete semester credits in courses including *Advanced Composition*, *Humanities*, *Speech*, *Personal Fitness*, *Marine and Coastal Science*, *Robotics and Engineering Research and Development*, and *Medicine and Biotechnology Research*. Three online classes include *Advanced Composition*, *Introduction to Computer Programming*, and *Personal Finance*. Students of all ages are also able to participate in

weeklong specialized, age-appropriate athletic camps. With the exception of two-week and three-week credit courses, classes are one-week in length.

During the summer of 2015, 996 students attended the summer program; individual course registrations exceeded 1,700. 90% of these students attended the school during the previous and/or upcoming school year. 280 students attending during this summer were entering the primary grades, pre-kindergarten through grade three; 224 were intermediate students entering grades four through six; 122 were Middle School students entering grade seven or eight; and 270 were entering Upper School, grades nine through twelve. Upper school students earned 266 semester credits. Collectively, students attended nearly 1750 classes.

Classes ranged in price from $170 for half-day, one-week enrichment classes to $2,350 for a three-week, semester credit course that included travel and expenses to a research facility in the Bahamas for one of these weeks.

This setting was easily accessed by the researcher, one of the school's full-time administrators, whose responsibilities include the Lower School's curriculum and instruction as well as leadership and management of the summer program under examination. The letter to the school's president seeking approval to conduct this study is located in Appendix A; his reply is located in Appendix B.

Participants/Sample

Two hundred-two teachers form the full-time school-wide faculty, including 98 with master's degrees, four with specialist degrees, and six with doctorates. Over 60 of the 202 faculty members have earned their gifted endorsement. The school is accredited by the Southern Association of Colleges and Schools (SACS) and the Florida Council of Independent Schools (FCIS). More than 120 colleges and universities visit this campus annually to recruit students.

As a single case study, the sampling was bounded to the one site under study (Creswell, 2013, p. 155). Participants of this study included employees of the independent school as well as adjunct instructors who teach during the summer. Some of the full-time employees may not choose to teach during the summer. In October 2015, all full-time employees completed an anonymous online survey for the March 2016 accreditation report. The second survey included participants who represented the entire population of teachers currently employed by the school and who have taught classes within this summer program. The sampling method was purposeful in that these participants were chosen to ensure an information-rich study; their experiences provided the information needed to answer the research questions (Creswell, 2013, p. 155). Since all participants in this group have experienced the summer phenomena either through the planning process or teaching, criterion sampling was employed. This type of sampling required that all participants met the same criterion, in this case, having planned a class or taught in this program; the result was quality assurance (Creswell, 2013, p. 158).

Data

The researcher selected a case study as the format for the examination of the summer program; case studies are intended to examine programs within organizations (Creswell, 2013, pp. 148-149). Both qualitative and quantitative research methods were utilized to examine this summer program as this blend provided a more comprehensive understanding of the program (Creswell, 2012, p. 22). Qualitative methods were employed to gain an understanding of how people within this context perceive their experiences (Merriam, 2009, p. 5). The study sought to describe, not quantify, the phenomena that occur naturally (Merriam, 2009, p. 13). The study was naturalistic in that it occurred in an authentic setting and the researcher did not control or influence what was being studied (Merriam, 2009, p. 7). Quantitative data gathered through surveys captured the trends of current attitudes and practices (Creswell, 2012, p. 376); demographic and historical data added richness to the description of the program (Creswell, 2012; Merriam, 2009). Collectively, the research design amplified the voices of the participating teachers (Cooper, 2014) and will inform future decisions.

The plan for conducting this study included both sequential and concurrent collection of varied forms of data including surveys, interviews, and historic performance figures. Single surveys gathered qualitative and quantitative data simultaneously; follow-up surveys and interviews added the sequential element (Creswell, 2012, p 22). Framed as an intrinsic case study, the multiple forms of qualitative information were analyzed and interpreted to describe the summer program. Quantitative data were used to more accurately describe the historic performance and growth of the program.

In order for the data to answer the research questions, five standards established by Howe and Eisenhardt (1990 as cited in Creswell, 2012, p. 255) were applied. The research questions guided the data gathering and analysis. These questions addressed instructional designs and desired outcomes that support the school's mission and structures required to foster the development of collegial teams to design courses and intentionally align summer courses with the traditional school year. The researcher gathered perceptions of the participants in order to understand how they viewed learning theories that foster student attitudes, which structures they believed support collegial planning, and their ideas as to how the program's perceived and actual value could be increased. Data analysis was technically sound and the researcher's assumptions explicitly stated; the study is worthy and has value for informing and improving the current professional practices. These standards and their relevance to this study will be addressed specifically within this chapter.

Data collection occurred in an established educational setting. The surveys for faculty members and summer instructors were completed online via Google Forms. This platform allowed the identity of subjects to remain anonymous and therefore protected.

Quantitative and qualitative data were gathered through online surveys and interviews. A cross-sectional survey was utilized to examine current attitudes, beliefs, and practices (Creswell, 2012, p. 377). Selected colleagues of the researcher reviewed all questions and, when provided, responses to ensure clarity and respect for the respondent.

As 2015-2016 marked this institution's ten-year accreditation visit, a school-based accreditation self-study team surveyed all employees in order to gather information for the March 2016 visit. The four survey questions addressing the summer program were:

1. Have you ever offered a summer course at (name of school)?
    a. If you offered a course for credit, what have you offered?
    b. If you offered a course for enrichment, what have you offered?
2. Please list the three greatest strengths of our summer program.
3. Please list three areas for the continuous improvement of our summer programs.

The researcher was not a member of this self-study group so data collected were without bias.

A formal, online call for summer class proposals was sent to all teachers during the first weeks of November 2015. A Google Form captured information regarding proposed classes, course objectives, anticipated expenses, and the weeks during which the teachers would be available to teach. The teachers who did not wish to teach indicated this decision on a separate Google Form.

Those who have taught or have proposed summer courses were asked to complete an anonymous survey including questions related to which school-based standards are addressed in their summer classes as well as evidence of the school's mission and continuity with the traditional school-year curriculum. The notice of forthcoming survey is located in Appendix C. The survey questions are located in Appendix D.

Teachers were informed that portions of their responses would be used in a study examining the current state of the summer program. The purpose of this study was included in the opening of the survey.

Interviews with select teachers were conducted in order to gain an understanding of what motivates teachers to create new course offerings. The invitation to participate in an interview is located in Appendix E. The interview questions were designed to generate responses with great detail and encourage unplanned, spontaneous follow-up questions (Creswell, 2012, p. 384). The six types of questions recommended for interviews include experience/behavior, opinion/values, feeling, knowledge, sensory, and background/demographic (Merriam, 2009, p. 96). Each type of question is represented in the list of interview questions located in Appendix F.

Collection began upon the final approval of this study. Data gathered from closed-ended questions were organized in an Excel spreadsheet in order to create tables to facilitate analysis and display findings. Responses to open-ended questions were coded according to emerging themes by employing qualitative methods of data organization and analysis. Coding included characteristics of individual learning theory and teacher responses indicating his/her desire to be more actively involved in course design and teacher leadership actions.

Data analysis

The purpose of this study was to examine an established school-based summer program; the results of the data analysis are intended to be useful to the key decision-makers for this summer program. As both qualitative and quantitative data were gathered and compared, statistical trends could be substantiated (Creswell, 2012, p. 551). The

procedures employed included tabulation of responses to closed-ended questions, coding responses to open-ended questions, completion of a descriptive analysis of the survey items, checking for bias, and responding to the pre-established and emerging descriptive questions.

Demographic data for the entire school year were utilized to describe the school, as 90% of the students attending the summer program are full-time students during the school year. The data were used to describe the students who participate in the summer program. The extended history of the program provided data describing the groups (grades) of students enrolled, teachers who have taught, and courses offered. By organizing this data in tables and charts, the patterns evidenced add richness to the study in terms of the program's development and evolution.

Descriptive statistics were employed to determine measures of central tendency.

The researcher transcribed the interview conversations. During the initial reading of the survey and responses, the researcher made marginal notes for common comments or intriguing responses.

Coding by aggregating survey and interview data into categories allowed the researcher to compile rich descriptions of the content by recognizing emerging themes and interpreting teacher perceptions (Creswell, 2013, p. 184).

The researcher read through the surveys and noted common responses. Responses to each of the open-ended questions were listed in a chart; duplicate responses were tallied. The data were then coded according to recurring statements and responses. As themes began to emerge, similar pieces of information were regrouped and overlaps were noted. Similar items were recoded. In vivo codes were utilized for exact words of any

participants allowing for more robust analysis (Creswell, 2013, p. 185). The information was represented in a table format.

Greater, more robust understandings of this program resulted as multiple levels of analysis including demographics, perceptions, processes, and student learning were employed (Bernhardt, 2004, p. 22). By analyzing the intersections of the different levels of data, trends began to emerge, more questions arose, and ideas for program refinement became evident.

Participant Rights

In terms of IRB review, this study was exempt. Approval from the IRB board was granted December 8, 2015. The letter of approval is found in Appendix G. Research, as defined by federal regulations at 45 CFR (Protection of Human Subjects, 2009), was conducted as the examination of a program that yielded results for inclusion in the current body of knowledge. Had the sole purpose of this study been intended for program refinement, this study would not be considered research. The survey and interview procedures did not place the subjects at risk of damage to employability. The survey and interview questions were designed to seek general information; the information shared was neither private nor incriminating. Any existing data such as the program's performance history cannot be linked to any individuals (Belmont Report, 1979).

Federal regulation 45 CFR 46.102 defines a human subjects as a "living individual about whom an investigator conducting research obtains data through interaction with the individual." Interactions include online surveys even though they may not ask for identifying information. Respect for participants was honored. The first survey conducted by the accreditation self-study team employed a collection method that

did not record identifiers. In terms of the interviews, this information was shared in a trusted relationship and therefore not communicated to others. Consent forms explained who would have access to the data and any potential future uses of this information (Belmont Report, 1979).

The data received by the researcher from the accreditation self-study survey were arranged by question with responses into one form; no identifying information was provided. For those completing the online survey, only the researcher had access to their responses. Respondents were assured that the benefits of this research outweighed any risks. Results from this study were arranged in composite form so that individuals cannot be identified (Creswell, 2013, p. 174).

A professional relationship exists between the teachers and the researcher; some relationships extend to a social level or friendship. A statement on the survey informed the respondents that this was an anonymous survey; bias was avoided throughout the collection of data, the analysis of data, and the compilation of the final study. Synonymous to validity in quantitative research, the credibility within qualitative research was established as the researcher revealed any personal bias that may influence the study. As stated earlier, the researcher was committed to mitigating any bias by maintaining professional objectivity during data collection, analysis, and interpretation. Multiple measures and triangulation of the results were employed along with peer reviews and member checking (Bloomberg & Volpe, 2012; Creswell, 2013)

Analogous to reliability in quantitative research, dependability ensures data collection, analysis, and interpretation can be verified. Extensive explanations of

processes and peer coding were two means by which this study maintained its dependability (Bloomberg & Volpe, 2012, p. 113).

A study's value is increased if the results can be generalized and transferred to other contexts. In order to ensure this possibility, rich descriptions of the study's context and the discoveries are necessary. The data analysis and interpretation of this study provide the rich description needed to facilitate transferability to other contexts (Bloomberg & Volpe, 2012, p. 113).

Potential Limitations and Delimitations

Limitations include any external conditions that limit the scope or outcomes of the study (Bloomberg & Volpe, 2012, p. 103). The researcher explicitly acknowledged her role as director of the summer program since its inception June 1992. All data gathered, regardless of its positive or negative voice, were included in the study.

Delimitations on this study imposed by the researcher included limiting the surveys and interviews to adults within the single context of the school that sponsors the summer program under study.

Summary

This study of an independent school's summer program was designed to examine the variety of opportunities currently available, the intentional alignment of summer courses to the school-based standards and curriculum, the collegial discussions that support the refinement of summer instruction, and evidence of the school's mission in the program. This case study was limited to the one site and utilized qualitative data from surveys and interviews with teachers and quantitative data from the summer program's

archives. The data were analyzed and shared with participants so that the discoveries made could be utilized to inform future decisions and program refinements.

CHAPTER FOUR

RESULTS

The purpose of this case study was to examine the current status of an independent school's summer program. Aspects examined include the variety of course offerings, the alignment of school-year standards with summer instruction, evidence of collegial conversations, and adherence to the school's mission statement. This chapter is organized according to the nine critical findings derived from the collected data. These findings begin with the program's history then address the study's three research questions.

Analysis Method

Quantitative data retrieved from the program's archives provided performance figures related to enrollment, types of classes, and revenues. Data from the last ten years were analyzed and organized to convey the rich history of the program. This history conveyed the program's development and the rationale for each program refinement.

Additional quantitative data related to instructional designs were extracted from a researcher-administered survey of summer instructors. Responses from the first three survey questions were organized into tables arranged by class categories (credit, enrichment, or athletics) then instructional design elements according to the number of years the respondents had offered classes in this summer program. A summary table (Appendix H) includes the responses from the three categories.

Qualitative data were collected from open-ended survey questions, the accreditation self-study surveys, and interviews. Interviews were recorded, with the permission of the interviewee, in QuickTime Player. Upon completion of each interview,

the researcher transferred the recording to VoiceBase in order to create a machine-generated transcript. Upon receipt of this document from VoiceBase, the researcher edited the machine transcript while replaying the audio file. The researcher read each edited transcript and recorded marginal notes of common or intriguing responses. These responses were coded according to themes within each research question (Appendix I). Responses were tallied and organized into charts based on the study's research questions. These tabulated charts guided the formulation of findings and their supporting evidence (Appendix J).

Quantitative and qualitative results from archives, a school-wide accreditation self-study survey, a researcher-administered survey of summer instructors, and interviews with summer teachers were organized within the framework of the study's research questions.

Thirty-four of the 134 teachers who have taught during the summer responded to the researcher-designed survey; this represents 25.37% of those contacted. Table 4.1 summarizes the demographics of the respondents according to their instructional areas or categories and the number of years they have taught in this summer school program.

Table 4.1

Summary of Survey Respondents

Survey Respondents			
Years	Credit	Enrichment	Athletics
1 – 4	2	4	2
5 – 6	3	5	0
7 – 10	2	2	2
11 – 15	0	3	1
15+	2	5	1

Information regarding the seven summer school teachers interviewed is included in Table 4.2.

Table 4.2

Interview Participants

Demographics of Interviewees			
Interviewee	School Year Division	Years Teaching in This Program	Summer Class(es)
1	Lower School	15+	Grade Level Introduction, Leadership
2	Lower School	11 – 15	Grade Level Introduction, Recreation
3	Lower School	15+	Science
4	Middle School	11- 15	Credit Courses
5	Middle School	5 – 6	Math and Leadership
6	Upper School	7 – 10	Authentic Research
7	Upper School	15+	Online Credit Course

Findings of the Study

Nine significant findings emerged from this study. Since these findings are organized according to the study's research questions, the order of their presentation does not imply level of importance.

1. The summer program offers a wide range of engaging topics for students entering pre-kindergarten through grade twelve. This program facilitates the transition of new students and their families into the school's community. The enrollment has remained constant despite recent dips in the nation's economy. The number of teachers and members of the support staff employed each summer has remained constant.

2. Teachers believe elements of instructional design promote greater and more meaningful learning in addition to honoring the school's mission.
3. Summer teachers feel school-year standards and expectations should align with summer instruction.
4. The benefits of continuous learning during the summer are evident within the following school year.
5. Community development and relationship building continue throughout the summer and into the following school year.
6. Summer instructors appreciate dialogues with colleagues within the same or different divisions and content areas.
7. The summer program has developed and adapted naturally with school year curriculum changes.
8. Summer instructors recognize the value of the summer program's continual development and are interested in participating in this process.
9. Perceived and actual value can be increased through internal and external explicit communication.

Each finding is discussed and supported by responses from surveys and interviews along with quantifiable trends within the historic data. As a naturalistic study, data collection occurred within the actual context of the summer program and without interventions by the researcher. Perceptions shared by instructors within all academic divisions and multiple content areas provided equal representation throughout the school and summer program. Connections to the study's research questions and conceptual framework were intertwined throughout the findings and their supporting evidence.

Finding 1

Based on archived data, the summer enrollment in this fee-based program has remained constant. The number of classes varied from year to year as new topics were added to the menu of traditional offerings. Grade level introductions and enrichment classes in content areas, the arts, and technology continue to be well attended by new and returning students as well as students from other schools. Each year, the teachers are encouraged to design new courses. Credit class offerings have expanded to include authentic science research at off-campus facilities and three online classes.

As enrollment and the variety of classes change, the number of teachers employed each summer responds to the demands of enrollment and class topics. They are often assisted by adjunct instructors, instructional aides, college-aged alumni, and Upper School students earning community service hours. As teachers are on campus, the opportunities for collegial discussions increase. This finding will be discussed later within the study.

Table 4.3 provides a summary of the number of paid hours for teachers, members of the support staff, and alumni. Hours for lifeguards, van drivers, the nurse, and other campus-wide positions were not included. Over the course of the most recent ten years, the means for payable hours included: faculty 8,538.3, support staff 1,172.25, and alumni 598.6.

Table 4.3

Payable Hours for Summer Team Members

Year	Faculty	Support	Alumni	Total
2006	8,969	1,306	288	10,563
2007	8,349	474	600	9,423
2008	7,926	1,397	na	9,323
2009	8,191	1,787	432	10,410
2010	8,885	1,742	395	11,022
2011	9,061	1,449	606	11,116
2012	8,938	906	301	10,145
2013	8,879	646	718	10,243
2014	7,827	1,095	725	9,647
2015	8,358	921	1,322	10,601

Program's history. This summer program has historically offered a wide variety of course options for students entering pre-kindergarten through twelfth grade. General topics include credit or required courses, enrichment classes, and athletic camps. While traditional credit classes such as *Advanced Composition, Humanities, Speech*, and *Personal Fitness* continue to be offered, two online courses, *Advanced Composition* and *Introduction to Computer Programming*, have been available since 2007. *Personal Finance Honors* will debut as the third online class in 2016. Authentic science research courses, which blend on-campus instruction with extended stays at off-campus research facilities, were launched in 2008. By introducing this format through *Advanced Marine Research*, the topics have expanded to include *Marine and Coastal Science, Robotics and Engineering Research, Medicine and Biotechnology Research*, and *Ecology and Renewable Energy Management.*

Table 4.4 includes the number of semester hours that have been earned each summer since 2006. Each year is divided into traditional classes, online classes, and authentic research. The number of traditional credits earned has been declining as online

and authentic research courses have gained popularity. Additionally, immersion classes offered during winter break and spring break, such as *Humanities Abroad*, have impacted the number of credits earned each summer.

