ABSTRACT

LEMKE, RICHARD E. A Hospital School: An Intrinsic Case Study (Under the direction of Robert Serow and Peter Hessling.)

The purpose of this qualitative study has been to examine the operation of one North Carolina hospital school. Nine participants, consisting of five hospital school teachers, one hospital school media specialist, the school’s principal, and two hospital administrators were given the opportunity to describe in their own words, the hospital school and how educational services are delivered to K-12 and some Pre-K students in this school away from home.

The study identified the history, mission, staffing, administration, funding, population served, services provided, and demographic data describing the operation of the school. The study also confirmed the positive role school can play for patients experiencing chronic illnesses discussed in the literature, including the normalizing effect of the hospital experience with school as an element of students’ day and the encouragement students can receive from preparing for the return to regular school settings.

Participants in this study reported a close working relationship between public school educators and hospital personnel who work closely to prepare students for an eventual return to school.
A Hospital School: An Intrinsic Case Study

by

RICHARD E. LEMKE

A dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy

EDUCATIONAL RESEARCH AND POLICY

Raleigh

2004

APPROVED BY:

__________________________________  __________________________
Co-chair of Advisory Committee  Co-chair of Advisory Committee
DEDICATION

To my parents for their never-ending love and support
and to my wife Robin and daughters Amber and Emilie,
for their love and patience.
BIOGRAPHY

Richard E. Lemke, was born in Lancaster, Wisconsin and graduated from Kelly Walsh High School in Casper, Wyoming. He received his B.A. degree in Special Education from the University of Northern Colorado in 1972 and M.S. degree in Special Education from the University of Wisconsin-LaCrosse in 1978. His teaching experience includes deaf and hard of hearing students, grades pre-school through high school and students with specific learning disabilities at the middle school and high school levels. In 1984, following the completion of a M.A. in Educational Administration from California State University-Northridge, he moved to North Carolina and served as a special education administrator in the Durham County and later the Durham Public Schools. In 1990 he became the first principal of the Hospital School operated by the Durham Public Schools and located at Duke University Medical Center. The school provides educational services to school-age patients being treated in the hospital.

He currently resides in Durham, North Carolina with his wife Robin. He has two daughters, (Amber and Emilie) and a son-in-law (Didi).
ACKNOWLEDGEMENTS

The author wishes to express his sincere thanks and gratitude to all who supported this accomplishment. In particular he would like to express his thanks to Dr. Peter Hessling, co-chair of the advisory committee for his guidance, editing and encouragement. Special thanks go to the remaining committee members Dr. Bob Serow, Dr. Paul Bitting, and Dr. Michael Vasu for their instruction. Also, the author wishes to thank the case study participants for their support and Dr. Lubker for her assistance and encouragement. Without all of them this would not have been completed.

Mr. Lemke’s sincere appreciation and gratitude go to God for making this all possible and to his family for their continued support of his work toward achieving this goal. Particularly the patience, prayers, and encouragement from his wife Robin made this realization possible. The support from his daughters also meant a great deal.
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CHAPTER ONE: INTRODUCTION

Students in America’s schools are experiencing increasing expectations for improved performance from parents, the community, and the government. Managing this higher level of performance in school along with a chronic health condition may seem overwhelming to some. Traditional school classroom teachers are being challenged to demonstrate academic progress for all students. Students who have extensive gaps in their classroom instruction make this task more challenging. Hospital schools were established to bridge these instructional gaps whenever possible.

Hospital schools extend instruction beyond the school walls to support student achievement. Teachers in hospital schools provide instruction and instructional support to students who are unable to participate in school with their peers due to chronic illness or injury. The availability of these services offers tremendous support for those who can access them. Little information describing hospital schools is available from the literature. Information from the recently established Association for the Education of Children with Medical Needs (AECMN) identifies hospitals throughout the United States that support school programs (Jansen, 2003). Information describing hospital schools and how they deliver education to children does not seem to be available. This study aims to identify what a hospital school is and how it operates within the healthcare setting. The questions below were selected to provide an understanding of what a hospital school is and how instruction is delivered to children in a hospital setting. Exploration of the
educational services delivered by one North Carolina hospital school raised many questions.

Research Questions

1. Why operate a school program in a hospital?
2. How is the hospital school administered?
3. Who is served by the hospital school?
4. How is teacher time utilized?
5. How is the effectiveness of the school program evaluated?
6. How can the hospital school respond to the curriculum requirements of the traditional schools?

Chronic illness may severely impact a child's participation in school. Katz, Kellerman and Seigel (1980) indicated that school for children can be compared to work for adults. If children remain out of school for an extended period of time, they risk developing adverse psychological reactions similar to those observed in unemployed adults. Regular school participation has been demonstrated to be necessary for psychosocial well being (Sanger, Copeland, & Davidson, 1991). Thompson and Gustafson (1996) report that school adjustment issues experienced by children with chronic illnesses can result from the direct effects of the illness or from the treatment. Among the primary issues are central nervous system sequelae, pathological conditions resulting from the disease, and secondary effects that include fatigue, absenteeism, psychological stress or distress. Therefore, communities are often assigned the task of continuing the education of students with chronic and life threatening illnesses in non-traditional school settings such as hospitals and homes. Teachers collaborate with medical treatment teams and provide support, familiarity, and structure in the treatment milieu (Hymovich &
Hagopian, 1992). The classroom teacher is often encouraged to work closely with medical personnel and support personnel to identify educational interventions for a specific child (Deasy-Spinetta, 1993).

Historically, school has been associated with children in hospital settings as an integral part of the treatment program. Hospital-based school programs or hospital schools have existed for close to ninety years. According to Walton (1951), as early as 1916 some voluntary and part-time teaching was introduced for selected children at the University of Michigan Hospital; then in 1922, the Hospital School was established under Social Service.

Programs providing academic instruction for school-age children are currently available at many major hospitals and medical centers, either through the local public schools, the hospitals, or a combination of both. Specifically, medical centers support the inclusion of a school program for long-term pediatric patients (Vizoso, 1994). This practice is due, in part, to hospital accreditation standards from the Joint Commission on Accreditation of Healthcare Organizations (J.C.A.H.O.) and federal, state, or local policies governing the provision of educational services, as provided by Public Law No. 94-142, 20 U.S.C.§ 1401, 1990, The Individuals With Disabilities Act, Public Law No. 105-17 Amendments 20 U.S.C. 1400 and state laws such as North Carolina law (N.C. GS 115C).
Statement of the Problem

McPherson et al. (1998) define children with special health care needs as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally” (p.138). McPherson et al. (1998) used this definition to establish an operational prevalence rate among children younger than 18 years old. The authors report that 18% or 12.6 million of U.S. children under the age of 18, as of 1994, had a chronic physical, developmental, behavioral, or emotional condition and required health and related services of a type or amount beyond that required by children generally. These figures did not include the at-risk population. Newacheck and Halfon (1998) reported that an estimated 4.4 million children, representing 6.5% of the non-institutionalized population under 18 years, were limited to some degree in their activities due to chronic conditions. The authors also note that children with disabilities are subject to many more days of restricted activity, including missed school days, than other children. Davidoff (2004) estimated that 12 percent of non-institutionalized children aged birth through seventeen have a chronic health condition that results in elevated needs for services or limitations in normal activity. More specifically, Perez (1997) reported that between 10 and 20 percent of children in the United States suffer from a chronic disease, such as asthma, congenital heart disease and sickle cell disease. Earlier estimates also reported that 10 to 15% of the United States childhood population had some chronic health impairment (Gortmaker & Sappenfield, 1984; Hobbs & Perrin, 1985). Approximately 1 to 2% of the childhood population with
chronic health impairments are children with the severe forms of chronic illness, whose problems are very specialized (Hobbs, Perrin, & Ireys, 1985). Separately, each of the chronic diseases is relatively rare. However, when combined, more than one million children have severe diseases and each one may be ill and away from school for long periods of time (Hobbs, Perrin, & Ireys, 1985).

Childhood cancer, for example, affects 1 in 600 American children from birth to 15 years (McCarthy & Plumer, 1998). The National Childhood Cancer Foundation (1997) reported the incidence of cancer among children at a rate of 1% per year. Approximately 6500 children under the age of 15 years are diagnosed with some form of cancer in the United States annually (Armstrong & Horn, 1995). Many of the children who several years ago would have died from a chronic illness now survive (Brown, 1993). Age specific U.S. cancer death rates, as an example, indicate a continuing decline in the death rate for all primary cancers among children ages 5 through 14 and 15 through 24, from 1950 through 1999 (See Table1), Bleyer (1990), using data from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute and the U.S. Census Bureau, estimated that on average, one in every four elementary schools has a child who has or has had cancer, and the average high school has two students who have or had cancer.
Table 1

50-Year Trends in U.S. Death Rates, All Races, Males and Females

SEER Cancer Statistics Review 1973-99, National Cancer Institute

Continuing Decline in Death Rate

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<td>0-4</td>
<td>11.1</td>
<td>5.2</td>
<td>2.6</td>
<td>-2.8</td>
<td>-2.9</td>
<td>-76.9</td>
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<tr>
<td>5-14</td>
<td>6.7</td>
<td>4.8</td>
<td>2.6</td>
<td>-1.0</td>
<td>-2.8</td>
<td>-61.5</td>
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<tr>
<td>15-24</td>
<td>8.6</td>
<td>6.6</td>
<td>4.6</td>
<td>-0.7</td>
<td>-1.7</td>
<td>-46.7</td>
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<tr>
<td>All Ages</td>
<td>195.4</td>
<td>199.1</td>
<td>202.8</td>
<td>0.1</td>
<td>0.1</td>
<td>3.8</td>
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Despite the obvious need for education by this significant population of ill children, a literature search on the subject of hospital schools and the services these schools offer revealed little information on how they are organized or how they operate.

Purpose of the Research

The study examined the operation of one hospital school. Written policies and procedures were studied to identify the population of students served, the focus of the school’s services, school funding, the teacher’s role within the treatment experience, instructional delivery, and how effectiveness of the school program is measured.

The intent of the study was to increase our knowledge and understanding of how a hospital school delivers educational services to school-age children.

Understanding how a hospital school operates and the role of the teachers who
deliver academic instruction to children is the focus. Considering short inpatient hospitalizations and increasing outpatient approaches to treatment, it is also important to consider any implications for teachers and administrators in traditional school settings when these students return to school both during and following medical treatment.

**Significance of the Study**

In the United States, approximately 6550 new cases of cancer in children under 15 years of age occur annually (See Bearison & Mulhern, 1994). Of these new pediatric cancer cases, 40% have leukemia, 20% have tumors of the central nervous system, 10% have lymphomas, and 30% have cancers of the musculoskeletal system and kidney (Derengowski & O'Brien, 1996).

**Increase in Survival Rate**

Since the 1970s, overall mortality rates for most childhood cancers have declined and the survival rates have markedly improved (Ries et al., 1999). Specifically, Ries et al. (1999) reports that of the four leading causes of cancer death among young children (brain and central nervous system, leukemia, endocrine, and soft tissue), the death rates have declined for each from 1975 through 1995. Ries et al. (1999) further report an overall five-year survival rate for adolescents (ages 15-19) with cancer, which improved from 69% to 77% from the periods 1975-84 to 1985-94. Dahlquist (1998) reports that while childhood cancer remains potentially life threatening and still poses a serious threat to families and patients, by 1999 over 60% of children diagnosed with cancer were expected to survive. Bradlyn et al. (1996) report a 67% survival rate for all childhood cancers for one five-year period.
Derengowski and O’Brien (1996) report an overall survival rate of children with cancer at 50%. They also report, that “65-75% of all children with acute lymphoblastic leukemia are in continuous complete remission 5 years or more after diagnosis” (p.109). Parsons and Brown (1998) projected an estimated 200,000 pediatric cancer survivors by the turn of the century. McCarthy and Plumer (1998) estimated that only 1 in 1000 young adults would not survive childhood cancer by the year 2000. With increases in the survival rates, the resumption of a child’s social and academic development becomes an important component of the treatment program. The child and family attempt to return to the normal routine of life once the child is medically stabilized. For a child, this includes a return to school (McCarthy & Plumer, 1998).

Similarly, the survival rate for children with severe burns is improving. Improvements in resuscitation, operative techniques, and critical care are resulting in improved survival rates (Sheridan et al., 2000). The authors conclude that the rates of survival have improved so much that at the present time, most young children and children with large burns should survive.

School and the Future

School participation is instrumental in validating children’s future. According to Maul-Mellott and Adams (1987), school participation reinforces the fact of the future for all children. It affirms the probability of living to use the skills gained. Schoolwork offers normality for children and its continued role in their lives is a signal that hope is not lost, that they may, in fact, continue to live for many months or years to come (Kleinberg, 1982).
Impact on School Performance

The positive impact of increased survival creates new stresses for the patients and their families, requiring ongoing adjustment (Derengowski & O’Brien, 1996). It is well documented that cognitive and psychosocial adjustment difficulties are associated with pediatric chronic illness. Obstacles to normal school attendance and academic performance for all children diagnosed with leukemia and brain tumors include frequent school absences, acute effects of the malignancy, acute effects of chemotherapy, and infections (Chesler & Barbarin, 1986). Parsons and Brown (1998) report that children treated for leukemia have lower school attendance. In recent studies of cancer patients, the participants reported strong efforts were necessary for them to deal with problems such as restricted mobility and catching up with school (Felder-Puig et al., 1998). Periodic hospitalizations and acute exacerbations of symptoms can interrupt school attendance erratically. Fatigue and pain can inhibit concentration. The visible side effects of treatment or the physical manifestations of the underlying illness can be extremely embarrassing and can lead to withdrawal and isolation. School buildings and programs may be ill-suited to children who have physical and physiological limitations but who are academically competent (Hobbs, Perrin, & Ireys, 1985).

Many children and adolescents diagnosed with a chronic illness will require some type of special consideration from their schools at some point during their school careers. While most will not require a special education placement, many will require coordinated school-based interventions such as accommodations in the regular classroom with frequent breaks to address the fatigue and/or modified
assignments and homework to facilitate educational and social growth (Sexson & Madan-Swain, 1995).

*Rising Academic Standards*

An expectation for higher performance in school has the potential to increase pressure on children experiencing a chronic illness. Children may experience the pressure to remain caught up in school during absences from hospitalization and treatment. This study seeks to identify how a large, established hospital school program addresses the school-related issues of children living with chronic illness and injuries.

Expectations for higher student performance combined with increased teacher accountability are driving assessments to monitor school performance. North Carolina, Virginia, Texas, Kentucky, Rhode Island, Maryland, and South Carolina are examples of states with such statewide mandates (Olson, 1999). Virginia’s “Standards of Learning” require that students must pass a battery of tests in four subject areas to earn a high school diploma in 2004 (Portner, 1999). The recent reauthorization of the 1965 Elementary and Secondary Education Act (20 U.S.C. 6301 et. Seq.) requires that states set clear and high standards for what students in each grade should know and be able to do in the core academic subjects of reading, math and science. Public Law No. 107-160, The No Child Left Behind Act (2001) will require that all states measure student progress through tests aligned with the law’s higher standards. The emphasis on higher standards is resulting in school districts setting higher attendance targets. A study conducted in Minneapolis found that “students who were in class 95 percent of the time were twice as likely to
pass state language arts tests as students with attendance rates of 85 percent” (Johnson, 2000, p.1).