Humanities Abroad was introduced in 2009. Participating students travel to Europe with teachers during winter or spring break in order to experience the art and architecture traditionally studied in the classroom. Students benefit from this rich experience and the demand for the summer course declined once the announcement of this class was publicized. The enrollment in *Humanities* during the summer of 2006 was 42; in 2015 this numbers was 18.

Online class credits have continued to increase in popularity and, as of the summer of 2015, comprised 23.3% of the total semester credits earned. Table 4.4 provides a history of the classes with the number of credits earned each summer.

Table 4.4

Number of Semester Credits Earned

	Credit Class Format			
Year	Traditional	Online	Authentic Research	Total
2006	249	0	0	249
2007	224	16	0	240
2008	230	19	23	272
2009	228	42	25	295
2010	201	32	33	266
2011	198	39	32	269
2012	200	48	42	290
2013	161	40	32	233
2014	121	44	50	215
2014	143	62	61	266

Table 4.5 compares the yearly enrollment percentages of the traditional on-campus classes, online classes, and classes offering authentic research opportunities per year. Students participated in these semester credit classes in order to experience learning

opportunities not available during the school year and/or to provide more time within their school-year schedules to complete advanced coursework.

Table 4.5

Yearly Comparison of Credit Course Formats

	Percent of Course Formats		
	Traditional	Online	Authentic Research
2006	100.00%	0.00%	0.00%
2007	93.33%	6.67%	0.00%
2008	84.56%	6.99%	8.46%
2009	77.29%	14.24%	8.47%
2010	75.56%	12.03%	12.41%
2011	73.61%	14.50%	11.90%
2012	68.97%	16.55%	14.48%
2013	69.10%	17.17%	13.73%
2014	56,28%	20.47%	23.26%
2015	53.76%	23.32%	22.93%

Enrichment classes. Enrichment classes, offered primarily in the lower grades, include content area topics, such as language arts, math, science, technology, and foreign languages. Although once offered in Upper School, low enrollment numbers drove the decision to limit or eliminate these options. A large number of Upper School students participate in this program's credit classes, continue authentic research with mentors throughout the community as part of this school's advanced studies, or work to earn community service hours. With other worthy options available, little if any time remained for additional enrichment through this program.

Grade level introductions. Grade level introductions are offered for students entering pre-kindergarten through sixth grade; Middle School has offered similar classes in the past. Attended by both returning and new students, these courses allow teachers to welcome students by sharing expectations and unique aspects of their grade level. New students and their parents are able to easily transition into the school community during a

quieter time and before the year begins. Teachers gain an understanding of each student's strengths and weaknesses; this allows teachers to alert parents of skills that may need to be practiced and more fully developed before school begins.

The community spirit that forms during the summer transfers into the school year; summer students are able to assist their peers who did not attend the summer class. Table 4.6 includes a ten-year history of the enrollment numbers for the grade level introductions. The grade levels are included in order to inform the reader of the summers during which Middle School and Upper School offered introductory classes; the recently introduced *9th Grade Study Skills* class is included.

Table 4.6

Enrollment History of Grade Level Introductions

Year	Grade Levels	Number of Registrations
2006	PK-8	386
2007	PK-8	339
2008	PK-8	317
2009	PK-8	240
2010	PK-8	229
2011	PK-6	246
2012	PK-6	224
2013	PK-6	207
2014	PK-6	236
2015	PK-6; 9	282

Math classes. Beginning in grade four, students are placed according to their math ability and performance. Students who qualify for accelerated math utilize a text one grade level above their peers. Pre-Algebra is also introduced in grade six. Summer accelerated math classes provide instruction in skills and concepts that are taught in the course of study these students will miss. Although not required, the accelerated math classes are highly recommended. Enrollment depends on the number of qualifying

students and, of this group, the number able to attend. Packets are provided for students unable to attend the one-week course. Additional math classes were designed for students continuing at their current placement; the practice of key skills and concepts is enriched by activities and real-world application questions. Critical thinking and problem solving are either incorporated into the grade level classes or offered as separate enrichment classes.

History of summer math classes. Table 4.7 provides an enrollment history of the summer math classes. Since 2006, the school-wide enrollment in summer math classes has decreased, as Upper School no longer offers summer classes in this content area. Two factors can be noted. First, with each passing year, it becomes more difficult for older students to devote a week or more to non-credit classes. Other summer obligations, academic and non-academic, restrict their schedules. Second, an on-campus tutoring center has reduced the need and resulting interest in summer math classes, especially for older students. The decision for students to take advantage of on-going tutoring through the center has met their academic needs and ensured more timely assistance when needed during the school year.

An increased performance of Lower School students during the 2012-2013 school year created the need for additional accelerated math classes the following year, therefore more students attended accelerated classes during the summer of 2013. The summer math classes and enrollment are dependent upon the school year performance of the students.

Table 4.7

Enrollment History of Math Classes

Year	Number of Registrations	Entering Grades
2006	168	3-10
2007	151	3-10
2008	122	3-10
2009	121	3-10
2010	126	3-11
2011	116	3-11
2012	102	3-11
2013	130	3-11
2014	82	3-8
2015	94	3-8

Technology classes. Summer technology topics and classes evolve with technology itself. Classes that initially provided instruction in productivity applications and simulations have developed into multimedia production and today, 3-view and robotics. Table 4.8 includes enrollment history for one-week technology courses offered in Lower and Middle School. These figures do not include three-week credit or required courses. Credit classes refer to *Introduction to Computer Programming* and *Robotics and Engineering Research and Development*; required courses refer to *Computer 7.*

Beginning with the 2013-2014 school year, students in grades seven through twelve were required to have a personal iPad in class each day. In order to ensure students were proficient with their devices by the first day of school, the Middle School offered *iPad Boot Camp* during the summer of 2013. Offered to new and returning students, this class accounts for the increased enrollment. During the summer of 2015, three Lower School technology classes were offered; Middle School's *Video Production*, which was introduced in the summer of 2010, has not been offered since 2014.

In recent years, fewer technology-specific classes were offered as technology has become woven into class resources. Technology is used more frequently throughout all classes; this practice is not reflected in Table 4.8.

Table 4.8

Enrollment History of Technology Classes

Year	Number of Registrations	Entering Grades
2006	59	4-6
2007	48	3-8
2008	48	4-8
2009	57	4-8
2010	83	4-8
2011	60	4-8
2012	78	4-8
2013	113	4-8
2014	93	3-8
2015	47	5-6

Academic enrichment. Newly designed classes along with traditional favorites are offered each summer. Students may participate in some of the same classes over multiple years. Full-day classes have replaced many of the half-day classes that were available in the earlier days of this summer program. The counts included in Table 4.9 reflect the number of classes attended; numbers in the earlier years may be skewed upward as students who attended two half-day classes were counted twice.

Leadership. As one of the four pillars found within the school's mission statement, developing future leaders is an ongoing commitment. *Developing Middle School Leaders* was introduced in 2010 and, during the first year, the minimum enrollment number was not met. Through school year promotion by the teacher, students gained interest in this class and the enrollment increased. During the summer of 2013, the Lower School introduced a new class, *Heart of a Servant*, in which students serve in the

community daily. As a result of this class, students and their parents have been inspired to contribute their time and energy to several organizations throughout the community. Table 4.9 reflects the growing enrollment in leadership classes.

***Foreign language*.** Spanish within the Lower School was designed according to Foreign Language in the Elementary Schools (FLES), a program that advocates short, daily lessons that are connected to aspects of the classrooms' current studies. Since the Lower School students became exceptionally fluent as a result of FLES, students new to the school were often at a disadvantage. During the summers of 2006-2008, new students were required to participate in an intensive, one-week Spanish class. During the following school years, the time dedicated to daily Spanish was decreased in order to allow more time for formal instruction in the content areas. Once this decision was made, the need for the intensive summer class decreased. In order to ensure new students are prepared for the current level of Spanish instruction, lessons are now included in the summer grade level introductions for grades four through six. Table 4.9 displays the historical enrollment in foreign language classes.

Science. Science classes encourage problem solving, hands-on experimentation, and collaboration; they are generally theme-based. Topics include zoology, dinosaurs, rocketry, and sea life. Like the academic enrichment courses, science classes have evolved from half-day to full day schedules. The larger enrollment numbers in 2006 were due to students selecting multiple half-day classes. If a student participated in two half-day science classes within the same week, s/he would have been counted twice. See Table 4.9 for this history.

***Recreation*.** Topics include healthful living, exercise, culinary skills, and themed-classes such as pirates, princesses, and fairies. The purpose of these classes is to provide organized activities based on interests of the children but with less academic emphasis. Table 4.9 includes the historical enrollment in recreation-based classes.

Table 4.9

History of Enrichment Courses

Year	Science	Academic Enrichment	Art	Leadership	Foreign Languages	Recreation	Other	Total
2006	172	137	71	0	58	185	146	769
2007	94	67	98	0	55	129	71	514
2008	59	64	39	0	56	122	77	417
2009	107	55	40	4	7	157	56	426
2010	144	54	18	0	8	145	104	473
2011	146	45	51	9	6	195	121	573
2012	154	95	25	9	4	246	163	696
2013	138	98	19	34	10	184	143	626
2014	111	69	19	45	0	176	140	560
2015	122	75	10	40	4	230	148	629

Middle School required classes. Table 4.10 provides an enrollment history of required Middle School courses. *Speech 8* is currently the only required Middle School course offered during the summer. In previous years, both *Computer 7* and *Physical Education* were available. School year curricular changes designed to benefit the educational experiences of the students have eliminated the need for these two summer classes.

The *Computer 7* curriculum has been restructured to encompass an entire school-year, which allows students to utilize new skills in tandem with the requirements of content area assignments. The immediate and intentional application of computer skills allows students to gain greater proficiency while employing these skills in other areas. Developmentally, this is educationally more appropriate for Middle School students.

Similarly, *Physical Education* is now offered only during the school year. The content is more meaningful when presented over a longer period of time so that students are able to process, internalize, and apply skills gained; habits supporting a healthy lifestyle are developed over the course of the year. Compressing this content into an intensive two-week period during the summer would greatly reduce the effectiveness and value of the intended instruction and outcomes. This class was not offered during summer after 2013.

Speech 8 was introduced in 2014. Once an Upper School requirement, students now benefit from instruction and rehearsal during Middle School. This affords students more time and opportunities to employ the critical skills supporting research and effective public speaking. Middle School students often participate in regional competitions that require confidence and a command of public speaking. By participating in a formal speech class earlier in their academic careers, students are better prepared for speaking opportunities in school and throughout the community.

Table 4.10

Enrollment History of Middle School Required Courses

Year	Physical Education	Computer 7	Speech or Debate	Total
2006	78	29	0	107
2007	74	35	0	109
2008	57	30	0	87
2009	40	46	0	86
2010	62	27	14	103
2011	66	21	16	103
2012	41	0	24	65
2013	51	0	11	62
2014	0	0	28	28
2015	0	0	34	34

Athletics. The enrollment in athletic camps offered to younger students has remained constant as demand in the upper grades has historically declined. Table 4.11

provides this history by year and by grade; other refers to students who are not enrolled in this school during the year.

Table 4.11

Enrollment History of Athletic Camps

Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	Other	Total
2006	1	24	22	40	44	9	42	42	61	48	27	5	8	9	81	463
2007	0	10	11	30	26	35	32	58	35	38	35	10	11	8	52	391
2008	0	4	8	56	31	42	36	63	55	42	39	41	23	14	73	527
2009	9	19	12	22	56	43	53	50	51	60	27	26	25	6	63	522
2010	2	7	13	30	31	55	47	45	45	50	32	19	22	13	54	465
2011	5	8	8	43	44	45	62	57	71	30	39	22	20	6	68	528
2012	3	24	17	48	49	47	32	62	59	42	19	12	17	9	86	526
2013	6	16	30	46	45	53	36	59	46	47	10	11	6	4	65	480
2014	4	10	12	40	56	41	51	43	45	28	14	11	4	6	49	414
2015	2	10	16	49	43	42	34	45	41	34	14	10	0	1	45	386

As stated earlier, Upper School students encounter increased challenges in scheduling their numerous summer opportunities and obligations. One such obligation or commitment is earning community service hours. Although students may serve others beyond the school community, many choose to contribute their time and talents within the school's community; our athletes donate countless hours to our summer athletic camps. Even though their participation is not reflected in the official enrollment, they are actively involved in the program as their leadership and athletic acumen add value to the summer program. Student athletes are applying what they have learned in an authentic context. Table 4.12 includes community service hours earned through the summer program since 2012. The number of hours, displayed by division, was greater in athletics. Accurate data before the summer of 2012 could not be located.

Table 4.12

Community Service Hours Earned Through Summer Program

Summer	Lower School	Middle School	Upper School	Athletics
2012	202.5	-	208	553
2013	465	90	110	2,566.5
2014	150.75	17.5	328.5	2,157
2015	263.25	79.5	67.5	2,633.5

Athletes also have opportunities to travel to camps offered on college campuses throughout the nation. Although the quality of instruction at this school is comparable to what they experience elsewhere, the players gain by maximizing time college coaches are able to observe their performance.

The older players who are able to assist with the camps familiarize the younger students with the school's athletic programs in terms of options and opportunities. The current enrollment trend through grade seven is likely to continue so attention will be placed on our younger students.

Enrollment summary. The enrollment history revealed historical trends and shifts in demands and interests. Although changes such as those in the Middle School curriculum may have initially impacted enrollment in the summer program, this is evidence that the school year and summer program strive to intentionally align with one another.

New students. Table 4.13 includes the number of new students accepted for each subsequent school year as well as the number and percent who attended the summer program. The interview data included later in this study include the value of summer for new students and their families in terms of transitioning into a new school.

Table 4.13

New Students Enrolled in Summer Program

Year	New Students Attending Summer	School Year	New Students For School Year	Percent of New Students Attending Summer
2006	232	2006-2007	364	63.74%
2007	185	2007-2008	301	61.46%
2008	191	2008-2009	323	59.13%
2009	149	2009-2010	293	50.85%
2010	155	2010-2011	332	46.69%
2011	152	2011-2012	336	45.24%
2012	138	2012-2013	283	48.76%
2013	130	2013-2013	275	47.27%
2014	138	2014-2015	317	43.53%
2015	130	2015-2016	303	42.90%

The data available to the researcher noted each student's official enrollment date as the first day of the school year; the actual acceptance dates for each student were not available. Although most were accepted before summer started and were therefore able to attend classes, some of the new students were accepted after summer classes ended. The school has observed an increase in the number of students who apply and are accepted later in the summer. If utilizing the number of students accepted by the beginning of summer instead of the first day of school, the actual percentage of new students attending the summer program may be greater than shown.

Utilizing the ten-year history of each grade's summer participation of new and returning students and the subsequent year's enrollment, an analysis revealed correlation coefficients indicating limited predictability when comparing either new or returning students to the grade level's total or new students to the following year's enrollment. These values are .649, .430, and -.452 respectively. The correlation coefficient that

resulted when comparing the returning students to the subsequent school year was .663, strong enough to be considered a good predictor.

When employing descriptive statistics to analyze each grade's participation of new and returning students, the range for new students was 9.21 (summer of 2015) to 16.21 (summer of 2006). The mean for returning students ranged from 51.86 (summer of 2014) to 60.29 (summer of 2011). As some grade levels traditionally admit a smaller number of new students each year, the mean values tend to be skewed to lower values. A more accurate view may be found when analyzing the percent of new students from each grade level that attend each summer. These percentages are found in Appendix K. In general, there was a greater percentage of students new to Lower School that attended each summer. It should be noted again that some new students are admitted after the summer program ends.

Revenues. Actual revenue figures were available to the researcher but are not included in this report. The revenue trend was critical in order to show growth in the program therefore the percentages in Table 4.14 are the comparison of each summer to the previous summer. Fees have remained constant since the summer of 2006.

Table 4.14

Percent of Revenue From Previous Years

Summer	Percent Increase/Decrease
2006	NA
2007	-4.96%
2008	+6.59%
2009	+0.38%
2010	+0.05%
2011	+4.22%
2012	+5.98%
2013	-6.80%
2014	-5.65%
2015	+13.38%

Finding 2

Survey results and emerging themes from interviews revealed that a majority of the instructors believe that the cited theory-based elements positively influence student learning and developing attitudes.

Table 4.15 displays the survey results by the course categories of credit, enrichment, and athletics. The percentages represent the responses within each of these categories. Table 4.16 displays the collective responses of the three groups.

Table 4.15

Percent of Instructors in Each Category Selecting Cited Element

	Survey Results		
Elements	Credit N=9	Enrichment N=19	Athletics N=6
Immersion	44.44%	36.84%	16.67%
Collaboration	77.78%	57.89%	50.00%
Authentic Experiences	22.22%	78.95%	0.00%
Inquiry	66.67%	42.11%	0.00%
Reflection	66.67%	31.58%	0.00%
Critical Thinking	100.00%	63.16%	33.33%
Problem Solving	55.56%	57.89%	33.33%
Other	0.00%	10.53%	50.00%

Table 4.16

Percent of All Respondents Selecting Cited Element

Elements	Number of Respondents	Percent of Respondents
Critical Thinking	23	67.65%
Collaboration	20	58.82%
Problem Solving	18	52.94%
Authentic Experiences	17	50.00%
Inquiry	14	41.18%
Reflection	12	35.29%
Immersion	12	35.29%
Other	5	14.71%

Immersion. Of the 34 survey responses, 12 instructors (35.3%) selected immersion as a valuable element. This included 4 of the 9 (44.4%) credit course teachers,

7 of the 19 (36.8%) enrichment teachers, and one of the six (16.7%) athletic coaches. Within the survey, credit teachers saw value in the focused attention on one group of students who are immersed in one subject. This undivided attention allows greater depth in more meaningful discussions, namely the research and preparation required for effective public speaking. Immersion in research and laboratory experiences allows students to develop greater understandings as well as increased interest in specific areas of study. Both credit course and enrichment teachers shared that the uninterrupted time facilitated scheduling of and travels to research facilities, museums, and other off-campus sites visited in order to enrich the students' learning experiences. As teachers focus on one subject area and one class, more time is available to design and plan more creative experiences while field-testing new instructional methods.