I am interested in how hospital school instruction serves chronically ill children during their inpatient hospitalization and outpatient treatment. This study will describe the phenomenon of the school program within a single health care setting, from the perspective of administrators and teachers.

Justification

A qualitative study should feature well-collected qualitative data focused on naturally occurring, ordinary events in natural settings to provide a picture or image of what that setting is like (Miles & Huberman, 1994). In this study, I will examine the operation of a school serving children in a hospital setting, who are experiencing life changing medical treatment. The case study, according to Yin (1994), is the preferred approach when conducting social science research that poses “when,” “how,” or “why” questions. In the hospital setting, the researcher has little control over the events. School occurs within the real life context of an environment where treatment for life threatening forms of illness or injury is delivered. It is critical that the role of school, within the context of the health care setting, be understood. A literature search on the subject of hospital schools and the services these schools offer revealed little information on the topic.

A critical part of this research is understanding how the school program is delivered, from the multiple perspectives of the participants. Merriam (1998) describes a case study as seeking to gain an in-depth understanding of the meaning, within the context and from the perspective of those involved. I am seeking
to obtain an intense description and analysis of the school instruction in one very specific and unique medical setting. A case study will provide the intensive description and analysis required to explain the small, yet complex educational program of a hospital school. Using case study methodology, the investigator will serve as the “primary instrument of data collection and analysis” (Merriam, 1998, p.17). The analysis is conducted inductively seeking to derive meaning from the data. Patton (1990) suggests that more can be learned from researching “extreme or unusual cases” (p.170) than from some statistical depiction of more typical cases. “The approach focuses on cases that are rich in information because they are unusual or special in some way” (Patton, 1990, p.169). The students served by the hospital school are children removed from school for periods of time to receive extensive medical treatment. It is the extreme nature of these children’s school needs that will offer rich information concerning school within a hospital setting.

Definition of Terms

Defining the term hospital school is, in part, a focus of this study. In the literature the term “hospital schools” is defined by Breitweiser and Lubker (1991) as “educational programs located within hospitals that provide school services to child and adolescent patients” (p.27). For purposes of this study, hospital school refers to a program of academic instruction provided to patients in pediatric and/or psychiatric medical units delivered by certified teachers employed either by the hospital, medical center or the local public schools. Instruction is typically provided to students individually at bedside or in small groups. Students with chronic health conditions often receive instruction from the hospital school. The term chronic health
conditions as defined by the American Academy of Pediatrics (1990) includes two criteria for defining chronic illnesses in children: a condition which a) lasts for a substantial period of time and b) typically interferes with daily functioning for greater than three months per year – or may require hospitalization of more than one month per year. Students who experience chronic illnesses may transfer from hospital to home and back to regular school during treatment. Transition, as defined in The American Heritage Dictionary (1980), is the process of changing from one form, state, activity, or place to another. For this study the term refers to the movement of school-age patients from hospitalized in-patient status to a return to home and school.

Reseacher and Biases

The researcher in qualitative research serves as the research instrument (LeCompte & Preissle, 1993). As a result, the biases and identity of the researcher must be clarified as they may affect the study. Qualitative researchers attempt to acknowledge their subjective states and biases, as a method of dealing with them (Bogdan & Biklen, 1998). In this study, my subjectivity eased my access and rapport with the study participants. I sought to understand their positions and roles through my own position in a similar setting.

Biases

In light of my current position, I was careful not to make assumptions about the operation of the hospital school in the study. I entered the study with an understanding of the hospital school I administer. As a result, in the methodology section I was attempting to gain the point of view of the participants in the school.
being studied and not assume that I understood. I was unable to ignore my perspective, but I was careful to seek clarification and remain conscious of how my perspective was affecting my inquiries and observations. I do acknowledge my potential bias toward understanding the hospital school and seeking to validate what I know in the study. I consciously entered each session with a clear sense that I was there to learn and understand something new.

Limits of the Study

Generalizability usually refers to whether the findings of a given study hold up beyond the specific subjects and the setting involved in the study (Bogden & Biklen, 1998). The intent of this study is to offer a glimpse of a hospital school from the perspective of some of the members of the school’s community. School-age patients and the parents of the hospitalized students were not included as participants in the interest of confidentiality and access. The study is not intended to serve as a representative sample of hospital schools in general.

In addition to being the researcher, I am in a position of administering a hospital school in a neighboring community. Casual familiarity with the school studied and members of its faculty may have influenced the results in some ways.

Summary

It seems that a greater understanding of the organization, instruction and instructional support delivered to children facing long-term hospitalization and frequent outpatient treatment is lacking. It is my intention that this study will contribute to that understanding.
CHAPTER TWO: REVIEW OF LITERATURE

Introduction

The purpose of this chapter is to examine available literature relevant to educational support for children living with a chronic illness. Literature from the four perspectives of medicine, special education, hospital schools, and psychology was reviewed. An effort was made to identify the role that school plays for patients recovering from a chronic illness or injury. Although research suggests that school is considered by some to be an integral component of the treatment process, it should be noted that little information specific to the organization and operation of a hospital-based school program was identified in the literature.

Mandate for Educational Services

Hospital schools are a growing phenomenon in both the health and education structures of America (Breitweiser & Lubker, 1991). Compulsory school attendance laws in each state support the inclusion of hospitalized children in school to the maximum extent feasible. Federal laws, state regulations, and numerous local policies and procedures require such services. One significant influence on the provision of educational services to children with chronic illnesses was the Education for All Handicapped Children Act of 1975, (P.L. 94-142). The Act mandated that all states provide an appropriate education for all handicapped children ages 5 through 21, including those with health conditions that interfere with children’s lives and education. In 1986 Congress implemented the Education of the Handicapped Act Amendments (P.L. 99-457). These amendments provided for special education and intervention services for handicapped children ages birth to five (Breitweiser &
Lubker, 1991). P.L. 94-142 was further amended as the Individuals with Disabilities Education Act of 1997 (IDEA). The IDEA provides for hospital-based schooling and homebound instruction when considered most appropriate to meet the child’s educational needs. The term “special education” is defined in P.L. 94-142 as “specially designed instruction, at no cost to parents/guardians, to meet the unique needs of a handicapped child, including classroom instruction, instruction in physical education, home instruction, and instruction in hospitals and in institutions” (emphasis added) (20 U.S.C.§ 1401[1990]) 9(p.16). School-aged and select pre-school-aged children and young adults may receive educational services through hospital-based school programs and homebound instruction as a part of the continuum of educational services mandated by PL 101-476, the Individuals With Disabilities Education Act (IDEA), of 1997. This study will provide an example of how the implementation of these mandated educational services is achieved in one hospital setting.

Rationale

Hobbs, Perrin, and Ireys (1985) identify compassion and community, prudence, economics, and moral discovery as reasons for allocating public resources in the interest of chronically ill children and their families. These investigators further explain that most reasons cited for supporting educational intervention are based upon a sense that children are valued for their own sake rather than for what they might do for others. The inclusion of school as a component of treatment for cancer and other chronic illnesses in children is felt by some to promote a positive adjustment to cancer treatment. It is important that
children return to school and school activities as soon as possible after the diagnosis (Larcombe, 1996).

Treatment for some diseases may impact a child’s academic development. Children with cancer, for example, may experience feelings of dependence, loss of control, and depressed self-esteem (Sanger et al., 1991). Treatment of the central nervous system through radiation and chemotherapy may result in permanent cognitive impairment in some children. Mulhern (as cited in Armstrong & Horn, 1995) reported declines in standard scores of two to four years, on age-norm referenced tests, from the initiation of treatment for brain tumors and the use of central nervous system prophylaxis in children with leukemia. The Armstrong and Horn further stress that these declines do not represent a progressive deterioration in ability, but represent a slowing in the ability relative to age-normed reference scores resulting in a pattern of poorer scores over time. The fact that differences were noted as late as 5 years after therapy suggests that intrathecal chemotherapy (treatment with drugs that are injected into the fluid surrounding the brain and spinal cord) potentially carries a significant toxicity, perhaps similar to though milder than radiation (Brown & Madan-Swain, 1993). A study on the psychological adaptations of survivors of childhood cancer concluded that “adult survivors of childhood cancer were found to be at least as well adjusted overall as their peers” (Gray et al., 1992, p.2720). The authors documented, however, that these same survivors were more likely to have repeated school grades than their peers. Appropriate educational intervention must be provided early, targeting the deficits that the children experience (Armstrong,
Blumberg, & Toledano, 1999). Armstrong and colleagues encourage appropriate early educational intervention that targets the deficits the children experience.

Role of School

For a child with a life threatening illness or injury, school is emphasized as a component of health care. School services are identified as a contributing factor in the recovery process for school-age children and adolescent patients. The need for social support from teachers is second only to social support from parents for adolescents at risk of school failure (Richman, Rosenfeld, & Bowen, 1998).

Deasy-Spinetta (1981) describes a health care setting for the child with a life-threatening illness such as cancer, leukemia, cystic fibrosis, or congenital heart disease that consists of the hospital, the family, and the school. Children and adolescents diagnosed with a chronic illness require some type of special consideration by their schools (Sexson & Madan-Swain, 1993). Considerations may include extended time to complete assignments or reduction in the number of assignments during periods when the students are receiving treatments. Hospital-based school programs focus on assisting school-age patients to maintain or regain academic levels of performance whenever possible (Breitweiser & Lubker, 1991).

Hope of a Future

Academic support, instructional intervention for treatment-related, needs, and accessible school instruction while in the hospital, may offer indirect and intangible benefits including offering hope to children with chronic health conditions, thus, further supporting their recovery.
Medical research suggests that continued participation in school while experiencing a chronic illness or serious injury such as a burn offers children continued hope. The emotional and social impact of school is a significant force in a child’s development (Maul-Mellott & Adams, 1987). “The regular achievement and long-range planning required in the school setting validate the future for children” (p.184).

Health care teams consider school a high priority to prepare patients with potentially life-changing conditions psychologically, socially, and educationally. School attendance offers additional significance as a normalizing factor in the life of the pediatric cancer patient (Deasy-Spinetta, 1981). Children find satisfaction and fulfillment in school (Kaplan, Smith, & Grobstein, 1974). School anchors children’s lives and serves as a primary influence in academic and social development. Returning to school for children with childhood cancer and other chronic illnesses plays a significant role in reestablishing the routines of daily living. As a result, these patients are able to participate in the normal learning and social activities that guide psychosocial development (Sullivan, Fulmer & Zigmond, 2001).

Educational Intervention

Hobbs, Perrin, and Ireys (1985) identify three groups of children when referring to the educational needs of the chronically ill child. They include children with severe cognitive deficits co-morbid with the illness; children with temporary or permanent physical disabilities with no associated cognitive deficits; and children with no intellectual or physical disability directly attributed to the illness but who may lag behind in school as a consequence of the illness or the treatment received. The
term co-morbid refers to a disease or other pathological process that occurs simultaneously with another (American Heritage Dictionary, 1980). A child with mental retardation who is diagnosed with childhood cancer serves as an example of the first group referred to above. Regardless of their specific educational needs, all chronically ill children appear to have several common needs, including those for sustained contact between the school and the health care team, for school personnel who understand the complex interplay between the illness and class participation, and for continuity in educational efforts when the child is hospitalized or convalescing at home (Baird & Ashcroft, 1985).

Children develop the intellectual and interpersonal skills necessary to enhance their individual sense of independence, self-efficacy, and accomplishment through their experiences in school (Searle, 2001). Chronic illness may severely impact a child’s participation in school and result in delays in development (Hymovich & Hagopian, 1992). As a result, communities are assigned the task of educating these students, often in non-traditional school settings such as hospitals and homes (Figure 1). Adjustments in educational supports are necessary across the educational careers of children treated with chemotherapy to address the absences from school that may occur. Maul-Mellott and Adams (1987) report that most cancer centers, general hospitals, and children’s hospitals utilize hospital-based teachers to provide the required support. Historically, “hospitals have instituted hospital-based schools to meet the needs of children hospitalized for periods of 3 weeks or more, or for chronically ill children requiring repeated hospitalizations” (p.191). The interaction between the educational and health care
systems within a community is presented by Lubker and Vizoso (1993) in Figure 1. The figure shows a connected relationship between the educational system and the health system for families whose children have a chronic health condition. Both the schools and healthcare providers are shown as systems within the larger community. The figure emphasizes how children with chronic health conditions and their families depend upon a working link between educators and healthcare providers. Homebound and hospital school services are linked with the health system through the local school and the larger educational system.
Educational services provided in different hospital settings vary widely, however the basic provisions are similar (Maul-Mellott & Adams, 1987). Searle (2001) reported that students attending a hospital school may receive individualized instruction, one-to-one tutoring, and a flexible curriculum adjusted to the demands of a patient’s treatment. The author also notes that in the hospital setting students are in regular contact with teachers and other staff who are familiar with the illness being
treated and students are able to associate with others who are experiencing similar treatment.

A professional teacher trained both in the school and in the hospital environments can help bridge the potential communication gap during a child’s treatment period. Teachers who are well prepared may serve as a valuable link in the total care of children. If a child has difficulty in school the parent(s) may attribute the problem to the illness. If in fact the difficulties are not related to the illness, an informed teacher may guide the parents to realize that the difficulties observed are not limited to children with serious illness (Deasy-Spinetta, 1981).

Survival rates associated with many treatments increase the need for educational intervention. MacLean, Foley, Ruccione, & Sklar (1995) report that the increasing rate of survival is producing issues for providers of school services in health-care settings. The issues include transition from in-patient to out-patient treatment, transition from off-treatment to long-term survival, and monitoring data on the late effects of the medical treatment on performance in school. Students in the off-treatment period are no longer receiving treatment. The authors suggest the use of a transition conference, which includes a teacher liaison as one participant, to assist with the different transitions required of children and parents as they experience hospitalization and medical treatment. Specific information describing how the conference process is to be implemented was not identified.

**Transition and Reentry**

School plays a role in the psychosocial care of pediatric patients treated for cancer and other life threatening health conditions. Teachers report that the
transition phase of the program is an important component of the re-entry into school for participating students and families (Deasy-Spinetta, 1993; McCarthy & Plumer, 1998). “School re-entry programs need to be made a part of the psychosocial service in every pediatric hematology/oncology service” (Deasy-Spinetta, 1993, p. 3264). Appropriately planned reentry can prevent future social and peer problems for school age patients and promote healthy adaptation from the point of diagnosis onward (Brown, 1993; Deasy-Spinetta, 1993). Brown further notes that homebound teachers are often used as liaisons for school reentry transitions. Many hospitals, particularly cancer centers and other chronic illness-related facilities, provide programs to ease the transition for chronically ill children while attempting to meet the educational and emotional needs of those within the school setting (Maul-Mellott & Adams, 1987). Reentry components that support the patient as well as orient the school staff and classmates to the disease are utilized as a means to ease the patient’s transition back to school. Hospital and homebound teachers visit children’s schools to prepare the staff and students for physical changes the child may have experienced as a result of treatment or surgery. They also prepare the staff for instructional modifications needed to accommodate the student’s return.