The value of immersion was a prominent theme throughout the interviews with instructors from the three academic divisions. One interviewee shared that the uninterrupted instruction provided opportunities to intensify the instruction through a variety of methods. An enrichment teacher from Lower School stated that an immersion class provides more opportunities for critical thinking and discovery. One teacher of a credit course shared that, during a six-hour day devoted to one class, the sense of community quickly and enduringly develops. This teacher also shared that the frequency and level of communication between teacher and student are much greater when students are immersed in one class. Feedback is more frequent and timely which increases its meaningfulness; the feedback becomes more actionable. Another credit teacher shared that students are more engaged when immersed in a single topic or project. There is more time for reflection and purposeful research, the result being students with greater

autonomy and confidence. The students truly own their learning. Immersion allows students to develop into a community of scientists, researchers, or writers. Immersion also benefits the youngest learners as grade level introductions become more than skill development; students learn through a topic that is real to them. Prior experiences and knowledge of selected topics inspire students to contribute to the learning of their peers by sharing information that they value or find to be interesting.

These findings were consistent with examples cited in this study's literature review; the focus created by immersion creates more extensive and complex understandings of concepts that lead to more enduring and meaningful connections to other topics.

Collaboration. The 34 survey responses yielded 21 (61.8%) in support of collaboration as a valuable instructional design element. This included 7 (77.8%) teachers of credit courses, 11 (57.9%) enrichment teachers, and 3 (50.0%) athletic coaches. Teachers of credit courses viewed collaboration as a means to achieve a goal, specifically, working together to not only complete an assignment but also resolve the interpersonal issues that may hinder group work. One credit course teacher viewed collaboration as a Christian value and method by which leadership is developed; two pillars of the school's mission statement include instilling Christian values and developing future leaders. This teacher elaborated that Christian values are a key value of our nation, which was created through collaboration, a process that fosters leadership. Enrichment teachers cited the preamble of the school's mission statement, "Within an atmosphere of love, concern, and mutual respect," as an expectation of collaborative

group work that students must learn in real-world settings in order to understand how to respect their peers and their peers' opinions; collaboration is a critical 21st Century skill.

Interview references to collaboration were made in conjunction with problem solving; students practice collaboration through scenarios presented by the teacher or from reading selections. These rehearsal opportunities prepare the students to work more effectively in the classroom as well as in the community; the prevailing trend from the interviews connected strong collaborative skills to effective leadership.

Like immersion, the teacher views of collaboration were consistent with the research of Costa & Kallick (2008) and Smink (2007); when real world problems are presented, student collaboration leads to the construction of greater meaning and the development of critical thinking skills.

Authentic experiences. Seventeen of the 34 survey respondents (50.0%) stated their belief in the value of authentic learning experiences. Two (22.2%) of the credit course teachers and 15 (79.0%) of the enrichment teachers replied in support of this element. None of the athletic coaches cited this element as valuable. Through open-ended questions on the survey, credit teachers spoke to the value of student learning and research within authentic research facilities. An enrichment teacher connected student applications of learned techniques in real world settings as a means of increasing their desire to continue their education in college and throughout life; students realize they can apply what is learned in other real-life situations.

An interview with a teacher of a credit course provided the reminder that authentic learning experiences can occur within the classroom; travel to an off-campus facility is not required. When designing a speech class, this teacher considered the future

expectations of the students; these included effective presentations during college and job interviews, effectual conversations with adults unknown to the students, and the delivery of emotionally moving speeches. This teacher recalled a student's comment after portraying President Reagan on the day of the Challenger explosion, "I was the one communicating the mourning of the country."

Another credit course instructor expanded upon the value of travel to off-campus research facilities. Research is a major component of the course referenced; students focus upon specific topics and the process of completing in-depth projects. Preliminary research is completed on-campus and, as students work with actual scientists and mentors in an authentic setting, they become more engaged in the process. Student ownership of the project increases as struggles may be created by unplanned or unpredicted experiment results.

Although authentic learning experiences are often associated with the sciences, their value extends into other subject areas; another area includes speech, as discussed in this study. Regardless of the content area, authentic learning experiences effectively establish deeper conceptual understandings, provide relevance, and model potential careers; the lifelong implications are evident.

Inquiry. Fourteen (41.2%) of the survey respondents valued inquiry as an effective instructional design element. Six (66.7%) credit course instructors and 8 (42.1%) enrichment teachers formed this group. One credit course instructor connected inquiry to the patriotic aspect of the school's mission statement by stating, "America is the embodiment of the Age of Enlightenment's quest for truth." An enrichment teacher stated that the development of future leaders is "directly related to students learning how

to think about situations that are not directly studied but often implied." Inquiry is an element of this learning.

Reflection. Twelve (35.3%) of the 34 responding to the survey noted reflection as a valuable instructional element. This included 6 (66.7%) of the 9 credit teachers and 6 (31.6%) of the 19 enrichment teachers. One credit teacher viewed reflection upon prior learning and personal experiences as well as collecting information for a speech that may be personal in nature as a new, yet valuable, experience for many Middle School students. Another viewed reflection as a critical skill practiced by effective leaders. Enrichment teachers shared that reflection is a valuable strategy that proves to be helpful throughout not only the school year but also life. A direct connection between the leadership component of the school's mission statement and reflection was made; while fostering their development as future leaders, students are asked to self-assess themselves on the various means by which they can become effective leaders.

During an interview with an enrichment teacher who leads the summer leadership class, he shared the value of reflection as students end each day thinking about their service experiences at the local mission. These reflections guide their creation of personal mission statements that are frequently recalled during the subsequent school year's mentor classes. Reflection has allowed the students to internalize the critical concepts learned during the summer; the teacher's references to the summer text or a summer discussion reactivate memories from the summer. These memories are enduring because of the time devoted to reflection.

A science enrichment teacher observed students becoming increasingly reflective after she implemented a journal in which students record notes, comments, drawings, and

digital photographs. An enrichment teacher, who offers a class based on healthful living, requires the students to maintain a journal including each day's activities, snacks, and discussions. These notes have encouraged students to be more reflective about habits related to healthy decision-making; she has observed students maintaining these habits throughout the school year.

Critical thinking. The instructional design element selected most often was critical thinking; this included 23 (67.7%) of the 34 survey respondents representing the three categories of summer teachers. The 23 responses include 9 (100.0%) credit course instructors, 12 (63.2%) enrichment teachers, and 2 (33.3%) athletic coaches. Universally, they all agreed that effective critical thinking skills are necessary for students to be prepared for college and lifelong learning. "Preparing students for college and lifetime learning through academically challenging programs and affirming competitive experiences" is one of the four pillars of the school's mission statement (LHPS mission statement). One credit course instructor cited not only thinking critically about the subject matter but also how to wisely utilize constructive criticism from peers and teachers in order to improve writing and public speaking skills. Enrichment teachers felt it was their responsibility to ensure students constantly and continually develop their acumen of thinking critically. They also saw the value of thinking critically when exploring new topics of study or transitioning to the next grade level. Athletic coaches noted critical thinking as part of good sportsmanship.

Statements from interviews included the ability of students to make wise decisions when confronted by difficult situations and the perseverance to form and answer leading or probing questions related to science. The levels to which students

within one class have developed their critical thinking skills may vary. Within the composition class, teachers are able to respond to these levels and guide students through developmentally appropriate activities in which the students can experience success while expanding their critical thinking skills. One credit course teacher has observed her students demonstrate their developing critical thinking as their responses to questions that, at the beginning of the course, would have yielded short, uninformative responses, become "ten minute long responses by the end of the course." Their developing critical thinking positively influences their academic confidence.

As noted in this study's review of the current literature, critical thinking develops as students are immersed in content areas of interest or when real world problems are presented. Questions and activities can be tailored to each student's level of critical thinking thus increasing the probability of success and continued development.

Problem solving. Lastly, problem solving was reported by 18 (52.9%) of the survey respondents as a valuable instructional element; this included 5 (55.5%) of the credit teachers, 11 (57.9%) of the enrichment teachers, and 2 (33.3%) of the athletic coaches. Collectively, this group felt that the ability to solve problems efficiently was a necessary skill for one to be prepared for college and lifelong learning. Credit teachers stated that this skill is needed to work well in a group setting; enrichment teachers stated that this skill is critical for one to develop into an independent learner.

Interview data revealed that problem solving opportunities may be planned within the instruction or arise spontaneously as a result of non-functioning group dynamics. Within an enrichment class for young students, a teacher shared that students practice problem solving while learning to ride a bicycle. The teacher of a grade level introduction

related the intentional inclusion of problem solving activities for student practice as well as to create opportunities for her to observe group dynamics and resolution. During the experimental stage at the research facility, students often encounter failed experiments or steps within the procedures that need to be corrected or redesigned. Effective problem solving strategies are required.

As stated in this study's review of the literature, providing adequate time to practice problem solving strategies and allowing students to take responsible risks in order to find reasonable solutions are valuable; summer affords the extra time for teachers to guide students through the process or independently reach resolution. Whether guided or working independently, students engaged in frequent problem solving activities gain self-confidence that has lifelong implications.

Through survey data and interview transcripts, the researcher found evidence of instructional design elements, such as immersion, collaboration, authentic experiences, critical thinking, and problem solving within the summer program under study. Each serves as a strategy through which teachers honor the school's mission "to inspire patriotism, instill Christian values, develop future leaders, and prepare students for college and lifetime learning through academically challenging programs and affirming competitive experiences" (LHP mission statement).

Finding 3

Survey results and interview excerpts provided evidence that summer instructors believe the alignment of school-year standards with summer instruction is critical.

Credit courses. Teachers of credit courses believe the school year and summer courses must align with one another. One instructor shared that his course not only

mirrors the curriculum utilized during the school year but that the school year instruction would be more effective if its schedule could replicate that of the summer. The extended time each day allows students to learn, practice, and master a new skill related to public speaking. This teacher and his colleagues have observed that academic performance in the summer class exceeds that of the school year. Other instructors of credit courses view summer classes as being more intensive versions of the school year's expectations; this is facilitated by the smaller class size and/or co-teaching with colleagues. Three teachers shared that they are faithful to the school year curriculum but are able to enhance the summer instruction by including field trips that are logistically impossible during the school year. Field trips include visits to local museums and research facilities.

Standards alignment was mentioned during interviews with two of the three credit teachers. One shared that he "felt this extreme fidelity to execute the curriculum that was in place with the Upper School teachers…the main objective there was that the students have the same experience during the summer that they had during the year." Another credit teacher noted the "bridge between biology and physics" that would be a part of the newly created environmental sustainability course.

Enrichment classes. A majority of the teachers offering academically-based courses believed their instruction encourages students to utilize and further develop skills and strategies presented during previous years; a direct correlation between the school-year standards and summer instruction was noted. These skills may include reading, math, organization, or other study skills. Teachers of grade-level introductions often address summer reading or summer math assignments; this benefits both returning and new students. One enrichment teacher shared that "since my summer students are usually

my traditional year's students, there are many connections made between the summer programs and the school programs. I am aware of the school standards and keep them in mind as I teach the summer courses. I frequently refer to things learned during the school year during the summer course and vice versa."

In terms of strengthening the connection between summer instruction and school-year standards, a majority of the enrichment teachers felt that tying the courses to specific standards would be beneficial. One teacher suggested that a standard curriculum for some of the basic courses would ensure the desired instruction is presented.

The data collected from surveys and interviews supported the finding that summer instructors believe the alignment of school-year standards with summer instruction is critical. Some have historically and intentionally aligned their summer curriculum to the school year where as others recognized the value of this practice once it was stated in the researcher-designed survey.

Finding 4

Survey responses and interview statements conveyed the teachers' beliefs that the benefits of continuous learning during the summer are evident the following school year.

Survey results from credit teachers, enrichment teachers, and athletic coaches communicated that the school's summer program facilitates each student's transition into the next year. A kindergarten teacher shared that the students become familiar with the routines and the teacher expectations. Summer classes help the youngest students maintain their developing social and emotional skills; less time is needed to reestablish previously learned routines. Teachers of grade level introductions stated that their instruction includes discussions of the summer reading and math assignments. Athletic

coaches shared that summer instruction allowed players to continue increasing their skills through repetition and uninterrupted practice.

Continuity of learning over the summer was the most frequently mentioned topic during interviews with credit and enrichment teachers. Aspects of leadership learned and practiced throughout the summer become frequent topics of discussion during the school-year mentor program. Parallels were drawn between character building discussions that occur during the summer and the school year. The teacher of a Lower School enrichment class noted that school-year activities or discussions often remind students of something they experienced during the summer class. These students share what they learned over the summer with their classmates; the students with the summer experiences tend to be more knowledgeable. One teacher spoke from his perspective as a parent, "the quality of the program combats the 'summer slide' that we often see with students." He recognized the value through the experiences of and feedback from his son.

Students who participated in the Middle School speech class were able to employ their newly developed public speaking skills as soon as the new school year began. Those who opted to complete the semester-long class during the school year may be learning public speaking skills after they are needed for a class assignment. Stated the speech teacher, "It was crystal clear who ..had taken the (summer) speech class and who were the kids who had not."

Teacher responses supported the value of continued learning during the summer months and aligned with research included in this study. Developing social skills and honoring classroom routines are an integral part of the learning that occurs in the primary grades. The interruptions caused by extended summer vacations create a regression of

social skills. School-based summer programs provide the continuity of learning that allows the participating students to maintain steady progress along their educational paths.

Finding 5

Community development and relationship building continue throughout the summer. These relationships include student-student and student-teacher. Survey responses from two athletic coaches conveyed the evidence and value of community and relationships. “By building the classes each summer to bring students back –we are creating the culture of learning and strengthening existing relationships.” Another coach noted the new friendships that are made during the summer camps. He continued to say, “hopefully these children learn enough about our program that they want to be a part of it in (Upper School).” Yet another coach shared that, “As a coach in Upper School, I am able to develop relationships with these kids before they even enter Middle School.” An example of student-student relationships can be found with “having Upper School athletes work with the Lower School kids. (This) helps them learn about our program and our expectations as a high school sport.”

Two enrichment teachers and one credit teacher shared stories of past students seeing friends from previous summers and excitedly saying, “I remember you!” One enrichment teacher recalled a young female student from Brazil who had been rather reserved the first summer but returned for a second year. She was heartily greeted by several of the previous year’s classmates saying, “I remember you!” A credit teacher recalled teaching a student new to the school. A sense of belonging was fostered and

now, whenever this teacher and student see one another, they “have a lovely conversation.”

Over the last ten years, an average of 51.23% of the new students have attended summer classes. Their first campus experiences occur during a time in which classes are smaller and student groups are together for longer periods of time. Teachers from all academic divisions mentioned how the summer program facilitates the transition of new students into the school community by making new friends and becoming familiar with the campus.

Students participating in full day academic classes may initially resent spending a portion of summer “in school” while friends are enjoying the freedom of vacation. One credit teacher reported that he has been able to shift this mindset toward that of a community. While together during the three weeks, the students collaborate, provide peer feedback, and blend into a supportive community. Before classes travel to off-campus research facilities, teachers incorporate community-building activities into each on-campus day. This sense of community bonds the students thereby facilitating travel and the development of scholarly relationships with mentors and scientists at the research facilities.

Two interviewees mentioned students who attended their classes in the past and now volunteer in their summer classes. One student had attended leadership class while in Middle School and last summer, as a rising junior, he worked alongside the teacher and current students on-campus and off-campus at a city mission. Another student had attended Lower School science classes every summer; throughout Upper School, she has volunteered in the science classes offered by the same teacher. In both of these instances,

relationships between teacher and student have developed into student-student relationships across the school's three academic divisions.

Teacher-student relationships within the summer community are often more meaningful as several credit teachers reported the impact of longer instructional blocks on the ability to devote more time to frequent conferences with each student. Feedback provided during *Advanced Composition* or *Speech* becomes more meaningful and actionable as students and teachers are able to engage in discussions at a greater depth than what is possible during the school year's shorter instructional times. The ongoing conferences lead to products of higher quality and a student-teacher relationship that is enduring. Students know these teachers on a more authentic level and, in subsequent years, are able to seek advice when needed. If students are in another class taught by one of their previous teachers, references are often made to the summer class; these connections, which may be academic, often lead to establishing or strengthening a community spirit within the later class.

Building community ensures students are matriculating in an environment in which they feel safe and are therefore able to focus their attention on learning. Healthy relationships and networks sustain meaningful communities. Research within this study's literature review cited adults who, as students, attended summer camps. A majority of these respondents stated that their summer enrichment experiences positively impacted their overall educational achievement, their research and productivity, as well as their life achievements.

Finding 6

Summer instructors appreciate dialogues with colleagues within the same or different divisions and content areas. Credit teachers shared that they valued the opportunity to team-teach during the summer; this is not typical in the school year schedule. Another reported that the more relaxed summer schedule allowed casual conversations to become true and meaningful educational discussions. The ability to work alongside teachers from other divisions and content areas was viewed as one of the best aspects of teaching during the summer. One credit course teacher shared that s/he would be a "better teacher if I were part of a team during the school year. It's very inspiring to have different takes on assignments and students."

Enrichment teachers also viewed summer as an opportunity to work with teachers other than those from the regular school year. They are able to develop ideas and coordinate activities that enable students from different grades to work together. Another shared that summer "gives a great opportunity for teachers to see how they can engage in interdisciplinary discussions" which often lead to curricular refinements. The social and educational needs of students, both specific and general, are often topics of discussion. Teachers from different divisions and content area may observe different academic performance or social behaviors.

During interviews with teachers from credit courses and enrichment, four mentioned how much they value the time summer allows for collegial conversations. The instructor of an online credit course mentioned the ongoing conversations she has with the teacher who offers the same course within the traditional, on-campus structure. Each recognized value within the other's format and often considered this in future

refinements. The Middle School leadership instructor shared that he loved working alongside one of his colleagues as this relationship often led to the implementation of new strategies and activities. A Lower School enrichment teacher mentioned the value of working with an adjunct instructor; he has brought fresh ideas from his school-year context into the summer program. A Lower School classroom teacher shared how articulation with teachers of adjacent grade levels both before and after summer has provided effective instructional strategies and conveyed current student performance levels. She also works with a grade level colleague who designed a community service/leadership development class for young children. This teacher shared how she was inspired by the number of local opportunities for community service, how students and parents embraced these opportunities even after the class ended, and the level at which these students were committed to serving others. She would not have had this discovery without the opportunity to dialogue and design classes with another teacher. This collegial relationship carried over into the school year.