Educational services for school age patients often address normalization, socialization, and fulfillment as patients experience treatment and recovery from a life threatening illness such as cancer. Hobbs, Perrin, and Ireys (1985) suggest that in cases where illness and its treatment interfere with school attendance, homebound and hospital-based instruction should both be available to continue the child’s educational advancement. A school liaison can serve as an intervention when
children return to school by acting on behalf of the child with both medical and school personnel. A successful reentry program can prevent many future social and peer problems for school-age patients (Deasy-Spinetta, 1993).

Barriers to the Delivery of Educational Services

Diagnosis and treatment of school-age children and adolescents with cancer and other potentially life threatening diseases generate concerns for school performance among students, parents, and school personnel. Children with a life threatening illness experience potential difficulties in school. The educational needs presented by children with chronic illnesses are different in many ways than for children with other disabilities (Lynch, Lewis, & Murphy, 1992). As noted earlier, attendance at school may be interrupted. Absences due to frequent clinic visits and occasional hospitalizations may become a problem, particularly when teachers fail to understand the implications of the intermittent absences over time.

Specific deficits in both cognitive and emotional status related to school achievement may be a difficulty for children with cancer. Studies on children with leukemia indicate possible long-term cognitive deficits as a result of radiation and chemotherapy (Parsons & Brown, 1998). The authors report that children with cancer have a four-fold higher frequency of school-related problems than normal, healthy children. In comparison to other children, those treated for leukemia, for example, were reported to have lower school attendance, poorer concentration, under-activity, less energy, greater inhibition, less willingness to try new things, less emotionality, and delay in skill development. Sullivan et al. (2001) reported that
serious illness can jeopardize children’s self-confidence, interfere with academic and social development, and disrupt peer and adult relationships.

A study on the long-term effects of leukemia indicated that 50% of the children studied had learning problems at a five-year follow-up and 61% displayed short attention spans and poor or very poor concentration (Brown & Madan-Swain, 1993). The authors summarized a 1981 study by Meadows, Massari, Fergusson, Littman and Moss of 23 children with acute lymphocytic leukemia (ALL). The results found that younger irradiated acute ALL children and ALL children who demonstrated high-average to superior intellectual functioning, who were treated with radiation and chemotherapy, would likely suffer from severe academic difficulties and would require educational intervention. A number of studies have documented a high incidence of neuro-cognitive deficits associated with radiation therapy (Brown & Madan-Swain, 1993). Coniglio and Blackman (1995) reported that children treated for acute lymphoblastic leukemia are at risk for learning problems that include decreased IQ scores and deficits in mathematics, attention and memory. Regular classroom teachers may not be aware of the potential barriers to academic success presented by these students (Parsons & Brown, 1998). These findings may suggest a need for teacher education in the area of treatment effects on student achievement and the potential long-term impact on cognitive performance.

Parents indicated that teachers were misinformed about the illness and failed to understand the child’s needs (McCarthy & Plumer, 1998). The authors reported additional parental concerns that included child safety and peer teasing.
School district personnel surveyed on the subject of appropriate educational services for children with chronic illnesses report more barriers than those reported by parents (Lynch et al., 1992). School system representatives identified a lack of adequate funding, inadequate services, too few teachers and a lack of staff awareness as the major barriers. A survey of 394 teachers in North Carolina schools indicated that only 38% of the teachers surveyed received any formal coursework in the area of chronic illness and nearly half reported feeling unprepared to work with children with chronic illnesses (Johnson, Lubker & Fowler, 1998).

Armstrong and Horn (1995) recommend several forms of support for school-based personnel that included: educating classroom teachers and other school faculty about children’s diagnoses, problems that might be encountered, and reasonable academic expectations for the children in school. The authors also caution against the categorical approaches (e.g., learning disabled and educable mentally disabled) because they may not be appropriate for children with central nervous system (CNS) effects of cancer.

Studies of the psychosocial adjustments and age-appropriate achievement of patients found that strong efforts were needed to help patients. One of the problems reported by patients was catching up with academics. Only the patients diagnosed in adolescence had significantly more problems in the area of social well-being. (Felder-Puig et al., 1998; McCarthy & Plumer, 1998). Felder-Puig and colleagues further noted that developmental factors such as peer influences would be expected when the disease onset and management coexist with a developmentally important period like adolescence. Sullivan et al. (2001) explained that “children who miss
school for extended periods can experience deterioration in peer contact, which significantly impedes the process of socialization” (p.12).

Current Practice

A review of existing hospital school programs offers a glimpse of the types of programs currently available to school age patients in five different hospital settings. These schools demonstrate the differences found among this small sample of hospital schools identified during the research.

The State University of New York (SUNY) University Hospital in Syracuse provides an educational specialist for children developing learning disabilities as a result of either the primary cancer, such as brain tumors, or the treatment of the cancer (Karl, 1999). The specialist’s duties include working with children and adolescents, working with families to address educational concerns, serving as a liaison with schools, coordinating school reentry, and tutoring students during therapy.

Cincinnati Children’s Hospital Medical Center utilizes ten professionals to serve school age patients. Seven of the ten are certified teachers who serve patients treated in the medical areas of psychiatry, hematology/oncology, children’s rehabilitation, cystic fibrosis, and dialysis. Four teachers are employed by the Cincinnati Public Schools and three are hospital employees. The three additional non-teaching positions serve as reentry personnel to facilitate patients’ successful return to the regular school environment (Cullen, 2001).

The University of Wisconsin Medical Center utilizes three certified teachers, all of whom are employed by the Madison, Wisconsin Metropolitan School District.
All school-age patients receive instruction when medically able to participate. One goal for the school program is to provide an opportunity for students to keep pace with their regular school classmates. School also provides patients a normal daily routine through individualized instruction in the classroom or in the patient’s room. As members of patient care teams, teachers consult with home school personnel to coordinate the exchange of information and materials. School operates from 9:00 a.m. to 2:30 p.m. and follows the public schools’ academic calendar (Weber, 1999).

The school program at Children’s Healthcare of Atlanta provides a classroom environment, equipped with computers, where inpatient students receive help keeping up with schoolwork. Bedside instruction is also provided to patients unable to utilize the classroom. A hospital teacher contacts the patient’s regular school in order to coordinate the instruction in the hospital with instruction the regular school classes (Sullivan, 2003).

In-hospital school programs are provided for patients in the medical centers located in Richmond, Charlottesville, and Norfolk, Virginia. In addition, the State of Virginia utilizes educational specialists to serve school age patients when they leave the hospitals and return home. The educational specialists, serving different regions of the state, provide support during transition from the hospital and deliver assistance to children at the home school level (C. Luck, personal communication, April 15, 1997).

The role of a hospital teacher in the school I administer supports student achievement in several different ways. The teacher may: (1) contribute to the psychosocial needs of children in recovery, (2) provide early intervention to prevent
or reduce the cognitive impairment resulting from certain treatment involving the central nervous system, (3) communicate with regular classroom teachers and parents to reduce existing barriers that may interfere with the delivery of educational services to chronically ill children, (4) direct or support transitions when students re-enter schools following hospitalization and treatment, and (5) assist school personnel to adapt or modify school procedures when indicated by state and federal mandates (Cullen, 2001; Lynch et al., 1992; Weber, 1999).

Weber (1999) also stressed the importance of teachers working as members of a multidisciplinary team to remain informed and to inform other members of the child care team. The inclusion of academic instruction in the treatment and recovery process is stressed in the literature. A school program in the hospital provides teachers’ access to the patients and helps to address patient’s educational needs not covered by medical staff.

Quality of Life

Hymovich and Hagopian (1992) describe living with a chronic illness as a challenge and a threat for both the patients and their families. “Because chronic conditions affect every aspect of being (physical, emotional, social, financial, spiritual), they pose a threat to everything vital to the person” (p.3). Chesler (1993) describes the treatment of childhood cancer as being both physiological and psychosocial. The author emphasizes that the delivery of psychosocial care should include the entire social unit of the family, the extended family and friendships, relations, and neighborhood or community contacts. School is included among the community contacts providing the overall system of support.
Acute lymphocytic leukemia (ALL), the form with the highest incidence among all forms of leukemia, carries a more favorable prognosis than other forms of the disease. As a result, a large percentage of studies have focused upon this population (Brown & Madan-Swain, 1993). As of 1993, over 50% of children with acute lymphocytic leukemia achieve normal life expectancy Robison, Mertens, & Neglia, (as cited in Brown & Madan-Swain, 1993). As more children survive, short term and long term cognitive, social, emotional, and behavioral difficulties surface which interfere with overall levels of functioning. “The quality of life for these youth becomes of greater concern” (Brown & Madan-Swain, 1993, p. 75). Maintenance of a child’s school status and continuous academic progress, including, when appropriate, the reintegration into the school environment, is of paramount importance (Chesler, 1993). School provides children with a long-term relationship in their community. Although the presence of a life threatening illness in a child may seem overwhelming and almost beyond understanding in its meaning or purpose, “plugging away at life” in the face of this adversity becomes its own reward, for both the child and the family members (Deasy-Spinetta, 1981, p.16). School, as a component of the treatment and recovery process, appears to be supported in the research.

Multidisciplinary Approach

Hill and colleagues (1998) confirm “long term negative consequences of treatment on the psychosocial adjustment and academic achievement in survivors of childhood ALL who were treated approximately 15 years previously” (p.14).
Improved prognosis has resulted in more children with leukemia returning to school following treatment.

A multi-disciplinary approach that includes teachers is recommended as the best way to respond to the psychosocial needs of children with cancer (Cincotta, 1993). “The ideal is to develop a partnership among children, parents, teachers, psychosocial and medical staff, and volunteers, whose cumulative expertise allows for effective psychosocial treatment planning” (p. 3251).

Chronic illness can create significant stress in a community. The stressors include the individual’s reduced productivity in the community and financial strains resulting from services required to support the individual in the community. School services are one example required to support the individual in the community. (Hymovich & Hagopian, 1992). School provides a long-term relationship for the child with the community. The authors further suggest that nurses advocate for an adequate and appropriate education for chronically ill children. They emphasize that health-care personnel or parents cannot make teachers’ contributions to children. Although the school nurse can serve as an important link in the care of the child, most children’s school problems are of an instructional nature rather than a medical nature. As a result, the classroom teacher, the school psychologist, and the school counselor play pivotal roles in delivery of services, assessment, and support (Deasy-Spinetta, 1993). Deasy-Spinetta suggests that teachers be empowered by the medical team to assume a full partnership role. Lauria, Hockenberry-Eaton, Pawletko and Mauer (1995) includes child life specialists and teachers as key components of a psychosocial protocol for childhood cancer patients, in an
expanded multidisciplinary team. Included also as essential institutional and community resources are “school programs including in-hospital school, planned school reentry programs, tutoring, educational programs for school personnel, and liaison efforts with classroom or homebound teachers” (Lauria et al., 1995, p.1347).

Armstrong et al., (1999) indicate that assessment of children treated for cancer remains a challenge for psychologists and educators. Consultation with individuals who have expertise and experience in assessing children with brain tumors and leukemia is important, particularly when the knowledge of treatment history and current medications is essential to the interpretation of academic tests. This consultation may be difficult for psychologists with limited access to major medical centers. Sexson and Madan-Swain (1993) suggest an integrative approach, where communication between hospital-based personnel, the school, and the family is established when children are diagnosed, to track the child’s progress and interventions through periods of hospital care, homebound instruction, and school re-entry.

Patient Attitudes and Feelings About Their Condition

Perceptions and attitudes about their own condition is a factor influencing the development of problems in some chronically ill children (Briery & Rabian, 1999). Feelings about having a chronic illness play a significant role in children's social adjustment to peers and in how they cope with and adapt to the chronic condition (Lefebvre, 1983; McCubbin & Patterson, 1983). Concerns expressed by childhood survivors include the areas of family, friends, school, and employment (Lozowski, 1993). “Childhood illness apparently functions as a stressor, that in combination
with other variables, may contribute to increased risk, but is not the sole cause of adjustment problems” (See LaGreca, 1990, p. 287).

Cincotta (1993) emphasizes the importance of listening to children. The author stresses the importance of children having a voice in the treatment and recovery process following a cancer diagnosis. Many children who experience cancer fail to acknowledge some of the side effects from their surgery and treatment and withhold those feelings. Later reactions to the experience include anger, dropping out of school, or making decisions affecting their lives, which may have been avoided. Permission from medical personnel to accept that they experienced side effects would be significant. (Deasy-Spinetta, 1993). The author suggests that the student is aware of reduced academic performance, yet may appear to be functioning well within the average range. A student still performing at an acceptable level in math may realize changes in the speed at which they process new material following treatment and that new material does not come as easily. New information may not be retained or recalled as easily. Organizational skills that were once superior are no longer so. Children and adolescents may suffer daily and silently from the pain of their experience. Teachers can play a critical role in assisting students during the adjustment. Hill et al. (1998) reports that some chemotherapy has been associated with long-term neuropsychologic effects on intelligence and academic achievement. Their findings “suggest the importance of school achievement to survivor’s subsequent psychologic state and vocational adjustment” (p. 214). Hospital school teachers and homebound teachers can provide the
additional academic support for children who remain out of school during the
treatment and recovery period.

A multidisciplinary team approach described by Lauria et al. (1995) identifies
patient psychosocial issues and corresponding clinical interventions needing
attention during the period of diagnosis and initial treatment. School services can
play an integral role in assisting school age patients as they face these issues.
Lauria includes school services as clinical interventions in describing psychosocial
care issues for children with cancer. Two examples are: (1) psychosocial issue
uncertainty and loss of control: clinical Intervention – return to school and other
activities. (2) psychosocial issue – return to daily activities: clinical intervention – use
of hospital school and recreation services.

Numerous references to school as a component of the treatment and
recovery process for children are noted in the literature. The references identified
roles that school personnel may play to support children with chronic illnesses and
or injuries during the treatment and recovery process. The review failed to identify
research done to survey hospitals’ schools and how these schools deliver services.
The qualitative research proposed in this study will contribute new information to an
already limited base of knowledge on hospital schools and the role the school plays
in children’s treatment and recovery.
CHAPTER THREE: METHODOLOGY

Introduction

This chapter describes the study design. A qualitative intrinsic case study (Stake, 1995) was conducted at one hospital school. Stake describes an intrinsic case study as one in which the researcher wants to better understand the particular case being studied. According to Stake, the purpose of an intrinsic case study “is not theory building” (p.237). Instead, study is undertaken because of intrinsic interest in, for example, a particular school. The author contrasts the intrinsic case study with an instrumental case study where a particular case may be studied to refine a theory (Stake, 1995). This dissertation focused on understanding the phenomenon of one hospital school through multiple perspectives. The school is operated by the local public school system and is located in a state-operated hospital. The study examined the administrative policies and procedures and general operation of the hospital school. The study participants were teachers in the hospital school, the school principal, and hospital administrators. I collected data using interviews with teachers and administrators, observations of teachers performing the duties of a hospital schoolteacher within the hospital environment and document analysis using available written policies and procedures (Patton, 1990). Teachers had the opportunity, through member checking, to affirm that my recorded information was an accurate reflection of their school experiences (Lincoln & Guba, 1985).

Prior to data collection I developed a limited number of initial codes to help organize the data. Throughout the collection of data, I coded and analyzed the data (Charmaz, 1994). The final codes resulted from the actual data collection process.
Data that emerged which did not seem to fit the categories were not ignored. Instead, I weighed the explanations and modified the codes for these items (Charmaz, 1994). I analyzed and interpreted data using observers’ comments (Bogdan & Biklen, 1998), and continuously compared the data, looking for common themes requiring additional examination. Throughout the fieldwork, I was cognizant of the need for balance between descriptive material and the observer comments I recorded during data collection (Bogdan & Biklen, 1998).

Researcher Background

I bring to the study experience and interest in this area which extends beyond my present career assignment as a hospital school principal. I bring a background as a teacher of children requiring special education. I have served as a teacher of deaf and hard of hearing children and later expanded my experience by teaching children with learning and emotional disabilities.

A personal anecdote illustrates my interest in this topic. I was introduced to one child requiring bone-marrow transplantation after processing her referral for homebound instruction. The request came from a Medical Center physician for a first grade girl from a small community in the state. The child was residing in town for her treatment. While hospitalized, she was enrolled in the local public schools’ hospital school. Following her transplant, the child was discharged from the hospital but was unable to attend school due to a compromised immune system. As a part of her transition, I assigned a homebound teacher to the child and enrolled the girl in the first grade where she spent the year receiving instruction at home. The homebound teacher made several attempts to help her become part of the first grade class in her
elementary school. Classmates wrote letters and sent pictures and the child replied. The child’s mother and classroom teacher reported that a meaningful relationship developed with classmates from a distance. The liaison between school and home was the homebound teacher. Before the school year ended, the student visited the class one day for a birthday party. The school year ended successfully, and she was promoted to the second grade. Although she returned to regular school the next year, she was unable to complete grade two. She expired before Christmas.

This experience and several since gave me an increased understanding of how school for children experiencing life-threatening illnesses or injuries can be provided in the health care setting. I wanted to closely examine the teacher’s role in the delivery of instruction and better understand the operation of school in a hospital environment. In my role as hospital school administrator, I have observed physicians, nurses, social workers, and child life specialists supporting the school program as an important component of the overall treatment process. This research seeks to identify administrative components and practices common to a hospital school which support the delivery of educational services to students served in the hospital. While the faculty and I remain concerned with students maintaining steady progress in school, we also acknowledge the need for modified assignments for some children as well as a need to concentrate on the transition from the hospital school setting following treatment.
Study Design

The method for this study was determined by the questions to be explored. Since the focus of the study was driven by the desire to determine what could be learned from the operation of this single school, the research was designed as a case study. Stake (1995) and Yin (1994) both suggest that case study is a design used to answer the "how" and "why" questions, thus helping the researcher better understand the situation and learn from specific cases. The research of this specific case is intended to provide a better understanding of how one hospital school operates.

Qualitative inquiry enables the researcher to focus on a relatively small sample, even single cases (n=1), selected purposefully (Patton, 1990). The hospital school selected was chosen purposefully to help me gain an in-depth understanding of the educational services delivered to patients in one large state supported hospital school serving over 800 pediatric and psychiatric school-age patients annually, in conjunction with the local public school district.

The objective of my research was to gain a richer understanding of the administrative practices and procedures of the hospital-based school by examining the school within the real-life context of the hospital.

Study Site

I selected a large medical center that supports an educational program for school-age patients. Being familiar with the hospital setting and the roles of the selected participants, (principals, teachers, and hospital administrators) I was seeking the natural setting for a case study. The university-based medical center is
a large state supported hospital and offers pediatric and psychiatric inpatient facilities for children and adolescents. Hospitalization and extended outpatient treatment requires many patients to miss long periods of school, thus providing a rationale for the hospital school program. The school program has served patients from kindergarten through twelfth grade for more than twenty years. Patton (1990) explains that “in many instances more can be learned from intensively studying extreme or unusual cases than can be learned from statistical depictions of what the average case is like” (p.170).

The number of hospital schools in the state limited the size of the sample. Presently, four hospitals support state sanctioned schools serving K-12 pediatric patients (State Education Agency, 2001). The school was selected because it represents a medical facility where a school program is well established with a history of academic instruction and transition planning for children whose extended absences from school require instruction while in the hospital. Children experiencing treatment for cancer often have a high risk of treatment-related complications and even death (Shivnan, Shelton, & Onners, 1996). The hospital also supports a burn center serving patients regionally with severe and potentially life-threatening burns. These children serve as extreme cases who, when medically able, receive academic instruction as inpatients and outpatients for approximately two months to one academic year. The family’s natural focus on healthcare places school in an ancillary yet important role. Educational services in the health-care setting are not well documented in the literature.
The Hospital School delivers educational services to school-age and selected pre-school-age children. The school has a continuous, year-round calendar allowed by a waiver from the local public school system. Teachers work with children and adolescents not only on the inpatient units and in clinic settings, but also in area hotels when patients are involved in major organ transplants which may require long waits before surgery. The mission of the school “to provide for the effective management of the educational program for chronically ill, hospitalized and pediatric outpatient students” is included in the school brochure.

Healthcare services for children and adolescents are delivered in different facilities. Three older facilities house hematology/oncology, radiation, dialysis, a traumatic brain injury (TBI) clinic, the Burn Center, and the bone marrow transplant unit. A Children’s Hospital houses the school office, media center, classroom, and work stations for the pediatrics teachers. The bulk of pediatric inpatient services, the Pediatric Intensive Care Unit (PICU), and clinics are located in this facility. A Neurosciences Hospital houses the children and adolescent psychiatric program and teachers’ offices. The Women’s Hospital houses the obstetrics unit.

Participants

Written permission was obtained from the NCSU Internal Review Board (Appendix A) and from the hospital (Appendix B) for access to participants prior to any attempt at data collection. Access to the hospital school was approved. Third-party introductions through a School of Education/School of Medicine faculty member reduced possible questions about researcher intent. The school principal cleared my participation through the public school system. I spoke with the faculty of
the school regarding the study and confirmed their participation. I explained my role and the purpose of my research framed within the context of the school serving children with potentially life threatening illness and injury. The participants signed a consent form (Appendix C) and they were informed that all data collected would be securely maintained in my files at home. Participants’ names were not used. Instead, each participant was assigned an identification number. The participants of the study consisted of one principal, two hospital administrators, five teachers, and one media specialist.

All nine participants held advanced degrees. One had a Ph.D. in education and one was an M.D. Additional demographic information is listed in Table 2. Six out of the 13 teachers at the school participated in the study. The remaining seven school faculty members elected not to participate in the study. One teacher who chose not to participate was a former faculty member at the school in which I now serve as principal. I determined at the outset not to involve students or parents. The families are supporting members who are experiencing potentially life threatening illness or injury. I felt they were not critical participants to the case study of the school operation. A list of attributes including the school’s annual student enrollment, number of certified teachers, sources of funding, medical divisions served, and scope of services will be included in the selection criteria for a “purposeful” sample (Patton, 1990).
Table 2

<table>
<thead>
<tr>
<th>Participant Certification</th>
<th>Position</th>
<th>Gender</th>
<th>Age</th>
<th>Years in Education</th>
<th>Years at Hospital</th>
<th>Highest Degree</th>
<th>Area</th>
<th>Degree</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher</td>
<td>F</td>
<td>33</td>
<td>10</td>
<td>8</td>
<td>M.Ed.</td>
<td>Special Education</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Teacher</td>
<td>F</td>
<td>54</td>
<td>27</td>
<td>2</td>
<td>MLS</td>
<td>Media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Teacher</td>
<td>M</td>
<td>56</td>
<td>28</td>
<td>23</td>
<td>M.Ed.</td>
<td>Special Education</td>
<td>Special Education</td>
<td>Regular Education</td>
</tr>
<tr>
<td>4</td>
<td>Teacher</td>
<td>F</td>
<td>56</td>
<td>27</td>
<td>23</td>
<td>M.Ed.</td>
<td>Special Education</td>
<td>Special Education</td>
<td>Regular Education</td>
</tr>
<tr>
<td>5</td>
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<td>F</td>
<td>57</td>
<td>31</td>
<td>13</td>
<td>M.Ed.</td>
<td>Special Education</td>
<td>Special Education</td>
<td>Regular Education</td>
</tr>
<tr>
<td>6</td>
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<td>59</td>
<td>32</td>
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<td>M.Ed.</td>
<td>Special Education</td>
<td>Special Education</td>
<td>Regular Education</td>
</tr>
<tr>
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<td>60</td>
<td>30</td>
<td>30</td>
<td>Ph.D.</td>
<td>Education</td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>Hospital Administrator</td>
<td>F</td>
<td>45</td>
<td>NA</td>
<td>3</td>
<td>M.S.</td>
<td>Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Medical Director</td>
<td>F</td>
<td>42</td>
<td>NA</td>
<td>5</td>
<td>M.D.</td>
<td>Psychiatry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Potential Bias

Recognizing the potential for researcher bias in my current position as principal, I selected a different hospital school in which to conduct the study. My experience and expertise in the field of hospital school education provided me a focus that served as an asset in this study, an informed perspective with which to collect and examine the data. I view this experience as a strength, rather than a potential weakness. As a hospital school principal within a major U.S. medical
center, I endorse the delivery of academic instruction to all children who are able to participate during their hospitalization. In our School Improvement Plan (SIP) for 2002-2003 the stated mission reads:

To assist school-age children in maintaining or regaining academic progress during hospitalization and/or rehabilitation.

Data Collection

Stake (1995) indicates that the qualitative case study is characterized by the researcher’s immersion in the situation using on site observations and contact with the activities and operations within the organization. Additionally, what the researcher is unable to observe is obtained through interviews and documentation. I utilized three sources of data collection: (a) document analysis, (b) interviews and (c) observation (Bogdan & Biklen, 1998; Patton, 2002). I selected three different sources of information to triangulate the data collected to test the consistency among the findings generated by the three data sources within qualitative methods (Patton, 2002).

Patton explains that the triangulation of data sources involves checking the findings against other sources and perspectives which can contribute to the overall credibility of the findings.

Document Analysis

I gathered the school improvement plan, administrative policies and procedures, teacher’s documents and memos addressing policies and procedures to obtain documents for data collection (Bodgan & Biklen, 1998). I was seeking any historical or contextual dimensions that would add to the data collected through the
interviews and observations (Glesne & Peshkin, 1992). A limited amount of written information was available from the school. An analysis of existing school policy manuals and written policies and procedures was conducted to obtain information about the operation of the school (Glesne & Peshkin, 1992; Merriam, 1998; Patton, 1990). Patton (1990) refers to program records and documents as rich sources of information about a program. The documents provided a basic source of information about the school program and assisted with the formation of additional questions for interviews and observations. Information from the documents also provided a contextual foundation for some of the data collected through the interviews (Merriam, 1998). A document summary form (Appendix D) was utilized for taking notes on the materials reviewed. Miles and Huberman (1994) suggest the use of a summary form for organizing the information from various sources and for coding.

**Interviews**

I conducted an initial group interview with the participating teachers to obtain information about the time engaged in direct instruction, planning, transition and other duties. An interview guide was utilized for this initial set of questions (Appendix E). The information obtained was valuable for the study because it provided a foundation for understanding a teacher’s day in the hospital school. This initial session also served to dispel any concerns among these participants that I was interested in evaluating their performance or the operation of the school in general.

I interviewed each participating teacher a second time and interviewed the principal and both hospital administrators once during the course of data collection. The interviews were scheduled, semi-structured, and open-ended (Patton, 1990).
Interviews were conducted in the teachers’ work areas and in the offices of the principal and both hospital administrators. The interview guides (Appendix F) and (Appendix G) helped to ensure that the same basic information was obtained from each participant. All interviews were scheduled to last for 45 minutes to 1 hour.

Each interview was tape recorded, transcribed, and made available to the participants for review (Patton, 1990). Patton also notes that this technique eases data analysis by making it possible to locate various respondents’ answers to each question. Patton further states that the purpose for qualitative interviewing is to understand how program staff and participants view the program and to capture their perceptions and experiences. The interview with the principal was altered due to a sudden change in her schedule. As a result, I completed the interview by accompanying her to an off-site assignment. The job of hospital school principal comes with unscheduled interruptions similar to those of a principal in a traditional school. The anonymity of the participants was protected by coding the participants’ responses to the interview questions in place of names.

I listened to the interview tapes prior to transcription to gain an opportunity for data analysis (Maxwell, 1996). The notes I made helped develop initial ideas about categories to be utilized. I also listened to the tapes while reading over the written script as a review. Marshall and Rossman (1999) suggest that reading and rereading the transcripts familiarizes the researcher with the data. A coding system was used incorporating codes and subcategories corresponding to the questions from the interview protocol. Initially, the results were examined to identify individual teacher differences and any instructional variations that may exist among the
different medical units. A description of the interview results was written to examine teacher time use and the broader school organizational questions.

A final group interview was used with the teachers as a form of member checking. This provided these participants an opportunity to correct any misunderstandings I may have had and to generate any information not initially obtained (Lincoln & Guba, 1985).

Observations

In an effort to supplement information obtained through the interviews, I conducted observations of teachers engaged in the “typical” performance of teaching in the hospital (LeCompte & Preissle, 1993). I used non-participant observation as a means of data collection with an emphasis on refining and verifying data collected from interviews and documents (LeCompte & Preissle, 1993). Observation dates were initially scheduled with the teachers to establish rapport. The observations were spread over several months, including the summer, to allow an adequate opportunity to see the school in action (Bogdan & Biklen, 1998). The observations occurred during instructional and non-instructional periods of the school day. Teachers were observed delivering instruction, interacting with parents and hospital personnel and during non-instructional time engaged in planning and communication with home school personnel. I was introduced to parents and students as a colleague doing research to reduce any potential anxiety about a stranger appearing in this highly confidential setting. The observations were also designed to give the reader a glimpse and understanding of school in the hospital. As I gathered the data, I compared the information by reading and rereading the field
notes. I made summary notes to highlight key points. Field notes were collected using a laptop computer, a handheld computer, and paper and pencil, depending on the situation being observed. The notes were transcribed, read, and summarized in the form of memos.

Data Analysis

Data analysis involves organizing the information seen, heard, and read by the researcher in order to make sense of what is learned (Glesne & Peshkin, 1992). Bogdan and Biklen (1998) describe a two-phase process of analysis: analysis in the field and analysis after data collection. The authors suggest that analysis in the field be utilized to make decisions and narrow the study. A systematic approach of analyzing the data was utilized.

Coding is the main categorizing strategy in qualitative research (Maxwell, 1996). Merriam (1998) suggests that creating categories involves looking for recurrent patterns in the data. As a form of analysis, codes were used as tags for assigning units of meaning to the information compiled during the study.