Finding 7

The summer program has developed and adapted naturally with school year curriculum changes. Quantitative historic data of summer enrollment provide the numeric trends of curricular changes within academic divisions; these trends and rationales were shared within interview transcripts. As noted previously, the Middle School has revised their philosophy and policies related to *Physical Education* and *Computer 7*. Through 2013, *Physical Education* had been selected frequently by students as a summer course; completion during the summer allowed students to participate in additional electives during the school year. The same was true with *Computer 7*. Students were immersed in

projects that demonstrated their proficiency in various applications but the connection to the school year needed to be strengthened. Although the students successfully demonstrated their understandings, they tended to forget program capabilities and practical applications. By restructuring the computer requirement as a school year course, students are able to effectively and meaningfully utilize applications throughout their content area classes. The yearlong practice as well as additional time utilizing various applications allows the students to develop a more lasting understanding of the technology and its benefits. A similar philosophy guided the decision to require *Physical Education* as a school-year, not summer, course. Major components of the curriculum address the development of healthful habits that need to be practiced and established over longer periods of time. The two-week summer course did not provide adequate time for students to permanently embrace the desired behaviors, habits, and outcomes.

Benefits of immersion within a speech class were recognized and a summer class was developed. Interview data supporting these decisions and changes were discussed earlier in this chapter. Even though *Speech 8* is offered over an abbreviated period of time, the concentrated time devoted to research, writing, revision, and presentation effectively supports the development of these practices. Summer students are prepared for oral presentations that are assigned at the beginning of the next school year.

Although summer offers time for students to remain actively engaged in academics while providing openings within the next year's class schedule, results from this study revealed that consideration must be given to what is best for the student. Summer course offerings have been changed in order to honor the school-year curriculum and meet the needs of the students.

Finding 8

Summer instructors recognize the value of the summer program's continual development and are interested in participating in this process. Survey responses frequently suggested teacher teams in the form of steering committees or learning communities assembled to discuss the current practices, policies, and structures while brainstorming ideas for future refinements. An athletic coach stated that this team should be a strong core of teachers who are truly interested in providing great summer experiences for the students. A credit course teacher suggested a committee comprised of both school-year subject area instructors and summer teachers assembled to further refine alignment and continuity. Enrichment teachers echoed the same comments and added that school year teachers could provide feedback based on observations of their incoming students and evidence of gains made as a result of their participation in the summer program. Instructors could share their ideas as to which summer practices are effective or ineffective and ways to enrich current class offerings. As another enrichment teacher shared, this may involve discussion of the skills that need to be strengthened in general as well as by specific students. Additional time allotted for discussion was a common theme throughout all areas surveyed. A credit teacher mentioned a faculty grant that she had been awarded by the school in order to create a semester course; teachers are willing to devote the time to program refinements but also believe they should be fairly compensated for their work.

Teacher comments from interviews conveyed past refinements as well as their visions for the future. A credit teacher and a Middle School enrichment teacher inherited their classes from colleagues. After teaching a traditional on-campus course for several

summers, a credit course teacher recognized the need for an online format. Using Moodle as a delivery system, she and a colleague created an online composition course that aligned with the traditional, on-campus course. Even though 2016 will be the ninth year this online class has been offered, she continues to refine the content and delivery. Starting as a six-week course and students unfamiliar with online learning, the class has been redesigned as a four-week class of greater instructional quality for students who are now familiar with the procedures and responsibilities of online learning.

An administrator who had taught several summer classes shared his view of summer as an ideal opportunity to experiment or field test new ideas and instructional strategies. The design of the summer speech class became the foundation for the school-year course. He wanted to make this more of a hands-on class that would have real life value. Some of the curriculum developed for the summer class has been added to the Middle School speech class taught during the school year. This class has replaced the required Upper School speech credit.

A credit class teacher who has designed authentic research courses viewed the summer as a time to offer unique educational opportunities for students that would also alleviate some of the pressures school year teachers encounter with science fair projects. By starting with the idea for students to complete their required science fair projects during the summer, the summer teachers first accepted students from all Upper School grade levels. They soon realized the need to narrow the enrollment to only incoming freshmen. Unplanned changes in the revised plan included a component in which this class prepared students for the transition into Upper School. An additional course objective guided a move “to less about the science research and more about getting (the

students) comfortable with higher learning." The success of this initial research-based class has prompted the design of three new classes based on robotics and engineering, biotechnology, and environmental sustainability. Not only are more topics of interest available but also, as the teacher shared, she and her colleagues are able to occasionally blend their classes so that students have the opportunity to learn from their peers.

The Middle School leadership teacher shared that he followed the lead of the previous Student Council advisor when designing his summer class. "I took the foundation that she had developed within the leadership program and got a little bit deeper into having the students look more internally about leading; leadership begins with themselves." He continued to share the ongoing refinements of this class as he and his co-teacher "make adjustments to the schedule, we make adjustments, we make notes of, 'OK, this will go better before this' and we figure out how to develop the curriculum so that it flows with our timing, with our breaks, with everything…. It's actually pretty awesome to go back then and look and say this is what we did last year and this is our note for what we need to do this year…so we do go back and reflect and see what modifications we want to make for the following year."

Summer instructors recognized the value of the continual development of their summer classes and their influence on the entire program. The past refinements are evidence that ongoing revisions are necessary to sustain the success of any program; this evidence fuels their commitment to continually modify courses.

Finding 9

Perceived and actual value can be increased through explicit communication. Strategic planning is critical for a summer program's value to be recognized by students,

parents, and teachers. As the sponsoring organization's mission is honored and a vision is established, the explicit communication of those elements will increase the value of the program (Bell & Carillo, 2007, p. 48). Survey and interview results shared a common theme in that the school must promote the belief that learning is year round and does not stop at the end of the traditional school year. In addition to this idea, a credit teacher noted the consistency of our faculty, both between the school year and summer and from one summer to the next as a value-adding feature. Another teacher shared the observations made and feedback received from the instructional staff at a research facility her class visited. "They recognized that this (was) not just a bunch of kids there to hang out and snorkel which is what they normally get. With the other groups, the teachers…stand off to the side and let the (facility) educators take over; they don't really interact…facilities are impressed that our kids are working and asking higher order questions that mean something to their research…It's really a community of scientists we have developed." Observations such as these, when shared with others, can increase the value of the summer program.

Positive parent feedback is yet another means by which to convey the value of the summer program. The Middle School speech teacher shared both parent and teacher comments of value. Parent feedback to his child's authentic experiences generated feedback that "this is one of the best assignments our kid has ever done in school." After listening to presentations of a school year project, a teacher complimented one of the students for being extremely polished in his delivery. He replied that he had attended speech that summer. Stated the speech teacher during the interview, "It was crystal clear who were the kids who had the speech class and who were the kids who had not."

An enrichment teacher shared a comment that could be of value to new families, especially families with young children. The school's campus is home to students from pre-kindergarten through twelfth grade; all grade levels share many of these facilities. Whereas these tangible resources are an asset, the size of the school is overwhelming to some. New students who attend summer classes become familiar with the campus, the teachers, and classmates when the general tempo of the school is slower and the number of people on campus is smaller. Comments to this effect made by parents of new students can add value to the importance of attending summer classes. Another enrichment teacher shared the importance of following the school's mission and the value that is added by doing so. She appreciates the freedom and administrative support to teach and model Christian values throughout her classes.

Teachers interviewed and responding to surveys also spoke to the value of summer through a parent perspective. "I think one of the biggest things that I think is great about the summer program is that there's something for every parenting philosophy….if I want my child to do something physical, structured play, I have that opportunity. If I'm a parent who believes that year round education is the way to go, I can choose course offerings for my child in a way that we don't have to worry about that summer drain." He continued to say, "the best part about our summer program is the variety of things (and) the quality of the programs." Parents can select the experience desired for their child. Two credit teachers shared the value of offering *Advanced Composition* in two formats, one on campus and the other online. Both stated the value of each and the importance of continuing to offer the two options.

While reviewing results from the accreditation self-study survey and the summer instructor survey as well as interview transcripts, the researcher discovered that some individuals were not aware of several value-adding aspects of summer that are already in place. One was the recommendation to have a full-time nurse on duty during the summer. The school nurse has been full-time for several summers and, since the beginning of the summer program, the athletic trainers have also been on duty. This information was added to the summer brochure.

One instructor suggested allowing Upper School students to assist the teachers. These student may be assistants from the school year and/or students earning community service hours. Upper School students have assisted summer teachers for many summers and in many capacities. Table 4.10 summarizes the number of on-campus summer community service hours earned since 2010. By ensuring summer teachers are aware of this practice, the school's commitment to the mission's pillar, developing future leaders, may be illuminated; added value could be the result.

Additional value-adding items suggested by teachers are addressed each summer and are not always resolved. One frequent suggestion from the surveys was to offer more enrichment classes for our youngest students and Middle School students as well as more credit courses for the Upper School students. By explaining the past actions, current school policy, and the rationales related to these topics, value may be added in one of two ways. By informing the teachers of the history, they can either be better equipped to respond to questions related to these topics and/or share their ideas for addressing and possibly resolving these issues.

More widespread marketing throughout surrounding areas was also suggested as an effective way to advertise the school's opportunities thereby creating interest from potential families. Taking active steps to expand advertising as well as informing the teachers that approximately ten percent of our summer students are not currently enrolled during the school year are two means by which to add value to the program.

Commendations shared through the accreditation self-study overlapped with similar comments within the researcher-administered survey and interviews conducted with summer teachers. Teachers believe critical elements add value to the summer program. These elements include preparation for the following school year, enriching field trips, a wide array of course topics, small classes, a safe, caring school environment, and continuity of learning.

Recommendations included more offerings for all ages, earlier release of the summer brochure, and the creation of a full-time summer leadership position. The size of the summer program now warrants such a position. In terms of their professional practice, summer teachers would like more feedback regarding their summer instruction.

Teachers from all academic divisions and athletics recognized the value of the summer program and are interested in its continued development. Successful design and implementation of summer programs depend upon teacher input. As stated in this study's literature review, Fullan's classical change theory (2006) described contexts in which innovation is encouraged and celebrated. Communities of practice, such as this summer program, provide a context in which teachers can share resources and ideas. Transformative leadership is evidenced as teachers alter the current status by "developing

a new vision for summer school and creating a new standard for academic integration, teacher leadership, and community engagement" (Kelleher, 2003, p. 22).

Summary

As stated in the purpose of this study, the current status of an independent school's summer program was examined through data gathered from the program's archives, results from an accreditation self-study survey, a researcher-administered survey, and interview transcripts. Each of the study's three research questions were addressed and connected to the nine findings.

Summer instructors shared their beliefs and evidence that theory-based instructional designs effectively support the mission of the school by promoting the acquisition of greater content knowledge and development of attitudes that inspire lifelong learning. The summer instructors value opportunities to dialogue with colleagues from other divisions and subject areas. There is interest to extend these opportunities into learning communities and steering committees dedicated to the ongoing refinements and growth of the summer program. Finally, explicit communication of this program's existing value-adding features must increase in order to ensure school employees as well as current families and members of the neighboring communities are aware of the benefits and opportunities.

This study's problem statement detailed beliefs that may minimize the value of a summer program. These beliefs included lack of alignment with the school year, classes intended solely for course recovery, and programs that are unorganized, lack variety, and limited to a narrow audience. Although these specific beliefs do not accurately describe the program examined in this study, similar ideas may develop when communications fail

to explicitly convey value and opportunity. The findings of this study were utilized to strategically plan the next step; these recommendations appear in the following chapter.

CHAPTER FIVE

CONCLUSIONS

This case study examined a summer program that has been sponsored for the last twenty-five years by an independent school located in the southeastern United States. The most recent ten years of archived quantifiable data were analyzed to communicate the enrollment history; trends were studied to determine possible causes of significant changes.

All employees were invited to complete an online survey generated by an in-house accreditation self-study team; questions sought commendations and recommendations for this summer program. Those who have offered summer classes were invited to complete an additional online survey; instructors representing a cross section of the summer faculty were invited to participate in one-on-one interviews with the researcher. The surveys provided both quantitative and qualitative data whereas the interviews were strictly qualitative. The results from the quantitative and qualitative data guided the researcher in determining how the school's mission was honored in this program, how intentionally summer classes were aligned to the school-year curriculum, evidence of theory-based instructional elements, and, lastly, the opportunities for collegial discussions leading to professional growth, opportunities for teacher leadership, and program refinements.

Interpretation of Findings

Three research questions guided this study; one related to student learning, another to collegial work teams, and a third addressed adding value to this summer

program. Each question will be discussed in terms of conclusions and outcomes based on data analysis and supporting research.

Research question one. How do theory-based instructional designs effectively support the mission of the school by promoting the acquisition of greater content knowledge and development of attitudes that inspire and sustain a student's desire to embrace learning through a wide-variety of summer opportunities?

Conclusions and outcomes. Instructional designs based on individual learning theories are utilized in the planning and delivery of summer classes. The researcher-designed survey included seven instructional design elements as choices; these were immersion, collaboration, authentic experiences, inquiry, reflection, critical thinking, and problem solving. The option of 'other' was the final item. The results were organized according to categories.

Categories within this study referred to the three major groups of instructors represented in the surveys. These included teachers of credit courses, enrichment classes, and athletic camps. The academically-focused semester credit courses, offered by Upper and Middle School teachers, include options such as *Advanced Composition*, *Speech, Personal Fitness*, *Humanities*, *Logic and Semantics*, *Marine Research*, *Robotics and Engineering*, and *Introduction to Computer Programming*. See Appendix L for the history of credit classes offered.

Enrichment courses are offered in the school's three academic divisions; the greatest number of offerings was found in the Lower School. This category included content-based classes related to math, science, language arts, technology, and the arts

along with non-academic options such as leadership, fitness, cooking, crafts, and recreation.

The third category, athletics, included camps devoted to skill development and sportsmanship within organized sports recognized as varsity teams by this school. Primarily Lower and Middle School students attend these camps; Upper School students (athletes) are involved as mentors.

Critical thinking and collaboration. Based on the researcher-designed survey, critical thinking and collaboration were the two instructional designs most valued and frequently employed by instructors in the three categories. Although these designs are evident within the school year, the pace of summer classes lends itself to more activities encouraging critical thinking and opportunities for ongoing collaboration. The social aspect of collaboration fosters the habits and attitudes that are critical to students developing ownership of their learning and, ultimately, a dedication to self-learning (Johri & Olds, 2011; Mohr-Schroeder, Miller, Little, Schooler, et al. 2014). Situated learning theory provides the lens through which one can see the long-term value of focused, scholastic interaction as students apply current knowledge to novel situations (Costa & Kallick, 2008; Johri & Olds, 2011). By collaboratively thinking critically about a situation, students become more confident in their abilities and understandings; they are willing to take responsible risks for the sake of advancing their individual and group cognitive development (Costa & Kallick, 2008, pp. 186-187). Athletic coaches responding to the survey selected collaboration and critical thinking as vital elements in skill and team development as well as successful competitive events. As instructors from

the three categories, each representing unique contexts, recognized the value of these elements, one can appreciate the transferability of critical thinking and collaboration.

Authentic experiences and problem solving. By blending collaboration and critical thinking with solving problems in authentic experiences, students become even more engaged in their current learning and, ultimately, in developing lifelong interests and passions. Instructors surveyed found authentic learning and problem solving as critical instructional design elements within their summer classes. These elements may be more evident in science-based classes. The variety of Upper School science credit courses has expanded to include relevant problem solving within authentic experiences.

Similar to science enrichment programs offered at Duke University where instructors provide experiences based on the 5E learning cycle of recursively engaging, exploring, explaining, elaborating, and evaluating (Sykes & Schwartz-Bloom, 2008, p. 78), students incrementally construct their conceptual understandings through authentic experiences within topics of interest. Student interests and attitudes are positively impacted; summer opportunities are instrumental in inspiring and sustaining students' desire to embrace continued learning.

Inquiry. Inquiry, an element of service learning, supports the value of process in creating knowledge (Coghlan & Brannick, 2014). Within the three categories of instructors surveyed, the credit teachers represented by the Upper School and Middle School faculty saw more value in inquiry than the Lower School teachers and athletic coaches. Inquiry is fostered by research, a major component of the credit courses. Although Lower School academic enrichment classes, specifically those with a math or science focus, incorporate inquiry which relies heavily on questioning and seeking

understanding (Coghlan & Brannick, 2014), the lower percentage of enrichment classes intentionally incorporating inquiry may be due to the number of recreation-based classes offered in Lower School. The Middle and Upper School focus is more academic (credit-based) whereas Lower School offers a relatively equal distribution of academics and recreation. The enrollment history of Lower School enrichment classes found in Table 4.7 displays this balanced distribution between academically based courses and classes designed for recreation and fun.

Immersion and reflection. Though the smallest percentage represented within the three categories, primarily credit and enrichment teachers embraced immersion and reflection. One respondent from athletics selected immersion and, although this appeared to be insignificant, this coach may lead more than one sport camp thereby equating to greater value than what was suggested in the data.

A deeper investigation of immersion through simulations and gaming experience revealed multiple levels based on experiential qualities (Brown & Cairns as cited in Dahl, 2013). The lowest form, engagement, is limited to one's commitment to time, attention, and effort. When affect is incorporated, the level of immersion reaches engrossment. Like Csikszentmihalyi's flow (1990), one loses the sense of time. Only when one is totally immersed is it possible to gain a sense of reality within the experience (Dahl, 2013, p. 94). Without an understanding of each instructor's perception or definition of immersion, this research is limited to the lowest level of engagement. As instructors recognize the higher levels, the value of immersion may increase.

Reflection is critical in making meaning that leads to understanding, a focus of academically based courses. Thinking about what one knows (reflection), in conjunction

with self-regulation (managing how one learns) defines metacognition or thinking about one's own thinking. Through reflections, students develop an understanding of what they do and do not know and what they want to know. Explicitly taught as a critical reading strategy within this school's lower division, reflection develops to a more natural practice by the intermediate grades (Jaleel & Premachandran, 2016, p. 165). Student thinking becomes increasingly more visible by the time they are participating in credit classes; the summer instructors were keenly aware of how students build understanding of course expectations and research topics. This increased awareness by credit course instructors was implied by the survey results.

Preparing students for college and lifetime learning. These instructional design elements, although incorporated uniquely within each of the three categories, are critical for each student's preparation for the future. Their application supports the school's mission, specifically the capstone pillar, by "preparing students for college and lifetime learning through academically challenging programs and affirming competitive experiences" (School mission statement). As summer instructors ensure aspects of learning, both content and process, are visible, students are mindful of their strengths and preferred learning strategies. With this understanding, students are able to transfer acquired and highly developed understandings to the new and unique contexts and situations they are likely to encounter in their lifetime.

Outcomes related to leadership. Developing future leaders is another pillar of the school's mission. Service and leadership opportunities were found within specific summer course offerings in the Lower School and Middle School; the number of

community service hours earned within the summer program by Upper School students provided evidence of service and leadership.

Transcripts from an interview with a Lower School teacher included references to developing leaders in her grade level introduction class as well as a class designed to serve individuals within the local community. Students attending summer classes become familiar with expectations and are thereby able to assist or lead their peers during the first days of the school year. Student participation in classes designed to assist others within the community create an awareness of service and its role in one developing as an effective leader.

The interview with the Middle School leadership teacher included several references to immersion in both instruction and experiences. Reflection, specifically related to authentic experiences within a local mission, encouraged students to consider the qualities of a leader that may maximize his/her short-term and long-term effectiveness within an authentic context. In terms of personal development, students in this summer class are encouraged to reflect inwardly and understand why such ongoing reflection is critical to one's development into an honorable and effective leader. According to Bowman (2010), students immersed in authentic service experiences tend to engage in reflection regularly and frequently; immersion and reflection are instrumental in fostering significant service learning outcomes.

Upper School students emerge as leaders through opportunities made available in this summer program. The decline in athletic camp participation by older students, as shown in Table 4.9, can be explained by the number of community service hours students earned within the summer program. Upper School students have been guided through

summer classes, school-year mentors, and teacher example to welcome and accept leadership opportunities. Upper School students are able to directly apply their knowledge and understanding of leadership within the school community; this was predominantly within the athletic camps. Leadership and community building symbiotically support one another; both are aligned with patriotism, a pillar of the school's mission that each member of the school's community is driven to inspire.

Honoring the mission statement. "Within an atmosphere of love, concern, and mutual respect, (this school) is committed to instilling Christian values, inspiring patriotism, developing future leaders, and preparing students for college and lifetime learning through academically challenging programs and affirming competitive experiences" (LHP mission statement). The results of this study provided evidence that this summer program incorporates theory-based instructional designs throughout courses and opportunities in order to effectively support the mission of the school by promoting the acquisition of greater content knowledge and development of attitudes that inspire and sustain a student's desire to embrace learning.

Research question two. What structures, supports, and incentives should the school have in place to foster the development and build the capacity of collegial teams committed to the design and analysis of a summer curriculum aligned with the school year?

Conclusions and outcomes. As shared in the collected data, teachers appreciate opportunities during the summer to dialogue with a more diverse group of colleagues, both full-time and adjunct instructors. A less rigid schedule and smaller classes allow time for teachers to meet with others that they rarely see during the school year. The

noted benefits include discussions about curriculum, instructional strategies, and student needs; all are conversations that lead to building the capacity of collegial teams committed to the design and analysis of a more closely and intentionally aligned summer and school year curriculum. These spontaneous communities of practice demonstrate social learning theories that emphasize a mutually held purpose within the group. In this instance, common interests and the commitment to positively impact the learning experiences of and opportunities for their students draw summer instructors to one another.

Collegiality in theory and action. A learning organization is developing as teachers capture opportunities to dialogue with colleagues. Within the summer structure, a more relaxed atmosphere provides opportunities for teachers to expand their knowledge and skills, to improve their practice, and develop as professionals (Darling-Hammond & Rothman, 2011, p. 7). These opportunities may arise during lunch or during breaks. Teachers from different academic divisions may co-teach; this collaborative time for planning and teaching allows instructors to learn from one another. Full-time teachers who do not teach during the summer are able to visit classrooms of their peers in order to observe new instructional strategies and provide feedback to the colleague leading the summer class. On-site professional development offered during the summer may incorporate lesson studies in which a trainer meets with teachers to provide an overview of the lesson, present the lesson within a summer class, and then reconvene with teachers to discuss their observations of the lesson (Darling-Hammond & Rothman, 2011, p. 37). Professional development, such as these examples, positively influences teacher practice that builds student engagement and performance (Nadelson, 2015, p. 23).

Summer's structure supports the perspective of a learning organization, namely adaptability (Senge, 1990, p. 766). Educators, like the students they teach, possess a natural impulse to learn and expand their capacity. Learning organizations embrace generative and adaptive learning. This recursive practice of creating and coping is possible through on-going experimentation and actionable feedback. The conditions created by this summer program foster the development and communication of new knowledge (Wheatley, 2006, p. 110). The professional involvement of instructors from both summer and school year is transformative in that individual and organizational capacity are increasing (Senge, 1990, p. 768).

Survey responses confirmed not only the teacher appreciation of these collegial discussions but also their desire to join teams assembled to evaluate the current practices, policies, and effectiveness of the summer program in order to influence future refinements. As this survey was distributed to only those who have taught within this summer program, their experiences were first-hand. They were also knowledgeable in regards to the school year curriculum and expectations. Transformative leadership serves as a means to change the status quo or deconstruct established practices that are ready to be reconstructed for the future (Shields, 2006, p. 566). Fullan's classical change theory (2006) describes this context and can be directly applied to this setting. Capacity building is possible and welcomed by the educators within this school's school year and summer communities. As teachers express their individual hopes and dreams, a shared vision can be formalized allowing their joint ownership to sustain the commitment to the design and implementation of ongoing improvements.

Alignment of summer and the school year. Interview transcripts and survey results provided evidence that the teachers embrace the value of aligning the instruction and expectations of summer and the school year instruction. These solidly held beliefs and commitment to their actualization honor the school's mission. Innovation is more apparent as teacher teams become the responsible risks takers that they desire their students to become; positive attitudes abound as teacher collaboration and collegial actions advance the curriculum. The professional practice of each teacher develops more fully, teacher leaders emerge and, as a result, student learning increases.

Supporting collegial teams. Supports must be provided in order for teachers to effectively analyze existing data, properly align instruction, assessments, and expectations, and advance the summer program through innovative course designs and experiences created to prepare students for the lifelong love of learning and capacity to be successful. These supports may include dedicated time, leadership opportunities, or fair compensation. Teachers, like their students, flourish when totally and earnestly engaged in research, analysis, design, and implementation that lead to the wise transformation of an existing, well-established structure.

Based on survey and interview data, the teachers have enjoyed the spontaneous collegial discussions and recognized the benefits of sustaining this practice. In response to researcher questions regarding alignment and program refinements, many teachers expressed an interest in joining this group. Based on John Kotter's revised eight-step process, this interest is an opportunity that "could ignite the hearts and minds" of our teachers (Kotter, 2015). The analysis of the summer program encompassed numerous aspects in addition to the alignment of summer and the school year. The alignment alone

included standards, activities, resources, and assessments. In addition, the analysis should include a careful and intentional study of available data related to student performance. Working within the traditional framework of the school and its summer program, a more agile network may inspire and sustain recommended changes and refinements. The participation and leadership of teachers interested and committed to advancement reflect basic premises of transformative leadership; there will be deconstruction and reconstruction but with equity of voice and eventual organizational transformation (Shields, 2010, p. 563).

Summary. Since its introduction twenty-five years ago, this summer program has evolved to meet the needs of the students, their families, and the school. These changes, however, have been suggested and/or enacted by a small, yet random, group and have not been in response to the findings and recommendations of a formal group. It is time to involve teachers in the continued development of this program.

Research question three. How can explicit communication regarding the variety of classes, intentional alignment of the traditional school year with summer, and commitment to the school's mission increase the perceived and actual value of summer learning and this program while more solidly situating this summer program into the culture of the school?

Conclusions and outcomes. While reviewing survey data, specifically the accreditation self-study survey distributed to all employees, it became evident that not all employees were aware of some features or components of the summer program. Teachers who have not taught in the summer program or have not had children participate in the program recently may have shared suggestions for changes already implemented. While

reading these suggestions, it became apparent that, if individuals within the organization are unaware of these features, then how can we be certain that those outside of the organization are aware of these?

Survey examples. The examples, not directly related to the quality of instruction, included the need for a full-time nurse on campus during summer programs and allowing students outside of the current enrollment to attend classes. The summer staff includes at least two athletic trainers and one full-time nurse, all of whom are part of the year round staff. It is critical for these trained professionals to be readily available as the number of individuals on campus during the summer is similar to that of the school year. In addition to summer classes, athletic practices are scheduled.

Students from the community are welcome to join the summer program; the only exceptions are grade-level introductions to pre-kindergarten and kindergarten and advanced level classes that are by invitation only. The enrollment for the pre-kindergarten and kindergarten is limited since time is devoted to school year routines and references to "when you are in pre-kindergarten/kindergarten here." A young child not attending this school during the year would be confused by this message. Invitation only classes include *Pre-AP Biology*, *Pre-AP Chemistry*, *Pre-AP Physics*, and accelerated Lower School math courses. Each of these classes present specific instruction for students who will be enrolled in accelerated classes during the school year; the content is specific and the pace is fast. In order to accomplish the summer course objectives, the student audience needs to be limited to those who have met school-based criteria and will benefit from this compacted instruction.

Based on these examples, it became apparent that value-adding elements of the summer program may not be evident and therefore not adding the intended value. This raised the question concerning the community's awareness of the quality instruction and learning opportunities. If employees are not aware of the specifics related to staffing and student participation, it cannot be assumed that those in the community are fully aware of the core product.

According to Independent School Management (ISM), summer learning should be viewed as the school year's third semester. Learning is continuous and summer school or summer programs are an integral part of the institution. The accomplishments of school-based collegial teams assembled to analyze current elements and propose refinements will be critical to more solidly situating this summer program into the culture of the school. This intentional posturing should influence the perspectives of employees, new and current families as well as members of the community.

Interviews. Interviews yielded comments regarding the value of new students attending the summer program. Ensuring a new student's smooth transition into this school's community is facilitated through their participation in the summer program. Traditional entry points include pre-kindergarten, kindergarten, and grades six, seven, and nine. An analysis revealed that there was a greater percentage of new students entering these grades who attend summer classes than those that were not transitioning into these grades. Additional value could be added by actively encouraging all new students to attend the summer program.

Parent suggestions. A parent email from May 2014 questioned the summer offerings, general structure, and rates; this parent cited programs offered by schools

similar to the one in this study. This school's response included the rationale for each point under review; providing this information conveyed the message that decisions are made with intention and that suggestions are entertained. The email trail is located in Appendix M.

In response to the parent's suggestion to add multi-week tracks comprised of multiple topics, this summer program added such an option in 2015. The two-week offering allowed students to select from a variety of topics, each to be offered for ninety minutes each day. The fee included lunch and extended care. After numerous man-hours devoted to the logistics involved in planning a selection of topics, schedules of teachers, online registration parameters, and advertising, six students registered for this option. Although a larger enrollment is generally required, the decision to offer the camp was made with the hope of more registering after the deadline or, at the least, learning from this decision.

Attention to customer service drove the decision to experiment with a different class structure. When this summer program began, expectations and structures were designed to fit a set standard. Later, plans such as the two-week program of multiple topics were designed to fit the needs of the audience. The next step, as suggested by Senge (1990) should be driven by latent needs. As a learning organization, this school must uncover what the families (clients) might value but have never experienced or even realized they need (Senge, 1990, p.767).

Summary. As teacher teams and administrators create a vision for the advancement of this program, it will be critical to first revisit and refine what the school wants this program to accomplish. Other schools offer valuable summer experiences, but

faculty members of this team will need to honor the mission of the school and not dilute its effectiveness and overall value by striving to replicate others. By continuing to honor the school's mission, offering classes that incorporate theory-based instructional designs, fostering effective habits and positive attitudes in conjunction with engaging topics, and strengthening the alignment and connection between the school year and summer, the program will gain value. Explicit communication to employees, current families, and interested students within the community is essential to the ongoing advancement, development, effectiveness, and marketability of this program.

Implications

Internal implications. The results of this study may be of value to individuals, schools, and community institutions in terms of, not only summer programs but also, general curricular designs, instructional design teams, and institutional communication.

The primary group of individuals to benefit from this study will be the students. Those who attend the summer program experience quality instruction intentionally incorporating theory-based instructional designs that promote greater cognitive development and foster lifelong habits and attitudes critical to authentic engagement and ownership of one's learning. Ongoing evaluation conducted by collegial teams will be instrumental in monitoring course designs and ensuring alignment with the school-based standards. Continual refinement will ensure learning experiences prepare students for lifetime learning through academically challenging programs and affirming competitive experiences.

Students who do not attend the summer program benefit indirectly from the summer refinements. Traditional courses evolve as new courses are introduced; the

quality of each course hinges on the research and planning of the teacher teams tasked with ongoing instructional refinements. These practices will broaden and deepen the knowledge base of these teachers; their professional practice will develop. Their developing professional practice will transfer to their individual classrooms and all students with whom they have contact, whether during the summer or during the school year, will benefit from this professional growth.

The teams of teachers assembled to refine summer structures, thereby advancing student learning, will benefit as opportunities for teacher leadership emerge. Initially sharing ideas and observations, member of this group will individually and collectively construct meaning. The social aspect of this practice will facilitate transfer of new knowledge and practices to other contexts. An increase in available data will further advance their mission to refine and transform current structures. Analyzed data may be gathered from current classes; longitudinal data will increase the robustness of the data analysis.

This school's culture encourages the building of professional and program capacity; Fullan's classical change theory (2006) affirms this practice. Appreciative inquiry further advances this praxis by stimulating the questions that need to be posed and reflectively answered in order to influence gradual change (Cooperrider as cited in Coghlan & Brannick, 2014; Shields, 2010). Transformative leaders are willing to take risks and are able to form critical professional relationships in order to actualize a concrete vision (Shields, 2010, p. 570).

The sponsoring organization of this summer program could also benefit as structures within its realm are continually evaluated and refined. This dynamic nature can

solidly situate this program within the community and sustain the program's effectiveness and longevity. By supporting effective teams of teachers committed to program advancement, barriers to progress and valid transformation are minimized or removed.

External implications. The scope and depth of this study's findings, substantiated by the available data and connections to research, ensure the transferability of the program's design to other contexts. The qualities of effective summer programs are universal in that there should be a vision, intentional planning, and ongoing review. The vision of another organization's summer program should be consistent with its overarching mission.

A focused program needs a specific identity and should not strive to replicate the design of another; a target audience also needs to be identified. Once these decisions are made, a framework similar to this study's program can be adopted. The theory-based instructional designs are generally accepted; like the study's organization, however, these designs need to be recognized, embraced, and employed by the instructors. Whether the external organization's summer program is in its initial planning stages or undergoing development, a willing team of teachers representing all divisions and content areas needs to be identified as the guiding coalition tasked with researching the current status of the program. These findings, coupled with a vision, will serve as the necessary components of the evolving plan. Organization leaders and support staff must be actively involved in this process. As leaders emerge from the collegial team of teachers, short-term gains should be conveyed to and celebrated by all stakeholders. Sustained

development will lead to organizational transformation and deep, equitable change (Shields, 2010, p. 562).

Recommended Actions

The summer program under study is at a critical juncture as sustained growth drives the program. Complacency must be avoided. The following recommendations, not in order of importance, are supported by current research.

Recommendation one. Continue to design and develop new enrichment classes. Whereas traditional favorites may be offered each year, respond to the interests of the families and stay current with emerging topics. In addition to interest, new topics may possess greater value when presented with compelling research. One such course topic is game design. Although offered in the past, this general concept can be enhanced by explicitly stating this topic provides a valuable context for teaching complex problem solving skills (Akcaoglu, 2014, p. 597).

Rationale. By incorporating real-world situations such as environmental issues, students increase their content knowledge and problem solving skills through highly motivating and engaging activities (Akcaoglu, 2014, pp. 595-598).

Recommendation two. Beginning with proposals for the next summer, class descriptions should include a general overview of the class along with specific examples of instruction and intended academic and social/behavioral outcomes.

Rationale. Some class proposals have been copied from the previous year's information. Although traditional classes are valued and, as evidenced in historic performance, remain in demand by students and their families, they should be constantly refined. Summer is a prime time for students to be engaged in quality learning

experiences (Parsley & Ristvey, 2014, p. 22). Activities and practices should evolve and continue to meet the educational needs of the students; these needs continue to change as technology and other resources advance.

Recommendation three. Proposed classes must be aligned to school-based standards and school instruction. To ensure year round consistency and more solidly situate this program within the school's culture, all teachers proposing summer courses should explicitly indicate school-based standards, both content and process, that are addressed in proposed classes. Standards that are formally assessed must be identified along with the assessment method. Recreation-based classes may not directly address academic standards but behavioral expectations intended to honor the school's community and mission exist.

Rationale. Alignment between the school year and summer has been identified throughout this study as a critical element. According to the Institute of Education Sciences (IES), quality summer programs align content standards to the academic standards of the traditional school year (Parsley & Ristvey, 2014, p. 23). At this time, primarily required and credit classes are formally and intentionally aligned to the school year. Although most enrichment classes meet set school-wide expectations, this is not formally documented. This documentation will communicate intentional planning and desired outcomes; the value of the class and ultimately the entire program will increase.

Recommendation four. Explicitly stated evidence of intentionally planned, theory-based instructional elements should be included in the design or refinement of each course. These should be communicated in the course descriptions.

Rationale. Research within this study's literature review and data collected from school-based surveys and interviews support the value of design elements to encourage greater student engagement, increase cognitive development, and foster habits and behaviors critical to lifelong learning and success. The resolution of real world issues requires finely developed critical thinking skills (Costa & Kallick, 2008; Smink, 2007) and collaborative efforts. Social interaction between peers begins with the youngest students and develops through the process of making meaning or refining leadership skills (Lee, 2013, p. 271). Problem solving is the most valuable cognitive skill students need to develop to ensure future success (Akcaoglu, 2014, p. 583). This process, from a cognitive perspective, involves understanding the problem, representing the problem via mental images, planning a solution, and employing this plan (Polya, 1957, as cited in Akcaoglu, 2014). Duke University researchers claim the experiential approach of authentic experiences fosters construction of meaning, problem solving, and decision-making (Pleasants, Stephens, Selph, & Pfeiffer, 2004, p. 17). Inquiry encourages students to explore questions, propose explanations based on observations, conduct investigations, and utilize available data (Parsley & Ristvey, 2014, p. 24). Reflection upon problems is related to increased educational performance (Bowman, 2010, p. 21) and immersion-based learning allows students to learn from each other as exemplars (Bowman, 2010, p. 28). "When teachers make aspects of learning and problem solving visible and help students identify their own strengths and strategies, they can have a lasting impact on how their students learn once they leave their classrooms" (Jaleel & Premachandran, 2016, p. 170).