Establishing a basic structure for the codes helped prevent confusion in keeping the data organized. General definitions for each initial code were created to aid in consistent application during both the initial and later phases of analysis. These codes guided the organization of the data and the retrieval of data later in the process. A sheet listing the initial codes utilized is included in Appendix H. When most of the data were collected, I completed the analysis by seeking more general themes and constructs.
The coding system incorporated numbers to label each observation. The data were assigned category codes using categories and subcategories, seeking to cluster segments of data relating to particular research questions such as the school operation (Merriam, 1998). The data were examined for similar patterns and relationships to learn about the performance of the teaching assignment and to compare this with the information obtained from earlier interviews.

**Analysis in the Field**

A script of each observation and a transcript of each interview were made to provide a detailed account of the physical environment of the school, interactions of the participants within the hospital school environment, and responses to the initial research questions. Through a constant comparative method I analyzed the data throughout the study (Glaser & Strauss, 1967). Each script was coded for review and analysis. I examined emerging patterns and themes through the use of memoranda and other field notes to elaborate on the codes and offer explanations of the emerging data (Charmaz, 1994; Glaser & Strauss, 1967).

**Analysis Following Fieldwork**

Patton (1990) stresses the importance of completeness of data, before attempting to organize the information. I maintained separate files for field notes/observations, field notes/interviews, and field notes/document analysis as an initial way of organizing my data. This enabled me to review the material collected from all three perspectives and look for potential gaps in information.

Following the fieldwork, I organized the memos and reviewed the interview transcriptions and observation scripts. The original research questions asked were
compared with additional questions that emerged during data collection. Two overlapping processes were utilized to analyze the data. I reduced the data into meaningful categories and used the induction of data, the process of drawing generalizations from the details to capture data through data collection. I scanned the printed fieldwork notes line-by-line to identify clusters of data that indicated evidence of events reflected by the initial codes and to organize the data. Evidence of policies guiding the delivery of instruction is an example. From this initial scan additional codes were added or modified to adapt to what the data were showing me. The purpose was to make sense of the data I collected.

The review of the interview transcripts, observation descriptions, memos, and informal notes guided me through the progressive process of coding and recoding (Glesne & Peshkin, 1992). Some codes changed as a result of the analysis and a continuous review of the data collected. As the coding process evolved, memos were utilized to identify thoughts and ideas generated during the initial analysis. Glaser & Strauss (1967) suggest that memo writing on the field notes provides an immediate illustration for an idea. Also, since the incident can be coded for several categories, this tactic forces the analyst to use an incident as an illustration only once for the most important among the many properties of diverse categories that it indicates (p.108).

As a means of seeking further clarity, I cross-referenced the data to identify the categories and codes that were related. Additional codes emerged during data collection (Miles & Huberman, 1994).
Careful study of the data will result in conclusions and generalizations based upon the data. (Merriam, 1998) refers to this phase as intensive analysis. LeCompte and Preissle (1993) make a distinction between the empirical meanings a researcher may have assigned to behaviors and beliefs and the meanings held by the participants for the same behaviors and beliefs. The separation of these meanings is the step toward “creating a vivid reconstruction of the culture studied” (p 235). This will be achieved through data analysis.

**Internal Validity**

Internal validity refers to how closely the researcher’s findings reflect what actually happened in the context of the study. Yin (1994) suggests that internal validity is a concern only for causal or explanatory case studies when the investigator is trying to determine whether event x led to event y. Yin also indicates that internal validity is not a concern for “descriptive or exploratory studies” (Yin, 1994, p. 33). LeCompte and Preissle (1993) suggest the use of corroboratory and alternative sources of data to control for threats to internal validity. I relied upon the triangulation of qualitative data sources (Patton, 2002). Patton indicates that triangulation of data sources can contribute to verification and validation. He further explains that qualitative methods “permit inquiry into selected issues in great depth with careful attention to detail, context and nuance” (p. 227). Patton also states that qualitative methods contributes to the potential breadth of detailed data about small cases such as this study.

Concerns over researcher effects on the setting were minimized in the medical center setting, particularly a since it is a teaching hospital. Participants in
this setting are accustomed to numerous medical staff and other support personnel
in the rooms and on the units. I was able to blend in as a member of the school
professionals without affecting the site.

Ethical Considerations

Two issues dominate traditional guidelines of ethics in research involving
human subjects. These issues noted by Bogdan & Biklen (1998) are informed
consent and protection of subjects from harm. Each participating administrator and
teacher in the study was observed in the hospital school setting in which they work.
Observations included teacher time with patients during instruction as well as time
spent in meetings, planning and interacting with medical personnel. In addition,
teachers and administrators were interviewed. Prior to being asked to participate, a
brief written description of the project was provided to administrators and hospital
teachers. Care was taken to protect the anonymity and privacy of all participants by
using a numerical code to identify participant responses.

According to Glesne and Peshkin (1992), ethical considerations are
inseparable from either the researcher’s everyday interactions with the subjects and
the data. Ethical concerns may be addressed throughout the research and not
simply to satisfy the demands of human subjects review boards. This research deals
with issues concerning the delivery of public school services to students who are
simultaneously hospital patients in a medical center operated by a major university.
Upon receipt of authorization from each organization’s appropriate governing
authority, I monitored the potential ethical concerns, such as anonymity, throughout
the research design, methodology, and analysis phases of the study.
CHAPTER 4: FINDINGS

Introduction

The purpose of this chapter is to present the findings of the case study. I spent several weeks observing and interviewing the nine participants at the hospital and examining the organization and structure of the hospital school.

The experiences shared by the participants about working in a hospital school and with the personnel in traditional schools reflect the perspectives of teachers, a school administrator, a hospital administrator, and a medical director. The teachers and principal in the study described their experiences delivering school services in this health-care setting. The hospital employees offered impressions of the school as a component of the hospital.

Chapter Overview

This chapter is organized into six overall sections. Each section examines a different aspect of the school's organization and services. The sections listed below include:

(1) Participants
(2) Site Overview
(3) Organization and Structure
(4) School Operations
(5) School in Detail
(6) Summary
Case Study Participants

The participants’ comments and observations concerning school in a healthcare environment shaped the description of this hospital school. An introduction of these individuals provides a glimpse of their backgrounds and common interests. The seven participating educators represent an average of 26 years in education and an average of 15 years teaching in the hospital school. The hospital administrator served 3.5 years in her position in this hospital and 27 years in health care as a registered nurse. The medical director has five years in the hospital and 14 in health care. The educators’ responses contrast their work in the hospital with instruction in a traditional school.

Alice is a 33-year-old teacher who became dissatisfied with her assignment in another school system as a special education teacher. The constantly increasing number of students, lack of administrative support, and concerns over student safety resulted in Alice seeking something different. She accepted a part-time position with the school and now teaches in the school year round. Alice worked 8 of her 10 years in education as a hospital school teacher.

Jane is a 54-year-old retired media specialist who left a leadership position in a large metropolitan high school. After retiring she sought a position where she was able to utilize her skills but was not interested in returning to a traditional school setting. She accepted a new media specialist position with the hospital school. The position was a combination of librarian and technology specialist. She served on both the technology and staff development committees. Jane spent 2 of her 27 years in education in this setting.
Tom is a middle and high school math teacher in traditional schools. He also taught pre-vocational programs before coming to the hospital school. Now 56 years old, Tom has worked 23 of his 28 years as a teacher in the hospital school setting. He enjoys the autonomy and the opportunity he has to help children and to learn by working with numerous medical disciplines in the health care environment.

Mary is a 56-year-old special education teacher who worked in a hospital school setting for 23 of her 27 years as a teacher. Prior to joining the hospital school she taught special education students in the public schools.

Sandy is a 56-year-old teacher who worked in the hospital school setting for 13 of her 31 years in education. She worked for five years as a day care teacher before receiving a masters degree in special education. Following an internship at the state psychiatric hospital, she worked as a teacher of children with behavior disorders in a team-oriented instructional setting in the public schools. She was an elementary school teacher before joining the hospital school. She joined the hospital school to return to the collaborative atmosphere of working with other adults on a team.

John is a 59-year-old teacher who taught in the hospital school for 11 of his 32 years in education. He was an elementary education teacher for 21 years prior to joining the hospital school. He said that without regular classroom experience prior to coming into the hospital school he would not have understood what the job is all about. John felt that understanding the regular school setting was important before helping prepare students for their return to it.
School Principal Fran is a 60-year-old educator and spent all 30 years of her career in the hospital setting. She oversees the educational programs in pediatrics and in psychiatry. Prior to joining the hospital school her experience was teaching in a university affiliated psychiatric institute and administering educational programs in a state psychiatric hospital for adolescents.

Betty is a 45-year-old nurse who spent 27 years as a registered nurse prior to joining this hospital as an administrator. She had served as the clinical director of nursing. In that capacity she had monitored the hospital's contribution to the school’s budget. She described her role with the school as making sure that they have what they need to be able to provide services to children. Betty said that having the school fits with the hospital’s mission.

Joan is a 42-year-old psychiatrist who spent 14 years in medicine with five of them at this hospital. She served as medical director for the psychiatric unit serving children and adolescents. She expressed how much she felt that the school contributed and that working with the teachers was positive.

Overview

History

The hospital school was founded in 1965 as the result of collaboration between the local school district and the hospital. The school has grown from a staff of 2 serving approximately 50 students to its current staff of 15.5 who serve approximately 2000 annually (School Improvement Plan, 2000 – reference deleted to preserve confidentiality).
Hospital

Four different hospitals are affiliated with the university hospital organization and make up the state’s primary referral hospital and a major medical center providing specialized and primary care. Annually more than 500,000 people from across the state and the Southeast come to the facility for comprehensive medical services (School Improvement Plan, 2000).

Funding

Funding for the hospital school is provided by the state Department of Public Instruction, the local school district, and the hospital. Teaching positions are allotted by the state department of public instruction to the local school district specifically for this special school (Fran, personal communication, August, 2002). Special Small School Allotments are requested annually by the local district to support the school’s state funded positions. This special allotment is available to local school districts for Regional Programs, Hospitals, Special Programs and Institutions (H. Hurd, State Education Agency, School Finance Section, personal communication, July 2000). Additional teaching positions are provided by Preschool Disability Funds, by the local district (generated by the school’s average daily membership [ADM] and by financial support from the hospital. Funds provided by the hospital support the extended employment of teachers to provide for school coverage 12 months a year.

The school’s instructional materials and equipment budget is also funded from several sources. The hospital school receives a non-personnel allotment from state and local funds provided by the local school district based upon the school’s student enrollment. Fran indicated that the 2002-2003 funding for instruction was
$17,976 from state and local funds. Additional funds were provided to the hospital school by the hospital. Fran reported that funding from the hospital totaled $26,000. She explained that annually some discretionary funds are also provided by the school’s Parent Teacher’s Association (PTA).

There is no charge for the Hospital School services. The program is basically funded by the taxpayers of the state.

Organization and Structure

*School Governance Committee*

**Beliefs**

Similar to traditional schools in the state and local district, the hospital school implemented site-based decision making. The faculty utilized a School Governance Committee whose membership was comprised of teachers, a school administrator, non-certified staff, and hospital representatives. The school’s mission statement resulted from a consensus-building process that involved the entire School Governance Committee. This committee develops the annual School Improvement Plan (SIP) as required for all of the state’s public schools (Fran). The plan also takes into consideration the special circumstances of a hospital school.

We participate, like all teachers, in the development of a School Improvement Plan (SIP). Through this process we have secured waivers from the school year calendar, as we have kids all year long. We have permission for teachers in the Hospital School to use annual leave days even when it is a regular school day. We now have the ability to take annual leave at times
other than the due dates designated on the district calendar (Tom, personal communication, June 2001).

The school governance committee serves as the planning and decision making body and meets weekly during the traditional school calendar year.

Incorporated in the School Improvement Plan is a set of belief statements used to guide decisions made by the committee. The school’s belief statements from the 2000-2003 School Improvement Plan (2000) are identified below. These beliefs guided the instructional program delivered to students enrolled in the school.

1. Learning is a lifetime goal that can inform decisions, motivate actions, inspire passions, and fulfill dreams.

2. Children learn in different ways. Students, teachers, parents, and other significant adults share the responsibility for this learning.

3. All children have the right to learn and can learn even when they are sick or hospitalized.

4. Children in the hospital have the right to fair and equal access to materials, services, and technology available to children in regular public schools.

5. School is a normal part of a child’s life; school in the hospital can help provide a normalizing and healing environment for hospitalized and chronically ill children.

6. Hospitalized children should experience continuity in their education. Working with the child’s community school, family, and the medical community are crucial ways hospital teachers ensure this continuity.
7. Students’ educational and vocational choices should be guided by their interests, abilities, potentials, and experiences – not by their illness or disability.

8. School in the hospital is an implicit statement of hope.

*School Mission*

From the School Governance Committee’s stated beliefs about school in the hospital, a formal mission statement was included in the school's plan. The adopted mission of the Hospital School is “to provide educational services that meet the unique needs of children and adolescents” at the hospital (School Improvement Plan 2000-2003, p.30 - reference deleted to preserve confidentiality).

During the interviews I asked participants to describe the mission and purpose of school in the hospital. Each participant offered a specific response focusing on the supportive role school offers school-age patients. None of the participants could produce a written copy of the statement but referenced the School Improvement Plan (SIP) as the source of the formal statement of the mission.

When asked to describe the mission of the school in the hospital, participants provided the responses listed below.

1. Maintain studies during hospitalization to provide a smooth transition for students returning to traditional school settings (Nancy).
2. Allow students the opportunity to continue learning while hospitalized. To make sure they receive the educational services they need (Tom).
3. Offer regular, normal activities in a medical environment for students’ general well-being (Jane).
4. Help chronically ill children fill any gaps they may have in their education as a result of the chronic illness (John).

5. Provide students the educational services they require to help them remain on grade level and prevent them from getting behind while hospitalized (Betty).

Common themes that emerged from the participants’ remarks on the school’s mission focused on students’ continued learning, maintenance of a normal routine including school within the hospital environment, and remediation of gaps in skills and concepts experienced by students from frequent absences due to their illnesses.

**School Staffing**

The hospital school is staffed with 15.5 total positions supported by a combination of state, local, and hospital funds. Thirteen full time teachers deliver instructional services to patients in both pediatrics and psychiatry. One state funded principal, 1 secretary, and a half-time media specialist make up the remaining 2.5 positions. Of the 13.5 instructional positions, one is designated as a resource coordinator and one as a diagnostician. Both the resource coordinator and the media specialist teach one class per day in the computer lab and fill in for other teachers when needed. The diagnostician serves students in neuropsychiatry and does not have a regular teaching schedule, but can fill in if needed. All faculty members are state certified and hold advanced degrees (Hospital School Website – reference deleted to preserve confidentiality). Fran explained how teachers are primarily assigned to 1 of 2 medical services, Psychiatry or Pediatrics. Some cross
over may occur based upon student enrollment. Six teachers are assigned to
deliver instruction in child and adolescent Psychiatry and 5 teachers serve school
age and select Pre-K patients in pediatrics. Teachers serving Pediatrics are
assigned based upon the medical services that include the Burn Unit, Renal,
Oncology, Pre-K students with disabilities, and Obstetrics/Gynecology.