Recommendation five. Formalize structures to support collegial teams comprised of teacher volunteers interested in further analysis of the summer program's curriculum alignment with the school year.

Rationale. Value will be added to the learning experiences of participating students. Survey responses included teacher appreciation of frequent collegial discussions focused upon student needs, effective strategies, and curriculum development. Many of these responses were coupled with the request to be involved in curriculum development for summer classes. Teams comprised of multiple divisions and content areas should be involved in the development of new courses and ensuring all classes, traditional and new, align with school year expectations. This continuity with the school year facilitates student learning and more solidly situates the summer program into the school's overarching community.

Recommendation six. Offer on-campus professional development opportunities during the summer. These may be led by teachers or outside organizations.

Rationale. Adult learning theory states that humans learn best when studying topics they deem relevant (Conger & Benjamin as cited in Gallo, 2006, p. 681). One such topic may be STEM content and scientific inquiry. As this school's faculty is becoming more intrigued by project-based learning opportunities, teachers may be interested in developing their own knowledge base related to science. This may be accomplished through the instruction of an off- or on-campus facilitator.

Teachers may observe classes in session and perhaps co-teach a lesson (Nadelson, 2015, p. 31). Immediate feedback from the facilitator as well as the teacher visited could be readily available. The teacher participating in the professional development

opportunity may then design lessons for the school year and, when presented during the school year, the co-teacher from the summer may observe the lesson and provide feedback. Professional development is intended to develop one's professional practice. Although not professional development in a traditional sense, classroom observations by administrators provide actionable feedback to advance the professional practice of faculty members. Visits and follow-up discussions with administrators during summer classes can be beneficial.

Unique learning opportunities for teachers exist during the summer. More time is available for study and lesson development while visiting other classes is not complicated by conflicting teaching schedules.

Recommendation seven. Summer teachers should proactively determine how technology could be utilized with intention in their regular classroom.

Rationale. Instructional specialists work part-time to assist teachers in the incorporation of technology into their curriculum and, although this could be accomplished during the school year, the summer provides more time for the instructional specialists to work with teachers and their classes. Grades are not an issue in most summer classes so teachers are more willing to risk the integration of new technologies into their instruction.

Recommendation eight. Define structures to ensure student data from the school year are available to summer teachers. Conversely, ensure summer data are provided to school year instructors.

Rationale. A predominant value of a summer program is the provision of continuity of learning. Students involved in summer learning tend to not experience the

same regression or learning loss as those not involved in academic summer programs. In order to sustain continuing growth, summer teachers must be informed as to each student's school year performance. This uninterrupted and seamless progression maximizes student learning and positions the students for the upcoming school year (Beer, Le Blanc & Miller, 2008; Chin & Harrington, 2009; Costa & Kallick, 2008; Erdogan, 2011; Fello, 2010; Hirsch et al., 2011; Johri & Olds, 2011; Smink, 2007).

Recommendation nine. Explicitly communicate evidence of the school's mission in action throughout the summer program. This communication should include the intentional alignment with the school year.

Rationale. Members of the school's community as well as neighboring communities should be aware of a well-designed summer program's value and commitment to excellence. This awareness builds interest and increases enrollment and revenues for the school.

Dissemination of recommendations. As summer offers opportunities for discussion and school year planning, sharing results and recommendations from the study can be shared when this program is in action. Administrators of the three academic divisions and athletics need to be informed of this study's findings. Professional courtesy dictates sharing these findings and recommendations with administrators before meeting with the teachers. The teachers will be in the midst of the summer experience; this will be a prime time to engage in discussions and recommendations.

Recommendations for Further Study

This study's surveys and interviews were limited to current faculty members; a more robust study would include perceptions of students and parents. Course evaluations

provide immediate feedback but surveying students several months after the summer class concludes could provide insight as to the long-term effectiveness of the course. Questions may include how the summer experience prepared them for the school year and if they perceive themselves as better prepared than peers who did not participate in summer classes.

Students may also be asked to share their awareness of instructional elements such as immersion that are incorporated into the course design. Do students see a strong correlation between one or more elements and their level of performance or understandings?

Parent perceptions add a dimension to the evaluation of a program's effectiveness. Understanding their perceptions and noting their observations can provide insight into potential refinements or clarification in communication.

A longitudinal study of students attending summer classes over multiple summers may reveal the benefits of summer learning and evidence of this program's success in providing enriching opportunities. As teams of teachers align the school year with summer, common assessments can be administered to determine student growth over one summer as well as multiple summers.

Conclusion

The purpose of this study was to examine the current practices of a summer program offered by a southeastern pre-kindergarten through grade twelve independent school. The examined areas included the variety of opportunities for a range of ages and interests, intentional alignment to school-based standards and curriculum, collegial discussions to refine the connection between summer and the school year, and evidence

of the school's mission within the course and program planning, implementation, and evaluation.

This study offered data analysis and findings critical to the positive evolution of this summer program. As stated earlier in this study, a comprehensive review of the summer program, other than financial performance, has never been conducted. Teacher reviews have been informal and decisions have often been tactical rather than strategic.

The research questions were intentionally designed to address the most important factors within this program, the student's interaction with the curriculum, ongoing collegial discussions amongst teachers, and the role of the school's mission in guiding these elements and communication with the community.

The findings supported the value of intentionally planned instructional elements in order to maximize student engagement, positively impact cognitive development, and foster the adoption of valuable habits and positive attitudes. Summer learning can be welcomed by students of all ages and viewed as a life-changing opportunity. The earlier works of Dewey, Lave, and Wenger (Johri & Olds, 2011, p. 160) are enduring as evidenced in teacher feedback addressing collaboration, authentic learning experiences, and problem solving. Summer learning is not limited to course recovery and programs do not have to be limited to a small range of interests and age groups.

Teachers seek and welcome meaningful collegial discussions; these conversations can be spontaneous and with colleagues often not seen during the school year. Educational institutions must be committed to maximizing these collegial opportunities and the learning from these discussions. The wide range of grade levels within the school creates a context in which teachers can be actively engaged in a student's plan of study

for fourteen years, from pre-kindergarten through grade twelve. Discussions are not limited to today's needs; teachers are able to learn and understand future expectations. The teachers of older students understand the expectations and accomplishments during earlier grade levels; there is a clear picture about their forthcoming students' preparation. The study of this summer program provided evidence of this value and the marked advancements that are possible for students.

In order for any type of program to be successful, a concisely written mission statement is necessary. The community members of the sponsoring organization must embrace this mission and illuminate its evidence whenever possible. This common statement clearly conveys the goals and commitment of the organization; there is no question as to its purpose. Like a mission statement, elements of a program must be clearly conveyed to those within and outside the organization. The authentic value solidly establishes the program in the community; it is highly regarded for its accomplishments and the impact it has on the current and future successes of the students.

REFERENCES

References marked with an asterisk indicate studies included in the meta-analysis.

Ajogbeje, O. J., & Alonge, M. F. (2012). Effect of feedback and remediation on students' achievement in junior secondary school mathematics. *International Education Studies 5*(5), 153-162.

Akcaoglu, M. (2014). Learning problem-solving through making games at the game design and learning summer program. *Association for Educational Communications and Technology, 62,* 583-600. doi: 10.1007/s11423-014-9347-4

Alexander, K., Entwisle, D., & Olson, L. (2007). Lasting consequences of the summer learning gap. *American Sociological Review, 72,* 167-180.

Anfara, V., & Mertz, N. (2006). *Theoretical frameworks in qualitative research.* Thousand Oaks, CA: Sage Publications.

Bandeira de Mello, V., Bohrnstedt, G., Blankenship, C., & Sherman, D. (2013). Mapping state proficiency standards onto naep scales: Results from the 2013 naep reading and mathematics assessments. *National Center for Education Statistics,*

Beer, G., Le Blanc, M., & Miller, M. (2008). Summer learning camps: Helping students to prepare for college. *College Student Journal, 42*(3), 930-938.

Bell, S. R., & Carrillo, N. (2007). Characteristics of effective summer learning programs in practice. *New Directions for Youth Development, 2007*(114), 45-63. doi: 10.1002/yd.212

Belmont Report (1979). Retrieved from http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Berlin, R. A., Dworkin, A., Eames, N., Menconi, A., & Perkins, D. F. (2007). Examples of sports-based youth development programs. *New Directions for Youth Development, 2007*(115), 85-106. doi:10.1002/yd.225

Bernhardt, V. (2004). *Data analysis for continuous school improvement.* Larchmont, NY: Eye on Education.

Bloomberg, L. D., & Volpe, M. (2012). *Completing your qualitative dissertation: A road map from beginning to end*. Thousand Oaks, CA: Sage Publications.

Borman, G., Benson, J., & Overman, L. (2005). Families, schools, and summer learning. *The Elementary School Journal 106*(2), 131-150.

Bottorff, A. K. (2010). *Evaluating summer school programs and the effect on student achievement: The correlation between stanford-10 standardized test scores and two different summer programs.* Retrieved from http://search.proquest.com/docview/853648454?accountid=12756. (853648454).

Bowman, N., Brandenberger, J., Mick, C., & Smedley, C. (2010). Sustained immersion courses and student orientations to equality, justice, and social responsibility: The role of short-term service training. *Michigan Journal of Community Service Learning. 17*(1), 20-31.

Burgin, J. S., & Hughes, G. D. (2008). Measuring the effectiveness of a summer literacy program for elementary students using writing samples. *Research in the Schools, 15*(2), 55-64.

Carlson, J. (2010). Avoiding traps in member checking. *The Qualitative Report, 15*(5), 1102-1113.

Chin, C. S., & Harrington, D. M. (2009). Innerspark: A creative summer school and artistic community for teenagers with visual arts talent. *Gifted Child Today, 32*(1), 14-22.

Christenson, S. L., Reschly, A. L., Appleton, J. J., Berman, S., Spanjers, D., & Varro, P. (2008). Best practices in fostering student engagement. *Best practices in school psychology, 5*, 1099-1120.

Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organization* (4th ed.). Los Angeles, CA: Sage Publications.

Conger, J. & Benjamin, B. (1999). Developing the individual leader. In J. V. Gallos (Ed.), *Organization Development* (pp. 681-703). San Francisco, CA: John Wiley & Sons, Inc.

Cooper, H. (2003). *Summer learning loss: The problem and some solutions* (ERIC Digest No. 5) Retrieved from ERIC database (ED475391)

*Cooper, H., Charlton, K., Valentine, J., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic and narrative review. *Monographs of the Society for Research in Child Development, 65*(1), 1-118.

Cooper, J. (2014). Defining qualitative research. (PowerPoint). *Presentation from The University of New England EDU 802.* Portland, ME.

Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research, 66*(3). 227-268.

Corley, A., & Thorne, A. (2006). Action learning: Avoiding conflict or enabling action. *Action Learning: Research and Practice, 3*(1), 31-44.

Costa, A., & Kallick, B. (2008). *Learning and leading with habits of mind*. Alexandria, VA: Association for Supervision and Curriculum Development.

Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Pearson Education.

Creswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches.* Los Angeles, CA: Sage Publications, Inc.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience.* New York, NY: Harper Collins Publishers.

Dahl, T. I. (2009). The importance of place for learning about peace: Residential summer camps as transformative thinking spaces. *Journal of Peace Education, 6*(2), 225-245.

Dahl, T., Sethre-Hofstad, L., & Salomon, G. (2013). Intentionally designed thinking and experience spaces: What we learned at summer camp. *Learning Environments Research 16*(1) 91-112.

Darling-Hammond, L., & Rothman, R. (2011). Teacher and leader effectiveness in high-performing education systems. *Alliance for Excellent Education.*

Dearman, C. T. (2011). *The impact of collegial teaming on high school and university instructors: A descriptive multi-case study.* Retrieved from https://une.idm.oclc.org/login?url=http://search.proquest.com.une.idm.oclc.org/docview/1041246869?accountid=12756

Donohue, N. C., & Miller, B. M. (2008). Stemming summer learning loss. *The New England Journal of Higher Education, 23*(1), 19-20. Retrieved from http://search.proquest.com/docview/196904094?accountid=12756

Donovan, G. G. (2009). *A quantitative study of the summer slide in science of elementary school students.* Retrieved from http://search.proquest.com/docview/305169142?accountid=12756. (305169142).

Dweck, C. (2006). *Mindsets.* New York, NY: Ballentine Books.

Erdogan, M. (2011). The effects of ecology-based summer nature education program on primary school students' environmental knowledge, environmental affect and responsible environmental behavior. *Educational Sciences: Theory And Practice, 11*(4), 2233-2237.

Fairchild, R. (2012). Why and how communities should focus on summer learning. *National Civic Review, 100*(4), 13-20.

Fello, S. E. (2010). Becoming S.T.A.R.S.: Students and teachers achieving reading success. *Reading Improvement, 47*(1), 18-29.

Fullan, M. (2006). *Change theory: A force for school improvement.* Retrieved from http://www.michaelfullan.ca/media/13396072630.pdf

Garland, E., & Garland, H. (2006). Preparation for high school chemistry: The effects of a summer course on student achievement. *Journal of Chemical Education 83*(11), 1698-1702.

Giles, D., & Eyler, J. (1994). The theoretical roots of service learning in john dewey: Toward a theory of service-learning. *Michigan Journal of Community Service Learning, 1,* (1), 77-85.

Gold, K. M. (2002). *School's in: The history of summer education in American public schools.* New York, NY: Lang.

Hany, E. A., & Grosch, C. (2007). Long-term effects of enrichment summer courses on the academic performance of gifted adolescents. *Educational Research and Evaluation. 13*(6), 521-537.

Hirsch, L. S., Berliner-Heyman, S., Cano, R., Kimmel, H., & Carpinelli, J. (2011). Middle school girls' perceptions of engineers before and after a female only summer enrichment program. *Frontiers in Education Conference.* Retrieved from http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6142990&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D6142990.

Hoge, B. (October, 2013). *Authentic learning through gbl: Using inquiry and pbl strategies to accomplish specific learning outcomes through smart games in formal and informal settings.* Paper presented at the International Association for Development of the Information Society (IADIS) International Conference on Cognition and Exploratory Learning in the Digital Age (CELDA) Fort Worth, TX.

Independent School Management (2015). Summer program: The third 'semester' – Lower and middle school. *Ideas & Perspectives Online: ISM research, theory, and analysis. 40*(5). Retrieved from https://isminc.com/ideas-and-perspectives/vol-40/no-5/summer-program-the-third-semesterlower-and-middle-school

Independent School Management (2015). Summer program: The third semester – Three administrative considerations. *Ideas & Perspectives Online: ISM research,*

theory, and analysis. 40(7). Retrieved from http://isminc.com/ideas-and-perspectives/vol-40/no-7/summer-program-the-third-semesterthree-administrative-considerations

Institute of Education Services, What Works Clearinghouse. (2015, March). *Developmental Summer Bridge Programs.* Retrieved from http://ies.ed.gov/ncee/wwc/pdf/intervention_reports/wwc_summerbridge_031715.pdf

Jaaman, S. H., Ahmad, R. R., & Rambely, A. S. (2013). Web-based learning as a tool of knowledge continuity. *International Education Studies, 6*(6), 80-85.

Jaleel, S., & Premachandran, P. (2016). A study on the metacognitive awareness of secondary school students. *Universal Journal of Educational Research 4*(1), 165-172.

Johri, A., & Olds, B. (2011). Situated engineering learning: Bridging engineering education research and the learning sciences. *Journal of Engineering Education 100*(1), 151-185.

Karaca, M., Armagan, F., & Bektas, O. (2016). The use of the reflective diaries in science lessons from the perspectives of eighth grade students. *International Journal of Environmental & Science Education. 11*(2), 53-74.

Karahan, E., & Roehrig, G. (2015). Constructing media artifacts in a social constructivist environment to enhance students' environmental awareness and activism. *Journal of Science Education and Technology. 24*(1), 103-118.

Kelleher, J. (2003). Teacher leadership and high standards in a summer middle school. *Middle School Journal 34*(4), 20-26.

Kolb, A. Y. & Kolb, D. A. (2015). Experiential learning theory: A dynamic, holistic approach to management learning, education, and development. *The Sage Handbook of Management Learning, Education, and Development*, 42-68. Retrieved from http://www.researchgate.net/profile/David_Kolb/publication/267974468_Experiential_Learning_Theory_A_Dynamic_Holistic_Approach_to_Management_Learning_Education_and_Development/links/5559122408ae6fd2d826eb12.pdf

Kotter, J. (2012). *Leading change*. Boston, MA: Harvard Business School Press.

Kotter, J. (2015). *8 steps to accelerate change in 2015.* Retrieved from www.kotterinternational.com/ebook/eBook-Final-Copyright-2015. pdf

Kuby, C. (2011). Making space for critical dialogue with 5- and 6-year-olds. *Young Children, 66*(5), 36-43.

Lakonpol, T., Ruangsuwan, C., & Terdtoon, P. (2015). Full length research paper development of web-based learning environment model to enhance cognitive skills for undergraduate students in the field of electrical engineering. *Educational Technology and Communications 10*(21), 2806-2813.

Lee, K., Sullivan, A., & Bers, M. (2013). Collaboration by design: Using robotics to foster social interaction in kindergarten. *Computers in the Schools, (30),* 271-281.

LHPS (n.d.). Retrieved from http://www.lhps.org/lhps/lhp/ABOUTLHPS/MissionStrategicDirection.aspx

Lotter, C., Yow, J. A. & Peters, T. T. (2014). Building a community of practice around inquiry instruction through a professional development program. *International Journal of Science and Mathematics Education 12,* 1-23.

Mbati, L. (2013). Online social media applications for constructivism and observational learning. *The International Review of Research in Open and Distance Learning. 14*(5), 166-185.