Administration

State Level

The hospital school is considered one of the state’s local public schools. As
such, it holds a state school number and operates under the regulations, policies,
and procedures of the State Board of Education (State Education Agency Directory,
2002)

Local District Level

As a local public school the hospital school is administered by the local
education agency (LEA), which is the local public school district. The policies of that
school district’s board of education guide the operation of the hospital school, similar
to that of any other school in the LEA (State Education Directory, 2002).

An excerpt of the job description for a teacher taken from the local school
district’s Personnel Manual includes:

Qualifications - teacher certification in the assigned area

Report to the school principal

Goal - to create a flexible instructional program and a class environment
favorable to learning and personal growth; to establish effective rapport with
pupils; to motivate pupils to develop skills, attitudes and knowledge needed to live a rewarding life in an ever-changing world.

Similar to teachers in a traditional school, the hospital school teacher reports to the principal or designee and is expected to deliver an instructional program favorable to learning. In accordance with certification guidelines from the State Education Agency, the performance of teachers is assessed by the principal or designee using the local school district approved forms and procedures.

**School Level Administration**

The Hospital School principal is the individual responsible for the operation of the school. Fran reported that she serves two organizations, the school system and the hospital. She works closely with both the local school superintendent and his designee and the hospital administration: “I answer to one of the hospital Vice Presidents. We do most of our business using email and the telephone.” In the hospital Fran works regularly with the Medical Director and administrative teams within psychiatry because school is an integral component of the system: “I have regular meetings with the psychiatry administrative team. I have no set meetings with pediatrics. The teachers attend individual medical team meetings for oncology, rehabilitation, renal, and the burn unit. They know the kids and I don't” (Fran). Fran also works with the clinical director of nursing on the pediatric side and indicated that she felt neither organization understood the extent of her job.

“I also answer to the LEA Superintendent” (Fran). Fran participates in the same district level meetings with the other principals from the school district. She reported that frequently the topics are not relevant to her specific assignment at the
Hospital School. When asked whether or not she is required to attend all of the superintendent’s principals meetings Fran indicated “yes” and shared that “Very infrequently is anything brought up at the principal’s meeting relevant to me. Even our computers; we don’t even interface with our technology folks.”

Fran reported that she participates with the teachers in four regularly scheduled monthly meetings. She leads one monthly staff meeting, and participates in one monthly School Governance committee meeting and two staff development meetings each month. Some of the traditional duties she identified that occupy her time include staff supervision, budgeting, and representing the school in a public relations role for duties such as coordinating the university student volunteers used in the school.

Fran also explained that some areas of responsibility encountered in the hospital school are not faced by the principal of the traditional public school. Hospital policies and procedures surrounding issues of patient confidentiality require that staff sign annual confidentiality agreements. The form is shown in Appendix I.

Qualifications for the position of principal include the following:

It is the policy of the State of that a principal must have at least four years of classroom teaching experience and possess, at least, a Masters Degree in Education Administration (Public School Law, 2000).

The duties of a school principal, as identified in the State Public School Laws (2000) list the following duties:

1) To Grade and Classify Pupils

2) To Make Accurate Reports to the Superintendent and the Local Board
3) To Improve Instruction and Community Spirit

4) To Conduct Fire Drills and Inspect for Fire Hazards

5) To Discipline Students and Assign Duties to Teachers with Regard to
   The Discipline, Well-being and Medical Care of Students

6) To Protect School Property

7) To Report Certain Acts to Law Enforcement

8) To Make Available School Budgets and School Improvement Plans

9) To Evaluate Certified Employees and Develop Action Plans

10) To Transfer Student Records

11) To Establish School Improvement Teams

With the exception of duties specific to the facility, such as fire drills, the principal in
the hospital school will address each one during the course of a school year, with
some modification (Fran). I asked Fran to contrast her role as principal in the
hospital school with that of the other principals in the district. She answered:

Here there is not much discipline, but it is the same in terms of staff
supervision, same in terms of budgeting, representing the school at
functions and dealing with the public to some degree. I tend to think of
the hospital staff as our parents. I go to meetings where they talk about
the workday, we've got to take care of the kids, the teacher should
have done X instead of Y, just things that they need too.

I asked the teachers about the principal's knowledge of the day to day involvement
in the school in this large health-care setting. Tom responded by asking:
How much can she know? You have to put trust into the people that they are doing their job. I think that it is a totally different expectation at the hospital school than it is at a regular school, and it should be. I like the way she has allowed us the autonomy.

School Operation

School Services

The Hospital School is a unique school in the state’s public school system. The school program is provided for patients in two main areas of the hospital. Teachers serve patients in child and adolescent neuropsychiatry and in pediatric medical services. Teachers may work directly with students as inpatients and outpatients. Inpatient students receive medical treatment while staying in the hospital while outpatients no longer occupy a hospital room but continue to receive medical treatment, often in one of the hospital’s clinics. The school provides:

Year-round, K-12 educational services to school-age patients so they will be able to continue their studies with as little interruption as possible. These services include: testing, direct instruction and liaison with the student’s community school. In addition, educational services are provided for preschool handicapped children who are inpatients and, on occasion for siblings of pediatric patients, teen parents of pediatric patients and children of adult patients who are hospitalized for a period of time. Students receive attendance credit and academic credit for the work completed during their enrollment (School
The Child and Adolescent Neuroscience medical service offers diagnostic and psychiatric services to children and adolescents with psychiatric or emotional disorders or chemical dependency (School Improvement Plan End of Year Status Report, 2000 - reference deleted to preserve confidentiality). Mary indicated that the educational program is considered a part of the treatment program for students served in the psychiatric units. She further explained that these medical units serve as the area's primary resource for psychiatric evaluation and treatment. The educational services for children and adolescents are described in the End of Year Status Report, (2000):

Educational services begin upon admission by initiating school contacts after permission is obtained from parents or guardians. Services continue as the student attends the hospital classroom where alternative strategies, materials, and methods may be employed to enable each student to experience success. Formal individualized achievement testing is done as appropriate. Continuous liaison is essential and includes suggestions to parents, community school staff, and community agencies for post-hospital care. A community conference may be held at the Neurosciences Hospital or through teleconferencing. Community schools are notified by phone or fax as soon as possible when a student is scheduled to leave the hospital. A written educational summary with suggestions or a final letter
documenting enrollment is mailed after hospitalization. Educational information regarding current hospitalization is shared only when parents have given written consent for release of information. Sometimes students are discharged abruptly for medical or insurance reasons, and adequate notice is not given. In those instances, the Hospital School staff will provide information to the community school as quickly as possible (p.29).

The Pediatric program provides educational services to school-age patients in grades K-12 and young adults through age 21 who have not yet graduated from high school. A preschool program is available to patients ages 3-5 who have special educational needs (School Improvement Plan, End of Year Status Report, 2000). Tom reported that the Pediatric program offers educational services to all Pediatric Service and Intensive Care Units, the Burn Center, the Dialysis Unit, Obstetrics/Gynecology, and Hematology/Oncology. Services are also provided upon referral to the Clinical Research Unit and numerous outpatient pediatric clinics. Pediatric Services are described in the End of Year Status Report, (2000):

Educational services in the Pediatric program may include educational assessments, direct instruction, special need referrals and liaison between the hospital and the community school.

Teachers in the Pediatric program provide small group and/or individual instruction based upon community school assignments and according to each child’s individual needs. Instruction takes place in the pediatric classroom or in the student’s hospital room. Educational
services are provided for an average of 3-5 hours per week depending on the severity of the student’s illness and length of hospitalization. After parental permission is obtained for contact, teachers maintain close communication with the community school throughout the student’s hospitalization. Upon discharge, pertinent information is conveyed to the community school as soon as possible (End of Year Status Report, 2000, P. 29).

Facility

Similar to a traditional school principal, the hospital school principal is responsible for supervision of the facility assigned to the school. However, the hospital school is located in a facility owned and operated by the hospital. The space is provided by the hospital for the school program and maintenance and repair remains the responsibility of the hospital. The school occupies designated office and instructional space in two hospital buildings. There is a single telephone number with voicemail and each faculty member has an extension on which to receive direct calls from community schools. Voicemail makes the individualized access to teachers by parents, schools, and students easy. The principal's office is located in a space designated for the hospital school on the second floor of the Neurosciences building along with the offices for the teachers working with students in child and adolescent psychiatry. This space also includes a classroom and computer lab for students able to leave the secure unit. The school also occupies designated space in the Children’s Hospital, which opened in 2002, where teachers serving pediatric patients have offices, two classrooms, a media center, a computer
lab, and additional administrative space for the school secretary and principal. The new 64 bed pediatric facility uses an open space design with bright colorful rooms, wide hallways and child-friendly spaces using art work to diminish the hospital appearance of the examining rooms and waiting areas. The school space consists of a single suite of six rooms. It includes an office reception area, principal’s office, two classrooms, a media center, and a teacher’s work room. The entrance to the suite of rooms is an inner hallway connecting all the rooms. The space is open and well lit. The room is lined with multi-colored storage cabinets. The Secretary’s work space is located to the left of the main entrances. The desk separates the workspace from the rest of the entryway with rows of file cabinets located directly behind the secretary’s desk against the wall. Across from the secretary’s work area is an office for the principal. The office is equipped with a telephone, desk, and computer. Classroom 1 is approximately 7’ by 13’ and Classroom 2, adjacent to classroom 1, is approximately 6’ by 7’. The smaller classroom serves as a preschool classroom and the larger is used for K-12 students when they are able to leave the medical units. The larger classroom has six student desks, three instructional tables, a TV/VCR, sink, and counter. Multi-colored built-in storage cabinets for instructional materials, a white board, multi-colored floor tiles and two spacious windows make it a bright, inviting space. Unlike a traditional school classroom, the room is also equipped with wall connections for oxygen in case of a medical emergency. Student work is displayed in the room along with photos of the students. A plaque hangs on one wall acknowledging the school’s first principal. The smaller classroom has one
instructional table, a teacher’s desk TV/VCR, and the same bright color scheme as the larger classroom.

The school suite designated for the school supports office space for 7 teachers, the secretary, and the principal. The teachers’ workroom is approximately 10’ by 20’ and is equipped with seven cubicle-like work stations. Each teacher’s workstation is equipped with computer, printer, and telephone. The room is also equipped with a microwave oven, refrigerator, file cabinets, a common work table, whiteboard, a sink with counter space and two coffee makers. A list of university student volunteers with their schedules was posted beside the white board in the room. Eleven volunteers are listed for the semester. A note was also included beside 5 of the 11 volunteers who speak second languages. In addition to English, four different languages are represented. A sign posted on one wall identified the specific medical units within the Children’s Hospital by floor. The list included Pediatric Intensive Care, Administration and Social work, Neonatal Intensive Care, Oncology and Cystic Fibrosis, Cardiac step-down, pediatric medicine, and surgery. The list does not include the clinics and specialty units, some located outside of this facility where students are served.

The media center is 7’ by 7’ and a computer lab 8’ by 12’. Both are also included in the school suite. The room is equipped with computers for teacher and student use. The five computers, printers, and one scanner are arranged in rows along the outside walls of the room. The room is filled with reading materials for students and provides for software storage. A sink and counter are also in the room. A plaque honoring a teacher who retired after 20 years of service at the school is
displayed in the media room. Jane described the unique issues facing the school with regards to maintaining the print and electronic inventory or instructional materials in the hospital setting:

It’s hard to use a traditional library circulation system here. We have an electronic catalog of all our materials. We use a whiteboard for a circulation system, where teachers are asked to list on the board any materials they take out to use. This still does not work very well. However, a computerized circulation system would not work. The problems are similar to that in a traditional school. Different individuals using the materials make it hard to keep up with all that we have. Here we have the added challenge of kids coming and going, which creates an added risk for loss.

The school’s physical location inside a major medical facility creates a unique challenge for the administration and implementation of some school district policies developed for traditional schools. Two examples that surfaced were the school calendar and the school district’s annual parent satisfaction survey.

School Calendar

Students are present in the hospital daily. As a result the Hospital School follows a continuous, year round calendar. The school, through its school governance committee, requested and received a waiver from the local board of education to follow a school calendar different from the local school district. The school calendar was described in the School Improvement Plan (2000). Some exceptions noted in the waiver for a different school calendar include teachers
adhering to the beginning and ending dates for the 10-month employment contracts, following the state holiday schedule and designating five mandatory workdays.

Other than the 12 holidays and 5 workdays, all days are considered instructional days. This also means that teachers have greater flexibility in annual leave days and are free to take their vacation days throughout the year provided that prior permission is obtained and adequate coverage exists. Taking additional workdays on an individual basis is also available as needed. If a teacher wants to take a workday at the beginning, end, or within the 10-month contract year, this procedure should be followed:

1) make the request in advance (5 days) to the principal and indicate how the workday will be used.

2) Check with fellow teachers in advance to ensure that coverage can be maintained

3) Remain flexible to the reality that an individually planned workday may need to be postponed if coverage needs unexpectedly arise (School Improvement Plan, 2000).

Teachers who follow the traditional school calendar for the district are limited to the workdays built into the school calendar. Instructional personnel are also limited to the use of annual leave days, unless they do not require the use of a substitute. State public school law (reference deleted to preserve confidentiality) provides that "Instructional personnel who do not require a substitute may use annual vacation
leave on days that students are in attendance”. The hospital school teachers use one another to assist with student coverage.

Self Assessment of Services

The program assessment conducted by the Hospital School faculty as a component of the School Improvement Plan included a study of the services provided by the school during the 1997 and 1998 school years. The results were reported in 1999, the final year of a 3-year school improvement planning cycle. The document noted that this was the first time teachers from both pediatrics and psychiatry used common terms to participate in a school-wide self-assessment of the services delivered to students. Teachers utilized an authentic assessment technique to examine the services delivered to patients. The faculty, seeking a uniform method of recording and analyzing data, analyzed data from Student Educational Profiles, client surveys, records of services provided to non-enrolled students and promotional records. This assessment method sought to provide a uniform method of recording and analyzing data (End of Year Status Report, 2000 - reference deleted to preserve confidentiality). The impetus for this effort came as the result of feedback obtained from the evaluation of the 1996 School Improvement Plan.

When a student is enrolled in the Hospital School, the hospital teacher collects information from the student, parents, medical staff and the student’s community school. Based on this collected information about the student’s medical condition, school functioning and educational needs and goals, the teacher develops and implements an appropriate
plan that may be revised as the student’s needs or condition changes. Educational services provided to the student as the plan is implemented are documented on the Student Educational Profile (End of Year Status Report, 2000 - reference deleted to preserve confidentiality).

Four common terms were identified by the school staff to describe the services provided by the Hospital School. The terms Liaison, Psychosocial, Assessment and Instructional were selected to describe the services provided by the school and are documented on the Student Educational Profile. Liaison includes the communication the teacher has between the community school, student, medical team, and family to guide the instruction and planning for transition out of the hospital. Psychosocial includes psychological and social management of patients to ensure a maximum quality of life. Assessment includes the formal and/or informal academic or behavioral assessment performed by the teacher, and Instructional includes the planning and teaching delivered by the teacher in the hospital setting to students on an inpatient or outpatient basis. Results published in the school’s School Improvement Plan, End of Year Status Report (2000) show total services delivered to hospital school students for 3 consecutive years. The percent of school services delivered for each major category for 3 academic years and are displayed in Table 3.
The faculty self-assessment identified instruction as one of the four major services delivered by teachers to students in the hospital setting. Liaison, assessment of students, psychosocial support, and instruction each represent approximately one-fourth of the services delivered by the school faculty.

Hospital School In Detail

Demographic Data

Students enrolled in the hospital school are recorded in the state’s student information management system as are students enrolled in traditional public school. The enrollment data are utilized by both the state department of public instruction (SDPI) and local education agency (LEA) for managing student enrollment and withdrawal information and to generate instructional and operational budgets for the school.
The Hospital School enrolled 771 students during the 1999-2000 school-year. This number reflected students from 354 public schools, 32 private schools and 21 children being home schooled. In addition, 1522 students served by the school were not enrolled. In contrast the numbers for the 2002-2003 school-year reflected a very similar breakdown. The total enrolled during 2002-2003 was 683. Of the 683, 394 represented students from public schools, 30 from private schools and 16 from home schools. The number of served but non-enrolled students was 1572 for 2002-2003.

Fran explained, “The non enrolled students would include some that had been here, left and received follow-up calls. The number also included kids who came back to us for outpatient services and kids we screened but were not here long enough to receive instruction and kids their local school asked us not to enroll.”

Students may receive services but not enroll in the school for reasons that also include parents not wanting to interrupt the student’s enrollment with the regular school or being concerned, for reasons of confidentiality, about the regular school knowing that the student was hospitalized.

*Role of the Hospital School*

The role of the school, as identified on the school’s website, is being a liaison with patients’ traditional or home schools: “The Hospital School serves as a liaison with the local school to insure that the hospitalized student is not counted absent during the period of hospitalization.” The site also mentions the school staff seeking students’ school assignments whenever appropriate and school histories for patients.
I asked the participants to explain the role of a school in the hospital. For example, is the role intended to help students remain caught up with school? The participants described the school’s role in several ways. One participant, Sandy, responded that the role of the school was to help kids “catch up and make up.” She indicated “Sometimes kids are not fully caught up but they are not as far behind as they would have been if we had not been here.”

The majority of participants indicated that the role of the school involved more than helping students remain caught up. Each participant offered a slightly different perspective on the role. Alice indicated that “every case is different.” She emphasized that some kids require more help than they would in school because they are sick. Alice further explained that the role may be to help a student get caught up, to help students sort out from the assigned work what can be completed in the hospital or to help the schools with grading the work completed by submitting grades. She also offered that “It is important for the student to try to keep everything normal. Most kids want to keep up with their work. It gives them a feeling of normalcy.”

John indicated that he tries to keep students as caught up as he can. He stressed that knowing they often can’t catch up, “it is more important to talk with the school and help them understand that the kid can’t catch up and not to require so much at this time. Schools usually don’t make a big deal out of it. You just explain the situation.” This role fills the liaison function discussed in the services offered by the school. In this role, the hospital teacher facilitates the re-entry contacts with the regular school. John explained that the “re-entry process involves the school’s
regular teachers, students, the individual classroom, the whole school, and the local fire department, in the case of burn victims."

Tom offered a diagnostic and prescriptive role for the school in serving students. He explained that

We have to cut away all the excess. We have to figure out what the goal is for that assignment, what we really want the kid to learn and teach and test the kid to see if he knows it. If the kid knows it then we go to the next skill. Every now and then we circle back around to see if the skill is still there, but we don’t practice for days and days unless it is a kid who really needs a lot of practice. We cut the busy work out and go with what is really important.

Joan described the school’s role from the perspective of a psychiatrist. The role she described for the school in psychiatry focused more on the process of returning patients to school and less on instructional delivery. “School is heavily involved in the discharge process. Teachers offer the treatment team plans for school re-entry and transition. Teachers are often mediators between the medical treatment team and the home schools.” Some medical units hold regular meetings to review patient progress and discuss issues surrounding the treatment. In units such as psychiatry and the burn center teachers serve as regular members of the treatment team. This participation offers an opportunity for students’ educational and transition needs to be considered by the team. Issues including a student’s need for homebound instruction or shortened school day can be addressed with the health care providers who document the needs for school personnel and parents.
Betty stated that “the school supports students who are missing school and simultaneously supports parents by reducing concerns over school absences during medical treatment.” She added that the school’s role extends to outpatients. “The school serves as a liaison with students in the clinics.”

The School Improvement Plan (2000) reported:

For the most part, students like school in the hospital. It offers a degree of normalcy for the child who is ill and promotes a sense of hope that conditions will improve and resumption of one’s routine can be expected. Students also view school positively because instruction is either small group or one-to-one and is geared to the level where they can perform successfully and learn.

The Hospital School’s role, in addition to delivering emotional and academic support to students, appears to be one of supporting parents, medical teams, and classroom teachers with an ongoing focus on the successful return to the traditional or non-traditional school environment.

*Role of the Teacher*

The duties of public school teachers in are identified in state law. The duties listed include: provide for general well-being of students, teach students, and discourage nonattendance. While none of the duties listed specifically address the duties of teachers in a hospital setting, they include the general activities a hospital school teacher performs in the course of their teaching assignment.
“Teaching the Student” includes “To teach as thoroughly as they are able all branches which they are required to teach” (p.276). Teachers in the hospital are expected to perform as much instruction as is possible to assist the student (Tom).

“Discourage nonattendance” includes “Cooperate with the principal in ascertaining the cause of nonattendance of pupils that he may report all violators of the compulsory law” (Public School Laws, 2000, p. 276). Hospital teachers maintain communication with the students’ schools. They provide both instruction and liaison services to encourage continuous enrollment in school (Sandy).

All of the teachers who participated in the study taught in traditional schools prior to working in the hospital school. When questioned about the role of the teacher in the hospital many referenced the role of teachers in a traditional school in their responses. John indicated that the role of the teacher in the hospital school was similar to being in a traditional school. It is “the same as a teacher in a regular school although abbreviated. We are usually teaching one-on-one. I don’t know if we give the same quality of educational services in one short hour of the day, but it’s something anyway.” Tom explained that in the hospital the students and teacher get closer. He explained, “in contrast to a teacher in a traditional school where you have many more students in your life at any given time so you may remain removed from the individuals so the kids get only a piece of you. Here, by contrast, seeing around 6 kids each day they get all of me.”
Manage Educational Services

Participants described the role of the teacher in this hospital setting as that of a manager. Tom reported, "I see us as managers of educational services for kids that are here in the hospital. I use the word manager because it is more than just teaching." This description could be applied to teachers in many schools today. While the instructional setting and the instructional delivery model are unique to the hospital setting, the role of the teacher in this setting appears to be similar to teachers in traditional schools.

Specific roles for teachers in a hospital setting are identified in the school’s web site and the School Improvement Plan. The roles included:

- delivering direct instruction on an individual basis to help students maintain their studies while out of school (Alice, Betty and Tom)
- serving as an intermediary for the student, working directly with school counselors, school social workers, parents, school administrators and select medical teams. In this role hospital school teachers work to ensure that the educational needs of the students are met while they remain out of school (Alice, Jane and John)
- serving as a liaison with students’ home schools and medical teams to plan their return to school (Tom and Alice)
- advocating for students’ needs both in the hospital and in the home schools (Sandy)
- promoting hope and encouragement through the delivery of school (School Improvement Plan, Hospital School 2000-2003, 2000).
In the course of the morning’s instructional routine, Tom returned to the teacher’s office to perform some management duties. The office housed a photocopier, file cabinet, fax machine, telephone, coffee maker, and bookshelves filled with teachers’ reference materials. A medical dictionary, disease specific materials, and a drug reference manual were also available. Tom prepared a form letter for a community school introducing the hospital school and reviewed a file on his student from her previous enrollment. She was one of the many who are enrolled and re-enrolled when they return to the hospital. He called the student’s school and informed the counselor of her enrollment in the hospital school and requested assignments and textbooks. The school counselor referred him to the school social worker who was serving as the community school’s liaison for high school students in the hospital. Tom faxed the letter to the community school. Next, Tom reviewed the number of outpatients on the hospital census. “We also do outpatients. As outpatients, we try to schedule their school time so they don’t have to make more than one trip over here (hospital). The school uses volunteer university students to assist with instruction. They supplement what the patients get from us, but occasionally it’s not a supplement but the bulk of it, depending on the teacher’s load and the kid and the quality of the volunteer. I have some volunteers coming today. They come an hour or two each week. I’m giving this student a kid and she’s going to work with him first. I’ll catch him this afternoon. I have to fill out this assignment sheet. He’s a 6th grader and a smart kid. All assignments are in (from the school). Let’s let him choose tasks and help as needed and that should be enough. I’ll go
down and tell him that she’s coming and then after she works with him she will give me some notes on what she did and any observations she has (Tom).

When asked about the teacher’s role and homebound instruction for students upon discharge, Tom indicated that hospital school teachers make those arrangements as well.

I will initiate that kind of conversation with the doctor or someone on the team that is taking care of the student. I’ll call an Orthopaedic nurse and ask for some help with it. If homebound needs to happen I will arrange with the nurse to have a homebound referral filled out and signed by the doctor. Then I’ll call the school let them know that homebound is recommended and find out who the homebound teacher is for the school and fax the cover letter and referral. When we get a discharge date I will call them back and let them know when to start homebound. Then I’ll follow up in a week or so to see if that’s happening. We try to be a little more conscientious about follow up because sometimes it is slow to happen and we know we can make it happen faster sometimes by calling and letting them know that we were serious when we said homebound (Tom).

Deliver Instructional Services

The SIP committee, in conjunction with other members of the Hospital School community, developed a shared vision for student learning. Two overall questions, “What do we want students to take with them as a result of being in the Hospital
School?” and “What indicators will we use as evidence that students have achieved the goals we set?” were used to shape the vision (School Improvement Plan, 2000, p.31). The committee used the questions when reviewing the available school data from the 1999-2000 School Improvement Plan, End of Year Status Report, 2000. A description of the instructional levels for student performance from the 1999-2000 school year baseline data was included in the School Improvement Plan (2000). The committee reported:

1) Students participate in school while in the hospital.

“Teacher records indicate that long-term students receive daily instruction” (p.33).

2) Students participate in a formal and/or informal educational evaluation including an assessment of academic achievement, cognition, behavior, or social skills.

The nature and duration of the many illnesses offer little warning, and the length of hospital stays is often unpredictable. Therefore, students must be evaluated quickly to determine their current levels of skills and abilities in order to receive appropriate educational services. In many cases students arrive at the hospital with no school records or assignments (p.33).

3) Students continue their studies with as little interruption as possible.

Lesson plans are created from community school assignments or developed by Hospital School teachers using state curriculum guidelines. Instruction is often individualized and modified to meet the unique needs
of each student. It is an on-going goal to continue to refine and expand the curriculum. Timely communication between the community school and Hospital School can reduce delays in educational services (p.33).

4) Students earn credit for academic work and attendance.

“At each student’s discharge, an educational summary or final letter is sent to the community school. Discharge information may include dates of enrollment, progress/grade reports, multidisciplinary evaluations, classroom observations and recommended strategies and interventions” (p.33).

Teachers described instruction to students in the hospital both in terms of the medical service being received and the patients’ hospital status as inpatients or outpatients. The principal, Fran, explained that in pediatrics a lot of the instruction occurs at bedside. In psychiatry, instruction is generally individualized.

Alice explained that pediatrics teachers serve both inpatient and outpatient students and the school schedule is determined by patients’ medical procedures and physical condition. “Both inpatients and outpatients are served by the school. Outpatients are typically served, initially, as inpatients following treatment or prior to becoming inpatients (Sandy). She explained that “Outpatients are typically served in the clinics.” They may also be seen in the school’s classroom (Tom). “Occasionally teachers travel to meet outpatient students at local residences such as Ronald McDonald House” (Sandy). Pediatric inpatient students are served by teachers assigned to their specific medical service.
A teacher is assigned to a clinic to work with outpatient students. “Sometimes kids are coming in for Chemotherapy. They may sit for a couple of hours. They bring their work and the teacher holds something like study hall” (Tom). Tom described how instruction for an outpatient student looked when kids come in just for check-ups. The teacher may ask about any problems at school. “One time when I was observing another teacher the parent asked if we would talk to the school. The child had a brain tumor and when they did the surgery they had to clip one of the muscles in the eye. So, when he gets tired his eye would roll. The classroom teacher freaked. She called the parent to come and get him because she thought he was having a seizure. This was a poor family that didn’t know how to self-advocate. They brought it up in clinic. The little boy said he didn’t think his teacher wants him in her class. So we called the school and talked with the teacher and principal and explained it to them” (Tom).

Alice indicated that, in contrast with a regular classroom teacher, instruction on pediatrics is “basically one-on-one.”

It is very individualized because I make modifications for kids, so every day you are coming up with a different way to teach. I might be teaching algebra for an hour and then reading a 2nd grader a book for the next hour and then giving a spelling test. A Hospital School teacher may deal with that type of schedule on a daily basis. As contrasted with regular school teachers. Teachers in a regular school usually know what they are doing every day. Here it is different. You don’t know what you are doing every day (Alice).
Alice further explained that she teaches pediatric inpatients in the classroom and at bedside. “Whenever kids can not leave their rooms we must go to them. When they can leave the rooms we bring them to the classroom. We try to get them to leave the rooms because it gives them a break. When they can’t we teach in the rooms at bedside.” Sandy explained that most instruction in pediatrics is delivered one-to-one at bedside or one-to-one in the classroom. “We like to group small kids together for instruction but this has become problematic due to infections and compromised immune systems.” On the Burn Unit, students receive instruction both in the hospital and on homebound while their surgery and treatment occurs. “Teaching inpatients occurs individually, at bedside,” on the Burn Unit (John). “I spend a lot of time waiting for access to the patients on the Burn Unit. Once I get in with the student the other departments will not disturb me.”

Tom reported that 75% of the time the instruction provided to the pulmonary patients was delivered at bedside because so many are on medical isolation. The students’ medical condition determines where they are able to receive instruction.

In psychiatry instruction involves either trying to keep students up with their classes or just trying to provide a positive educational experience. School is a required component of the treatment program and the teacher is a member of the treatment team (Joan). Students in psychiatry are served on a locked treatment unit. “We tend to have depressed kids and psychotic kids” (Mary). Joan also noted that continuation in school helps students’ self esteem. “We also work a lot on behavior issues; assertiveness when returning to school and anger control.” (Joan) Mary
explained how “A lot of the school’s involvement is liaison with the treatment team; getting the educational history.”