McCombs, J. S., Augustine, C. H., Schwartz, H. L., Budilly, S. J., McInnis, B., Lichter, D. S., & Cross, A. B. (2011). *Making summer count.* Santa Monica: RAND Corporation.

McIver, D., Fitzsimmons, S., & Flanagan, D. (2015). Instructional design as knowledge management: A knowledge-in-practice approach to choosing instructional methods. *Journal of Management Education* 40(1) 47-75.

McREL International (2012). *Summer learning losses.* Retrieved from http://www.mcrel.org/about-us/hot-topics/ht-summer-learning

Merriam, S. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey-Bass Publications.

Missingham, B. (2013). Participatory learning and popular education strategies for water education. *Journal of Contemporary Water Research & Education 150*, 34-40.

Mohr-Schroeder, M., Miller, M., Little, D., Schooler, W., Jackson, C., Walcott, B., …Schroeder, D. (2014). Developing middle school students' interests in stem via summer learning experiences: See blue stem camp. *School Science and Mathematics, 114*(6), 291-301.

Nadelson, L. (2015). Who is doing the engineering, the student or the teacher? The development and use of a rubric to categorize level of design for the elementary classroom. *Journal of Technology Education 26*(2), 22-45.

NAIS (n.d.). Retrieved from http://www.nais.org/About/Pages/About-NAIS.aspx

Newman, J., & Hubner, J. P. (2012). Designing challenging science experiences for high-ability learners through partnerships with university professors. *Gifted Child Today*. *35*(2), 102-115.

Nugent, G., Barker, B., Grandgenett, N., & Adamchuk, V. (2010). Impact of robotics and geospatial technology interventions on youth stem learning and attitudes. *Journal of Research on Technology in Education. 42*(4), 391-408.

Parsley, D., & Ristvey, J. (2014). Cosmic chemistry: A proactive approach to summer science for high school students. *Afterschool Matters. 19*, 20-27.

Pleasants, R., Stephens, K., Selph, H., & Pfeiffer, S. (2004). Incorporating service learning into leadership education: Duke tip's leadership institute. *Gifted Child Today 27*(1), 16-21.

Printy, S. M. (2008). Leadership for teacher learning: A community of practice perspective. *Educational Administration Quarterly*. *44*(2), 187-226.

Rand, J. (2013). Action learning and constructivist grounded theory: Powerfully overlapping fields of practice. *Action Learning: Research and Practice 10*(3). 230-243.

Ravitch, S., & Riggan, M. (2012). *Reason & rigor.* Thousand Oaks, CA: Sage Publications.

Redd, Z., Boccanfuso, C., Walker, K., Princiotta, D., Knewstub, D. & Moore, K. (2012). *Expanding time for learning both inside and outside the classroom: A review of the evidence base.* The Wallace Foundation.

Rozelle, J. & Mackenzie, A. (2011). Biology experiences in the summer: Keeping the faucet flowing for all students. *The American Biology Teacher, 73*(8), 449-452.

Santrock, J.W. (2001). *Educational Psychology.* United States of America: McGraw-Hill Companies, Inc.

Scott, C., & Matthews, C. (2012). Slithering into summer. *Science and Children,* 49(8), 56-61.

Senge, P. (1990). The leader's new work: Building learning organizations. In J. V. Gallos (Ed.), *Organization Development* (pp. 765-792). San Francisco, CA: John Wiley & Sons, Inc.

Shields, C. M. (2010). Transformative leadership: Working for equity in diverse contexts. *Educational Administration Quarterly 46*(4), 558-589.

Shyyan V., Thurlow, M., & Liu, K. (2008). Instructional strategies for improving achievement in reading, mathematics, and science for English language learners with disabilities. *Assessment for Effective Intervention 33*(3), 145-155.

Sikes, S., & Schwartz-Bloom, R. (2008). Direction discovery: A science enrichment program for high school students. *Biochemistry and Molecular Biology Education 37*(2). P. 77-83.

Smink, J. D. (2007). Summer learning programs and student success in the global economy. *New Directions for Youth Development, 2007*(116), 35-48. doi: 10.1002/yd.232

Stake, J. E., & Mares, K. R. (2005). Evaluating the impact of science-enrichment programs on adolescents' science motivation and confidence: The splashdown effect. *Journal of Research in Science Teaching, (42),* 359-375.

Varney, M. W., Janoudi, A., Aslam, D. M., & Graham, D. (2012). Building young engineers; TASEM for third graders in woodcreek magnet elementary school. *Transactions in Education,* 55(1), 78-82.

Wenk, M. (2005). What I did on my summer vacation. *English Journal, 94*(6), 42-48.

Wheatley, M. (2006). *Leadership and the new science*. San Francisco, CA: Berrett-Koehler Publishers, Inc.

Winter, E. C. (2005). A modified school year: Perspectives from the early years. *Child Care in Practice, 11*(4), 399-413.

York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership: findings from two decades of scholarship. *Review of Educational Research* 74 (3), 255-316.

Young, A. E., Worrell, F. C., & Gabelko, N. H. (2011). Predictors of success in accelerated and enrichment summer mathematics courses for academically talented adolescents. *Journal of Advanced Academics, 22*(4), 558-577. Retrieved from http://search.proquest.com/docview/1027114923?accountid=12756

Yull, D. (2008). Ethnomathematics and journaling in a multicultural summer enrichment mathematics class. *Research & Teaching in Developmental Education, 25*(1), 54-63. Retrieved from http://search.proquest.com/docview/886546646?accountid=12756

Zvoch, K. (2011). Summer school and summer learning: An examination of the short- and long term changes in student literacy. *Early Childhood and Development, 22*(4). 649-675.

Appendix A

Request to Conduct Study

Dear Mr. Hudson,

The purpose of this letter is to gain your permission for me to complete a research study at (name of school). This study is a partial requirement for my successful completion of a Doctorate in Educational Leadership from the University of New England.

(Name of summer program) will be the focus of this case study entitled "An Examination of an Independent School's Site-Based Summer Program." The 2016 accreditation's self-study team assembled to study auxiliary programs has already shared results of the online survey sent to current employees. The responses include the greatest strengths of the summer program and areas for continuous improvement.

Current teachers, both full-time and adjunct, who have either taught summer classes and/or are proposing classes for 2016 will receive an online survey which, like the self-study survey, will not include identifying information. This survey will ask respondents for evidence within their summer classes of theory-based instructional design elements, our school's mission and vision, alignment with school-based standards, and continuity with the traditional school year. Additionally, the survey will seek their suggestions for fostering collegial teams dedicated to employing professional practices that will create and sustain continuity between the traditional school year and summer instruction.

Teachers who have designed and taught summer classes will be invited to participate in one-to-one interviews that will allow me to gain a greater understanding of their design process, the intended outcomes, evidence of these outcomes, and how this collective experience influences their school-year instruction.

Although already an integral part of (name of school), I believe the results of this study can be utilized to increase the perceived and actual value of (name of summer program. As teachers and administrators gain a greater awareness of instructional design elements, the intentional alignment to our standards and school-year instruction, and our mission in action, we will have a definitive message to explicitly communicate to our students, families, employees, and community. This common message will increase the educational value and marketability of (name of summer program).

I thank you, in advance, for this opportunity and look forward to sharing the findings with you.

Warm regards,

Susan

Appendix B

Permission to Conduct Study

WARREN P. HUDSON
PRESIDENT

November 19, 2015

Susan Keogh

Dear Susan,

I am delighted to give you approval to complete a research case study titled "An Examination of an Independent School's Site-Based Summer Program" at (name of school). I believe this to be a very worthwhile project and look forward to reading your study once it is completed.

Please accept my best wishes as you complete your doctoral program.

Sincerely,

Warren Hudson
President

Appendix C

Notice of Forthcoming Survey

Title of the Research Study:

Examination of an Independent School's Site-Based Summer Program

Dear Colleague,

This is to inform you that you will be receiving a link to an anonymous survey designed to gather information regarding (name of summer program). As a current employee who has either offered a (name of summer program) class or as a current employee who is proposing a class for 2016, you are eligible to participate. The following information will be helpful as you decide whether or not to participate. If you have additional questions, please do not hesitate to contact me.

The purpose of the study is to examine current practices and their influence on the value of (name of summer program). Topics include evidence of our mission, inclusion of theory-based instructional designs, and how summer instruction is aligned to our school-based standards and school-year instruction.

The data will be objectively analyzed and composite results will be shared with school leaders and anyone invited to complete this survey. Results may be used to inform future decisions and program refinements.

There are no known risks involved with your participation as respondents and their responses will not be identifiable. Your privacy will be fully protected and all ethical and professional standards will be honored.

Thank you, in advance, for your consideration in participating in this study. Respectfully, Susan Keogh

Appendix D

Survey Questions

1. How many summers have you taught during (name of summer program)?
    a. 1-4
    b. 5-6
    c. 7-10
    d. 11-15
    e. more than 15
2. Which category best describes your summer class(es)?
    a. Credit
    b. Enrichment
    c. Arts
    d. Athletics
3. Which theory-based instructional design elements are evident in your summer class(es)? Select all that apply.
    a. Immersion
    b. Collaboration
    c. Authentic experiences
    d. Inquiry
    e. Reflection
    f. Critical thinking
    g. Problem solving
    h. Other

4. How does each element selected support our school's mission through your summer class(es)?
5. The most effective school-based summer programs intentionally align with the traditional year's standards and instruction. How would you describe the connection(s) between your summer class(es) and the school year?
6. In what way(s) could these connections be strengthened?
7. How does your participation in (name of summer program) allow or foster opportunities for collegial discussions?
8. How could the school facilitate the establishment and development of teams created to design, implement, and evaluate the alignment of the summer curriculum with the school year?
9. What are some descriptors you might use to convey the value of (name of summer program)?

Thank you for your participation in this survey. Results will be compiled and shared at the conclusion of the study.

Appendix E

Invitation to Participate in Interview

Title of the Research Study:

Examination of an Independent School's Site-Based Summer Program

Dear Colleague,

You are invited to participate in an interview that will allow the researcher to gather information regarding (name of summer program). As a current employee who has either designed a (name of summer program) class or as a current employee who is proposing a class for 2016, you are eligible to participate. The following information will be helpful as you decide whether or not to participate. If you have additional questions, please do not hesitate to contact me.

The purpose of the study is to examine current practices and their influence on the value of (name of summer program). Topics include evidence of our mission, inclusion of theory-based instructional designs, and how summer instruction is aligned to our school-based standards and school-year instruction. The data will be objectively analyzed and composite results will be shared with school leaders and anyone invited to participate in an interview. Results may be used to inform future decisions and program refinements.

Interviews will be audio recorded for the researcher's use only. There are no known risks involved with your participation as responses will have no bearing on your professional responsibilities and employment. Your privacy will be fully protected; your identity and information gathered during this study will remain confidential. All ethical and professional standards will be honored.. Should information be published or

presented at educational conferences, any and all identifying information will be removed.

Thank you, in advance, for your consideration in participating in this study.

Respectfully,

Susan Keogh

Appendix F

Interview Questions

The actual interview questions, depending of the role of the teacher interviewed, may include the following:

1. What was your inspiration for creating (name of course)?
2. What do you see as the major objectives of the course?
3. What are your expectations for your students?
4. Looking back to past summers,
5. Over the course of the class, did you see changes in the manner in which students analyze questions and problems?
6. Was there a change in their critical thinking?
7. By the end of the course, were the students more reflective while working their way through a question or problem?
8. Were you able to pose higher-order questions more frequently?
9. If so, do you believe that the structure of this class provided more opportunities for students to develop their thinking and rationale for their responses?
10. Did you notice collegial relationships developing between the students?
11. What were, and for the future, are your hopes for the students to take away from this experience?
12. Have you been able to transfer any of your summer teaching experiences to your school-year classes? That is, do you believe you are a better teacher because of your experiences in (name of course)? If so, what are some examples?

13. At the end of each summer, you spend time analyzing the course with your colleagues. What are some of the-improvements or changes that have been suggested?
14. Have any of these been implemented in future years?
15. What is your vision or what do you see as the future for (name of course)?

Appendix G

IRB Approval

UNE UNIVERSITY OF NEW ENGLAND

Institutional Review Board
Olgun Guvench, Chair

Biddeford Campus
11 Hills Beach Road
Biddeford, ME 04005
(207)602-2244 T
(207)602-5905 F

Portland Campus
716 Stevens Avenue
Portland, ME 04103

To:	Susan W. Keogh
Cc:	Grania Holman
From:	Olgun Guvench
Date:	December 8, 2015
Project # & Title:	120715-001, Examination of an Independent School's Site-Based Summer Program (Initial)

The Institutional Review Board (IRB) for the Protection of Human Subjects has reviewed the above captioned project, and has determined that the proposed work is not human subject research as defined by 45 CFR 46.102(d).

Additional IRB review and approval is not required for this protocol as submitted. If you wish to change your protocol at any time, you must first submit the changes for review.

Please contact Olgun Guvench at (207) 221-4171 or oguvench@une.edu with any questions.

Sincerely,

Olgun Guvench, M.D., Ph.D.
IRB Chair

IRB#: **120715-001**
Submission Date: November 25, 2015
Status: Not Human Subject Research, 46 CFR 46.102(d)
Status Date: 12/08/15

Appendix H

Survey Results

		Credit	Enrichment	Athletics
1 to 4	Immersion	2	2	0
	Collaboration	2	2	1
	Authentic Experiences	1	1	0
	Inquiry	2	0	0
	Reflection	2	2	0
	Critical Thinking	2	2	2
	Problem Solving	2	2	1
	Other	0	0	1
5 to 6	Immersion	1	1	0
	Collaboration	1	2	0
	Authentic Experiences	0	4	0
	Inquiry	0	2	0
	Reflection	1	1	0
	Critical Thinking	3	3	0
	Problem Solving	0	3	0
7 to 10	Immersion	1	1	1
	Collaboration	2	2	1
	Authentic Experiences	1	2	0
	Inquiry	2	1	0
	Reflection	2	1	0
	Critical Thinking	2	1	0
	Problem Solving	1	1	1
	Other	0	1	1
11 to 15	Immersion	0	0	0
	Collaboration	0	2	0
	Authentic Experiences	0	3	0
	Inquiry	0	1	0
	Reflection	0	1	0
	Critical Thinking	0	2	0
	Problem Solving	0	2	0
	Other	0	0	1
More than 15	Immersion	0	3	0
	Collaboration	2	3	1
	Authentic Experiences	0	5	0
	Inquiry	2	4	0
	Reflection	1	1	0
	Critical Thinking	2	4	0
	Problem Solving	2	3	0

Appendix I

Coding Scheme

Research Question	Code	Meaning
One	D-I	Design-Immersion
One	D-Au	Design-Authentic
One	D-Co	Design-Collaboration
One	D-T	Design-Technology
One	D-PS	Design-Problem Solving
One	D-R	Design-Reflection
One	D-CF	Design-Continual Feedback
One	D-Dif	Design-Differentiation
One	V-Eng	Value-Engaging
Two	Deb	Debrief
Two	Art	Articulation
Two	YR	Yearly Refinements
Two	Col	Collegial Conversations
Two	F/C	Fidelity to Curriculum
Two	S	School Support
Two	New	Encouraging New Classes
Three	M-L	Mission-Leadership
Three	Aca	Mission-Academics
Three	CV	Mission-Christian Values
Three	P/C/S	Mission-Patriotism & Community Service
Three	A	Alignment to School Year-Continuity
Three	V-V	Variety of Classes
Three	V-AP	Application
Three	V-R-ss	Relationships - Student-Student
Three	V-R-ts	Relationships - Teacher-Student
Three	V-IR	“I Remember”
Three	V-N	New Students

Appendix J-1

Research Question 1 – Interview Tallies

How do theory-based instructional designs effectively support the mission of the school by promoting the acquisition of greater content knowledge and development of attitudes that inspire and sustain a student's desire to embrace learning through a wide-variety of summer opportunities?									
	Immersion	Authentic	Collaboration	Technology	Problem solving/critical thinking	Reflection	Continual Feedback	Differentiation	Engaging
Code	D-I	D-Au	D-Co	D-T	D-PS	D-R	D-CF	D-Dif	V-Eng
A	3	1		1					2
J L	2	1		4	3	1			3
B L					1	1		3	
J M	4		1		1	3			1
M	4	10	1	1	2		3	2	2
B U				2			2	2	
N	3	5	1		1				3
Totals	16 20%	17 21.25%	3 3.75%	8 10%	8 10%	5 6.25%	5 6.25%	7 8.75%	11 13.75%

Appendix J-2

Research Question 2 – Interview Tallies

What structures, supports, and incentives should the school have in place to foster the development and build the capacity of collegial teams committed to the design and analysis of a summer curriculum aligned with the school year?							
	Collegial Conversations	Articulation	Yearly Refinements	Debrief	Fidelity to Curriculum	School Support	Encouraging New Classes
Code	Col	Art	YR	Deb	F/C	S	New
A	1	1	1				
J L	2		1				
B L						1	
J M	3		4	1			
M	5		10		4	1	1
B U	3		7		3	1	1
N			9				
Totals	15 25%		33 55%		7 12%	3 5%	2 3%

Combine debrief and yearly refinements-33-55%
Combine articulation and collegial conversations-15-25%

Appendix J-3

Research Question 3 – Interview Tallies

How can explicit communication regarding the variety of classes, intentional alignment of the traditional school year with summer, and commitment to the school's mission increase the perceived and actual value of summer learning and this program while more solidly situating this summer program into the culture of the school?

	Mission-Leadership	Mission-Academics	Mission-Christian Values	Mission-Patriotism, community & service	Alignment to school year-Continuity	Variety of classes	Application	Relationships Student-student	Relationships Teacher- student	"I remember"	New students
Code	M-L	Aca	CV	P/C/S	A	V-V	V-Ap	V-R-ss	V-R-ts	V-IR	V-N
A	1	2		2	4	1	1	3	1		2
J L	2	6		2	2	1	1		5		
B L			2	2	1	2	2	2		1	1
J M	8	2		6	6	4	3	5	2	3	1
M	2	7		2	9	5	11	3	5	4	
B U		3			6	2	1		2		
N	2	4			3		5	2	3	1	
Totals	15 9%	24 14%	2 1%	14 8%	31 18%	15 9%	24 14%	15 9%	18 11%	9 5%	4 2%

Appendix K

New and Returning Students

	Summer 2006			School Year 2006-2007			Percent of Summer 2006 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	41	2	43	59	2	61	69.49%	100.00%	70.49%
K	41	32	73	42	54	96	97.62%	59.26%	76.04%
1	21	44	65	28	67	95	75.00%	65.67%	68.42%
2	6	61	67	12	108	120	50.00%	56.48%	55.83%
3	7	66	73	15	106	121	46.67%	62.26%	60.33%
4	2	59	61	7	114	121	28.57%	51.75%	50.41%
5	5	57	62	12	116	128	41.67%	49.14%	48.44%
6	47	57	104	59	121	180	79.66%	47.11%	57.78%
7	23	97	120	44	159	203	52.27%	61.01%	59.11%
8	11	87	98	25	175	200	44.00%	49.71%	49.00%
9	19	92	111	40	158	198	47.50%	58.23%	56.06%
10	4	86	90	13	169	182	30.77%	50.89%	49.45%
11	0	59	59	7	165	172	0.00%	35.76%	34.30%
12	0	20	20	1	155	156	0.00%	12.90%	12.82%
Totals	227	819	1,046	364	1,669	2,033	62.36%	49.07%	48.99%

Note: The 1,046 students attended 2,213 classes.

	Summer 2007			School Year 2007-2008			Percent of Summer 2007 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	49	0	49	60	0	60	81.67%	na	81.67%
K	24	31	55	39	44	83	61.54%	70.45%	66.27%
1	15	58	73	25	81	106	60.00%	71.60%	68.87%
2	11	47	58	19	77	96	57.89%	61.04%	60.42%
3	2	53	55	7	103	110	28.57%	51.46%	50.00%
4	4	47	51	13	101	114	30.77%	46.53%	44.74%
5	9	36	45	12	101	113	75.00%	35.64%	39.82%
6	29	63	92	39	111	150	74.36%	56.76%	61.33%
7	13	79	92	30	163	193	43.33%	48.47%	47.67%
8	6	85	91	9	176	185	66.67%	48.30%	49.19%
9	14	93	107	29	158	187	48.28%	58.86%	57.22%
10	2	95	97	10	160	170	20.00%	59.38%	57.06%
11	2	47	49	8	159	167	25.00%	29.56%	29.34%
12	0	19	19	1	167	168	0.00%	11.38%	11.31%
Totals	180	753	933	301	1,601	1,902	59.80%	47.03%	52.37%

Note: The 933 students attended 1,780 classes.

	Summer 2008			School Year 2008-2009			Percent of Summer 2008 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	45	1	46	61	0	61	73.77%	na	75.41%
K	32	42	74	46	49	95	69.57%	85.71%	77.89%
1	8	43	51	20	78	98	40.00%	55.13%	52.04%
2	7	57	64	13	106	119	53.85%	53.77%	53.78%
3	9	49	58	18	97	115	50.00%	50.52%	50.43%
4	6	53	59	13	111	124	46.15%	47.75%	47.58%
5	7	48	55	9	117	126	77.78%	41.03%	43.65%
6	40	60	100	42	119	161	95.24%	50.42%	62.11%
7	21	82	103	45	150	195	46.67%	54.67%	52.82%
8	3	78	81	16	192	208	18.75%	40.63%	38.94%
9	11	121	132	23	191	214	47.83%	63.35%	61.68%
10	2	92	94	10	189	199	20.00%	48.68%	47.24%
11	1	57	58	5	170	175	20.00%	33.53%	33.14%
12	0	34	34	2	168	170	0.00%	20.24%	20.00%
Totals	192	817	1,009	323	1,737	2,060	59.44%	47.04%	48.35%

Note: The 1,009 students attended 1,767 classes.

	Summer 2009			School Year 2009-2010			Percent of Summer 2009 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	28	2	30	45	2	47	62.22%	100.00%	63.83%
K	29	30	59	46	50	96	63.04%	60.00%	61.46%
1	8	50	58	16	81	97	50.00%	61.73%	59.79%
2	6	37	43	16	88	104	37.50%	42.05%	41.35%
3	8	66	74	11	112	123	72.73%	58.93%	60.16%
4	7	52	59	12	107	119	58.33%	48.60%	49.58%
5	4	60	64	11	122	133	36.36%	49.18%	48.12%
6	23	58	81	47	114	161	48.94%	50.88%	50.31%
7	14	76	90	40	142	182	35.00%	53.52%	49.45%
8	3	78	81	12	177	189	25.00%	44.07%	42.86%
9	8	103	111	16	181	197	50.00%	56.91%	56.35%
10	8	110	118	13	195	208	61.54%	56.41%	56.73%
11	1	69	70	8	187	195	12.50%	36.90%	35.90%
12	0	27	27	0	174	174	na	15.52%	15.52%
Totals	147	818	965	293	1,732	2,025	50.17%	47.23%	49.19%

Note: The 965 students attended 1,729 classes.

	Summer 2010			School Year 2010-2011			Percent of Summer 2010 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	41	0	41	57	0	57	71.93%	na	71.93%
K	26	27	53	43	39	82	60.47%	69.23%	64.63%
1	10	50	60	15	90	105	66.67%	55.56%	57.14%
2	5	46	51	19	87	106	26.32%	52.87%	48.11%
3	3	41	44	5	97	102	60.00%	42.27%	43.14%
4	8	72	80	11	117	128	72.73%	61.54%	62.50%
5	8	42	50	12	104	116	66.67%	40.38%	43.10%
6	14	58	72	33	112	145	42.42%	51.79%	49.66%
7	16	69	85	50	147	197	32.00%	46.94%	43.15%
8	4	89	93	15	176	191	26.67%	50.57%	48.69%
9	16	107	123	40	163	203	40.00%	65.64%	60.59%
10	2	99	101	18	187	205	11.11%	52.94%	49.27%
11	0	58	58	7	182	189	0.00%	31.87%	30.69%
12	1	32	33	7	183	190	14.29%	17.49%	17.37%
Totals	154	790	944	332	1,684	2,016	46.39%	46.91%	49.40%

Note: The 944 students attended 1,921 classes.

	Summer 2011			School Year 2011-2012			Percent of Summer 2011 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	47	3	50	68	3	71	69.12%	100.00%	70.42%
K	24	34	58	38	46	84	63.16%	73.91%	69.05%
1	7	49	56	17	76	93	41.18%	64.47%	60.22%
2	4	57	61	9	100	109	44.44%	57.00%	55.96%
3	6	49	55	13	98	111	46.15%	50.00%	49.55%
4	7	57	64	15	90	105	46.67%	63.33%	60.95%
5	3	77	80	12	118	130	25.00%	65.25%	61.54%
6	19	65	84	48	105	153	39.58%	61.90%	54.90%
7	16	81	97	41	134	175	39.02%	60.45%	55.43%
8	3	82	85	12	192	204	25.00%	42.71%	41.67%
9	7	121	128	26	176	202	26.92%	68.75%	63.37%
10	1	102	103	20	186	206	5.00%	54.84%	50.00%
11	1	43	44	12	187	199	8.33%	22.99%	22.11%
12	1	24	25	5	192	197	20.00%	12.50%	12.69%
Totals	146	844	990	336	1,703	2,039	43.45%	49.56%	48.85%

Note: The 990 students attended 1,895 classes.

	Summer 2012			School Year 2012-2013			Percent of Summer 2012 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	27	0	27	43	0	43	62.79%	na	62.79%
K	31	45	76	44	57	101	70.45%	78.95%	75.25%
1	6	53	59	15	72	87	40.00%	73.61%	67.82%
2	9	37	46	14	83	97	64.29%	44.58%	47.42%
3	8	56	64	14	95	109	57.14%	58.95%	58.72%
4	4	53	57	16	92	108	25.00%	57.61%	52.78%
5	5	46	51	12	99	111	41.67%	46.46%	45.95%
6	16	62	78	32	120	152	50.00%	51.67%	51.32%
7	18	77	95	46	140	186	39.13%	55.00%	51.08%
8	1	65	66	11	169	180	9.09%	38.46%	36.67%
9	9	122	131	21	183	204	42.86%	66.67%	64.22%
10	0	105	105	7	192	199	0.00%	54.69%	52.76%
11	1	55	56	8	191	199	12.50%	28.80%	28.14%
12	0	23	23	0	197	197	na	11.68%	11.68%
Totals	135	799	934	283	1,690	1,973	47.70%	47.28%	50.48%

Note: The 934 students attended 2,247 classes.

	Summer 2013			School Year 2013-2014			Percent of Summer 2013 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	33	3	36	47	0	47	70.21%	na	76.60%
K	22	32	54	33	41	74	66.67%	78.05%	72.97%
1	7	64	71	9	92	101	77.78%	69.57%	70.30%
2	4	48	52	7	84	91	57.14%	57.14%	57.14%
3	4	56	60	11	92	103	36.36%	60.87%	58.25%
4	8	66	74	14	105	119	57.14%	62.86%	62.18%
5	8	55	63	15	101	116	53.33%	54.46%	54.31%
6	13	62	75	36	105	141	36.11%	59.05%	53.19%
7	14	92	106	36	147	183	38.89%	62.59%	57.92%
8	5	65	70	16	183	199	31.25%	35.52%	35.18%
9	9	94	103	28	158	186	32.14%	59.49%	55.38%
10	0	95	95	9	190	199	0.00%	50.00%	47.74%
11	0	41	41	9	189	198	0.00%	21.69%	20.71%
12	0	18	18	2	193	195	0.00%	9.33%	9.23%
Totals	127	791	918	272	1,680	1,952	46.69%	47.08%	51.02%

Note: The 918 students attended 2,089 classes.

	Summer 2014			School Year 2014-2015			Percent of Summer 2014 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	37	3	40	49	4	53	75.51%	75.00%	75.47%
K	21	32	53	27	67	94	77.78%	47.76%	56.38%
1	8	52	60	16	60	76	50.00%	86.67%	78.95%
2	4	55	59	12	74	86	33.33%	74.32%	68.60%
3	12	51	63	18	100	118	66.67%	51.00%	53.39%
4	7	50	57	16	90	106	43.75%	55.56%	53.77%
5	5	54	59	12	100	112	41.67%	54.00%	52.68%
6	16	57	73	39	107	146	41.03%	53.27%	50.00%
7	13	64	77	41	135	176	31.71%	47.41%	43.75%
8	2	67	69	21	171	192	9.52%	39.18%	35.94%
9	8	95	103	33	167	200	24.24%	56.89%	51.50%
10	2	87	89	14	173	187	14.29%	50.29%	47.59%
11	1	37	38	12	179	191	8.33%	20.67%	19.90%
12	0	22	22	3	189	192	0.00%	11.64%	11.46%
Totals	136	726	862	313	1,616	1,929	43.45%	44.93%	51.63%

Note: The 862 students attended 1,649 classes.

	Summer 2015			School Year 2015-2016			Percent of Summer 2015 to School Year		
	New	Returning	Total	New	Returning	Total	New	Returning	Total
PK	27	2	29	40	2	42	67.50%	100.00%	69.05%
K	26	45	71	42	51	93	61.90%	88.24%	76.34%
1	6	44	50	13	62	75	46.15%	70.97%	66.67%
2	5	52	57	9	79	88	55.56%	65.82%	64.77%
3	10	63	73	17	97	114	58.82%	64.95%	64.04%
4	6	59	65	9	97	106	66.67%	60.82%	61.32%
5	9	57	66	16	93	109	56.25%	61.29%	60.55%
6	20	73	93	38	125	163	52.63%	58.40%	57.06%
7	5	50	55	24	138	162	20.83%	36.23%	33.95%
8	2	65	67	29	162	191	6.90%	40.12%	35.08%
9	11	112	123	29	171	200	37.93%	65.50%	61.50%
10	1	90	91	20	186	206	5.00%	48.39%	44.17%
11	0	32	32	11	176	187	0.00%	18.18%	17.11%
12	1	23	24	3	188	191	33.33%	12.23%	12.57%
Totals	129	767	996	300	1,627	1,927	43.00%	47.14%	51.69%

Note: The 996 students attended 1,747 classes.

Appendix L

History of Credit Courses

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Advanced Composition	●	●	●	●	●	●	●	●	●	●
Humanities	●	●	●	●	●	●	●	●	●	●
Personal Fitness	●	●	●	●	●	●	●	●	●	●
Logic and Semantics	●	●	●	●	●	●	●	●		
Speech	●	●	●	●	●	●	●	●	●	●
Advanced Marine Research			●	●	●	●	●	●	●	●
Medicine and Biotechnology Research										●
Robotics and Engineering								●	●	●
Introduction to Computer Programming			●	●	●	●	●	●	●	●
Advanced Composition Online		●	●	●	●	●	●	●	●	●
Economics Honors			●	●	●					
Digital Media				●	●					
Digital Video Production				●	●	●	●	●		

Appendix M

Parent Email and School's Response

-----Original Message-----
From: parent
Sent: Thursday, May 08, 2014 5:16 PM
To: School's President
Subject: Summer Camps

Hi (President's name), I hope this finds you well. It's that time of year again and we are figuring out summer camps. I realized we only signed up (child's name) for two this year at (school's name). A week of lacrosse and a week of football. Several of our lower school parent friends have been discussing the choices in the catalog and it's truly been a topic every summer. It seems like many of the offerings are priced on the higher side compared to other camps. There have been many comments made about wishing the school offered more traditional style camp experiences. I feel like some of the camps to the theme parks are extravagant for a summer camp and quite expensive. I realize the teachers come up with the camp descriptions and submit them to the school. I'd like to offer a suggestion...

I started researching other prep school camps and came across some great ones. For example (similar school 1) in (state) offers two tracts: Sports Camp & Arts Camp

Sports Camp includes basketball, flag football, soccer, field hockey, lacrosse, and Volleyball. Also, movement skills, swimming, rock climbing and ports games like dodge ball, four square, Lord of the Ring, Ratball, etc.

Arts Camp includes art, music, drama, dance, performance skills as well as Visual arts and option for private music lessons during camp.

(Similar school 2) in (city) has a similar set up for their water camp: sailing, tubing, skiing, canoeing, swimming and arts and crafts, tennis throughout the day.

I actually chose to put actually chose to put (children's names) in (local camp) for 4 weeks and it's the same type of camp and includes lunch for about $275 week.

I feel (school) is missing the boat on a great opportunity. We have such amazing facilities to be able to offer similar camps. These to me are more fun and summer appropriate for lower school children. It gives them a variety of experiences during the days allows for indoor and outdoor fun. I also would like to suggest involving the high school students in the camps. They do this sometimes with sports but not many of the other offerings. The kids end up being with their teachers. Summer should be fun and light in my opinion. I'd love if (school) would look into this. I've attached the Brochures and descriptions for (similar school 1) and (local camp). I especially would love for

(school) to have sailing and canoeing. It's so great that we are on the lake.

I was not sure who to direct this request to other than you. I appreciate your consideration of my thoughts.

Many thanks, (parent signature)

From: (school president
Sent: Friday, May 09, 2014 8:48 AM
To: (parent)
Cc: (summer director, summer director's supervisor, athletic director)
Subject: RE: Summer Camps

Thanks, (parent's name), for giving us feedback. We can't improve unless we have parents point out where we could do a better job. The only thing I'm half-way competent to address is cost and will ask the others copied on this email to chime in on structure, options, and types of programs.

(Summer director) is in charge of (summer program) and knows a lot more than I. But I remember several years ago benchmarking our cost against a large number of (state) schools (don't think we checked (local camp), though). And we found we were way below market and consequently increased our charges. This included not only sports camps, but also academic courses. Maybe it's time for us to benchmark again.

(summer director and athletic director) -- would you please respond to (parent's) suggestions. (Summer director), I suspect you have done more recent benchmarking of our fee schedule. If not, please do so and share with (CFO) and me.

(president's signature)

On May 10, 2014, at 5:40 PM, (summer director) wrote:

Hi (parent),

Thank you so much for your email regarding (summer program). I greatly appreciate your valuable feedback and research. We do study the summer programs of schools similar to (school's name) and oftentimes use their ideas as inspiration for new classes. I also, as (president) noted, benchmark our fees against similar programs. Our base fees have remained constant since 2007; the few increases have occurred only when additional costs were added. During the early years of (school's) summer program, sports camps similar to those you described were offered. Students participated in weeklong camps that included fun activities and exposure to a variety of more organized sports; Advanced Composition was the only credit class available. Although well attended, we believed that our summer program could be much more. Our major goal was to design a program that offered enriching opportunities in academics, arts, and athletics.

As a result of this redesign, students are able to select classes based on themes in

which they are interested and new families who participate in summer activities become a part of the (school) community before the first day of school. Our teachers are able to design classes that extend beyond our school-year curriculum. Coaches develop each player's knowledge, skills, and love of their team sport. The scheduling of weeklong classes allows students and parents to tailor a summer based on interests without interfering with family vacation schedules. Upper School students often assist teachers during the summer; they are valuable to and benefit from (summer program). Their enthusiasm inspires our younger children who look up to them as role models. This connection strengthens the community of honorable leaders we strive to cultivate. It is a wonderful learning experience for our students who know our expectations and embrace our culture. Within recent years, (school) alumni, many of whom are pursuing degrees in education, have joined our summer staff. They have proven to be genuine assets and, at the same time, they have gained valuable experience. This being said, I do appreciate your thoughts and can see that it is possible to consider several more generic, multi-week athletic and art offerings next summer. We are blessed with a team of creative and innovative educators who will welcome the opportunity to design offerings such as these. One additional note...the annual NAIS (National Association of Independent Schools) convention was in Orlando this February. I attended a session presented by the director of Phillips Exeter's summer program. Although every summer program is unique, there are common issues that are critical to the design, management, and delivery of any quality program. After hearing his presentation and advice (based on 20+ years of experience at Exeter), I realized how many internal departments support (summer program). So many other programs are struggling with the business and management aspects; their summer instructors are often not school-year employees. I am proud to say that (school) has the critical components, including academics, technology, security, transportation, and human resources in place. Although we often hire non-(school) teachers during the summer, the vast majority are our full-time employees. Our students know the teachers and support staff members, our teachers know the students, and all summer employees know and honor our (school) expectations. Their dedication to our students and our school inspires their commitment to ensuring quality summer learning experiences. I look forward to hearing more about your family's experiences at (local camp); I am always interested in learning more! Again, (parent’s name), many thanks and please let me know if you have other questions.

Enjoy a blessed Mother's Day!
(summer director)