Students are served in a multi-graded and multi-level setting. “We try to follow what kids are doing in school, but you get so many kids coming in and so many different levels that you can not teach one-on-one like in pediatrics. When you have 5 students – a 5-year-old, 8-year-old, and a 10-year old reading on a 3rd grade level and a 3rd grader reading on grade level it is difficult to work one on one. I’ll do a group activity one day and centers the next day” (Alice). Teachers on psychiatry also prepare homework for the students each evening. Nurses supervise the school time in the evenings (Alice).

Student access to computers for both instruction and communication varies depending upon the medical service treating the student. All students have access. The technology is utilized by students to maintain communication with the community school via email, to support the curriculum, and for simulated instructional activities (Sandy). Students in psychiatry have access to a computer lab. Elementary students have one hour daily access while secondary students have two hours available to them for instructional use (Betsy). Tom noted that the older kids in Pediatrics use the computers for research and word processing. He also mentioned that increasingly, students enter the hospital with their own technology. “They are coming in with sophisticated experience on computers and I am seeing more kids with laptops now” (Tom).

Technology is utilized by teachers throughout the school. Jane indicated that “Most teachers appear to be using technology one way or another in their
They are using CD-Rom, email, and the Internet” (Jane). Tom indicated that he uses email daily. “I even taught Algebra 2 for a whole semester to a kid in Raleigh via email, fax and telephone. Technology has made a part of the job easier and more efficient.”

Deliver Individualized Instruction

Participants emphasized that the teacher’s role in the hospital setting involved instruction tailored to meet the unique needs of students. Jane explained how the role is “to teach the kids at whatever place they are and whatever can be done in the time period.” Alice concurred. She stressed that “a teacher’s main responsibility in the hospital is to continue a kid’s education while they are here, when they are able.”

Individualizing instruction also implies flexibility. Betty suggested that “not every good teacher could work in this setting. It is a different setting and you have to change your threshold or your expectations for these children when they are hospitalized. That may need to change on a daily basis.” Teachers teach both inpatients and outpatients. The school schedule is determined by patients’ medical procedures and physical condition. Instruction is delivered at bedside in pediatrics due to students’ medical restrictions (Alice).

Mary taught a lesson with two students on the locked Neurosciences unit. These students, both new to the unit, were unable to leave the unit to meet in the classroom on the 2nd floor of Neurosciences where the classroom, computer lab, and teacher’s offices are located. The unit is secure to enable medical staff to observe patients’ response to treatment and to provide for patient safety. The room used for instruction doubled as a recreation therapy room and had students’ art work on the
walls from a previous recreation activity. The approximately 10’ by 20’ room was well lit by a window opening onto the hallway and a wall of windows with an outside view of the parking lot and other hospital facility buildings. A chalkboard was mounted on another wall. The fourth wall was equipped with built-in wooden storage cabinets. The color scheme was turquoise and white with the floor covered with square linoleum tiles colored turquoise mixed with spotted grayish white tiles. A solid oak door remained closed during the instructional setting. A rectangular table in the center of the room was equipped with eight turquoise plastic chairs.

Alice met a first grade student in his hospital room. Alice knew the student as a returning patient. This was his last morning in the hospital because he was scheduled for discharge in the afternoon. He was out of his bed and seated at an adjustable table. The room, approximately 13’ by 15’ was equipped with a hospital bed, adjustable student table, rocking chair, an IV pump on a three wheeled cart, and a television mounted to the wall.

Tom visited his first patient of the day at 9:00 A.M. Sam, age 11, was a new patient. Tom entered the hospital room and introduced himself as a hospital school teacher. He explained to the parent how the assignments from Sam’s school would be handled. He explained that he would return after speaking to the community school and excused himself. At 9:10 he reviewed the medical chart on his second patient in the nursing station. The student, April, has cerebral palsy and was hospitalized for pneumonia. Tom checked the hospital room but the patient was receiving respiratory therapy. He asked the therapist if April communicated orally. She did not. Tom indicated that he would contact the school and may spend most of
the time on this case with the school on her transition, depending on her expected
length of stay. At 9:15 Tom returned to the nursing station and reviewed the medical
chart for Kathy, a new 15-year-old patient. She was hospitalized for facial surgery.
Tom explained the school program to the parent who indicated that they planned to
leave the hospital today and would not require school support. Tom returned to the
office and modified an assignment for the university student volunteer assigned to
work with Sam. He wrote some notes about Sam’s homework. At 9:20 Tom visited
another new patient’s room. The patient, Samantha, had been served by the hospital
school in the past. Tom explained to the student (no parent present) who he was
and remembered her as a former asthma patient. Samantha explained that she was
in an automobile accident and broke her pelvis. Tom collected the student’s school
contact information, information about her textbooks and how to contact her
parent(s). Tom then asked, “What do I need to do to help you right now?” Samantha
asked, “When will we start?” Tom responded, “We will start when I can get some
assignments from your school. Maybe tomorrow or definitely Friday.”

*Modify the Curriculum*

The Hospital School’s Web Site indicated that “Instruction is based upon
assignments from the student’s local school, the state’s Standard Course of Study
and the student’s individual ability.” Alice explained, “We use the Standard Course
of Study as a guide and communicate what we are going to do with the community
school, unless they indicate we should do something different. We also get a lot of
material from the community school.” She also described how the teachers in the
Hospital School work with curricula for students who represent multiple grades and
abilities, come from school districts throughout the state and come in and out of the hospital during the year.

A teacher’s main responsibility in the hospital is to continue a kid’s education while they are here, when they are able. Whatever they are working on you continue it. We have to juggle a lot of curriculum and know where to pull materials quickly. We obtain school assignment information quickly and when the student does not have his books we need to pull something comparable.

Tom further explained,

Some of us, to ease people’s minds, explained that this is not a regular school setting. And we are asked to teach a wide range of subjects and skills. It is impossible to be a master of all the material. The expectation from the beginning in the community school is the same expectation that we here in the hospital have. Setting the academic expectation from the people at home in concert with our teachers here reduces a lot of potential problems due to poor communication.

I accompanied Alice to the radiation clinic to meet with a brain tumor patient. The instructional time was scheduled around the student’s treatment appointment. Alice explained that the patient has a poor prognosis and has lost some use of her dominant side. As a result she is learning to write with her left hand. Alice met the student and her parents. The parents left the two alone for school. Alice and the student sat side-by-side in the clinic lounge chairs in the open waiting area. The area was a large, open space with a water fountain in the center of the room. Other
patients and families wait near by and the sound of nurses calling patients for appointments was heard on the intercom. Time does not permit the student to meet in the school space in the hospital. The patients must be present in the clinic to keep their appointments. Teachers frequently meet students in clinic areas when they are back for outpatient treatment (Alice).

“Why don’t we concentrate on your algebra today?” Alice has the algebra book, a clipboard, and paper to support the instruction in this non-traditional instructional setting. “Do you remember what we did yesterday?” The student acknowledged that she did and explained. “Let me show you a couple of problems. Try that one. The line is 3X + 5Y. Let’s try this with a pencil. You solve and remember when X is 0 you have to solve for Y”.

Teachers used backpacks and large cloth book bags to transport instructional materials throughout the hospital and clinics. They carried the necessary materials to students unable to go to the designated school space.

Planning for students with repeated hospitalizations enables ongoing communication between students’ classroom teachers and the hospital school staff. Alice explained how an illness such as cystic fibrosis and cancer that may place the student in the hospital for frequent visits enables teachers to establish effective communication with parents, students, and classroom teachers, making planning more effective. “Kids that come in for a lot of treatment I sort of know what I am doing. I’ll put their books aside, talk with the homebound teacher or classroom teacher(s) to learn what the student is working on and continue with that.”
Manage Liaison Services

The hospital teacher’s role as liaison with area schools was noted on the school’s web site as a service provided by the teachers. “The hospital teacher may make suggestions for a student’s educational services and transition plan for the return to the school and community” (School Website). Participants offered examples of transition related tasks that hospital teachers provide. Alice described liaison as the hospital teacher’s second responsibility following instruction. “The teachers’ second responsibility is to be a liaison to the home school to get assignments and let the classroom teachers know where the students are and how they are doing.” She offered one example of the teacher’s responsibility in a liaison role.

For a student with cancer the hospital school teacher may need to do a liaison in education with the classroom teacher, counselor and school nurse to educate them about the case and help make plans for the future. They may need to walk the school contact through the anticipated time out of school and set up any homebound paperwork. The school uses a letter from the physician to communicate diagnostic, medication, or other medical implications for education when they leave the hospital.

Alice also added that hospital school teachers have an opportunity to establish positive working relationships with home school teachers and counselors, particularly with long-term students or students repeating hospitalization.
They serve as the “school away from home” link for continuing the instruction assigned from the home school. Fax machines and email serve as helpful tools for maintaining communication about current assignments as students move between the school and hospital. She strives to help the patient’s school personnel understand what the hospital teacher does instructionally.

Sandy identified cooperation with the home schools as a way to accomplish goals or remedy potential problems. Sandy helps students with head injuries, kids get back into school routines, beginning with school attendance. She works closely with the school to ensure that students with a traumatic brain injury (TBI) are receiving the services they require. Sandy actually developed a protocol for these services to use with the home schools.

Occasionally hospital school teachers participate as members of a local school’s I.E.P. team. The Individualized Education Plan (I.E.P.) is a required component of the special education laws at the federal and state levels. This extends the hospital school teacher’s role with the home school to assist with making decisions about the type and extent of special education required for a student.

Teachers participate as members of the hospital’s child and adolescent psychiatric medical treatment teams. They meet with the team daily for an hour. “They receive information about the students’ medical status and they share information with the doctors about students’ behavior and participation in school” (Alice). Joan explained that for psychiatric patients, in particular, the hospital school
teachers serve as a valuable link with the home school personnel. “Teachers are able to translate what we (the medical team) think needs to happen into terms schools can use and implement. This makes a difference.” John discussed the liaison role from his perspective as a teacher on the Burn Unit. He distinguished this unit from other pediatric units as a closely-knit team.

With burn patients the teachers in the schools really want to know what is going on as soon as possible. As opposed to cancer, for example, teachers know someone who has cancer so it is not quite the same. For some reason, teachers feel more obligated to come and be part of the whole process than with other illnesses.

Liaison services provided by the hospital school teachers include educating schools about the hospital school and students’ needs, advising the schools and medical treatment teams about student performance and school reentry.

Serve as Liaison and Advocate

Participants also referred to the teacher’s role as a liaison. Serving as a liaison with students’ home schools and medical teams was identified as being an important role for the teacher. Fran explained, “The psychiatry team expects teachers to provide a daily verbal report to be included in the physician’s progress notes.” Similarly, the hospital teacher communicates with students’ permanent schools to obtain course assignments, instructional materials or assignments, attendance, and occasionally grades and information on required testing.” Tom noted, “I see myself as a teacher, liaison, social worker, and part of the family.” Sandy added “advocate” to the hospital teacher’s role. She referred to her work with
both medical teams and local schools to ensure that students receive help returning to the school routine. Through the example of a student recovering from a traumatic brain injury (TBI) she described the teacher’s role of working with the medical team in the hospital and the home school upon discharge. The teacher “works with the medical teams to help the kids get back into school routines e.g. school attendance for TBI.” When students return to school the role shifts to advocate “ensuring the services being offered are appropriate” (Sandy).

John identified some responsibilities the hospital school teacher has to get the students in his medical service back into school. The approach he described is two-fold, focusing on both the school and the student. Working with the school includes "developing a plan, contacting the school, (the schools are very anxious about the burn victim’s return), and helping the school deal with the fear factor to help set them at ease.” Working with the student, beyond direct academic instruction includes “answering students’ many questions, problem solving to ease students’ anxiety, and participating with former students (burn victims) in a summer camp program. This gives me an opportunity to see the kids grow up.”

Sandy met a student and his mother in the school office area at 11:30 A.M. The student sat in a rocking chair completing some school assignments. She asked the parent, “What did they tell you about precautions for returning to school?” As they discussed, Sandy added, “Remember that school may be your highest priority initially, he may have other issues on his mind.” The student was recovering from cancer. The mother shared, “He was on the A honor roll before getting sick”.

Teachers’ roles fluctuate among direct instruction, school liaison, counselor, and student advocate. As was stated by some participants, the role can be similar to teaching in a traditional school. It is the environment in which the teaching occurs that enables the teacher to focus on students individually that makes teaching in this health-care setting different.

Teacher Time

The group interview with teacher participants was designed to obtain a snapshot of the time teachers engage in the duties of a hospital school teacher. Instruction, Liaison, Assessment, Psychosocial, and Administration were the duties used in the group interview guide to categorize the teacher’s time. The participants added an “Other” category to the list of duties to incorporate time spent on life skills, working with university student volunteers, and waiting for patients. Students served in the hospital school are typically seen individually and the time involved in each category varies based, in part, on the individual student’s needs. The categories are described below.

Direct instruction and Instructional Planning refers to the preparation and delivery of instruction to students. Liaison includes time spent preparing for student transitions back to school, referrals for special education and homebound instruction and Section 504 accommodations, preparing educational reports for schools, school visits, and the telephone and email time used in communication with schools. Section 504 of the Rehabilitation Act of 1973 provides that accommodations in the educational setting be made for qualifying students. Section 504 requires that the student’s condition substantially limit a major life activity, such as walking, breathing,
or speaking. A student’s educational performance need not necessarily be adversely affected to be protected by the provision (Rehabilitation Act, 1973). “Assessment” includes time spent conducting formal or informal academic assessments with students. “Psychosocial” includes time involved with parents and classmates and time engaged with students in informal counseling and consulting around the school component of healthcare. “Administration” includes time involved with the process of student enrollment and withdrawal, medical team meetings, and discharge preparation. Time coordinating the use of volunteers, and waiting for access to patients on the medical units and in the clinics was also included.

Teachers reported the amount of time spent in each category with five “typical” students enrolled during the time of the interview to provide an overview of how they spend their time. The time was reported in hours on a per student basis. Direct instruction ranged from .75 to 2 hours per student, per day. Within the instruction category teachers added instructional planning and reported a range of 0 to 1 hour. Time spent in the role of Liaison ranged from 1 hour to 11.5 hours. Time for assessment ranged from .5 to 6 hours. Teachers reported from .25 to 6 hours on Psychosocial and from .5 to 2 hours for Administration. Time spent in the additional categories of Life Skills, Working with Volunteers, and Waiting for access to students ranged from 0 to 1 hour for each category (Table 4). Teachers emphasized that the factors they encounter with each student influence the time spent with students. Highly independent, successful students may not require much instructional time and support (Tom).
Generally, the morning from 8:00 to 9:15 is used for planning and preparation. This may include: communication with community schools and medical staff, preparation of instructional materials, review of the daily census, coordination with other teachers, making repairs in the technology, and scheduling students for the day. I met the teachers in the office at 8:30 A.M. Six teachers were at their workspaces. One teacher was working in the classroom. One teacher was eating breakfast, 3 were checking email, and 2 were preparing instructional materials for students.

Alice was at her workstation in the teacher’s office at 9:15 A.M. when the telephone rang. The call was from her 9:30 student scheduled for school in the clinic. The student called to cancel as she will not be coming to clinic today. Alice explained that this now opened time for her and she called the students scheduled for school at 2:00 P.M. to see if they are able to meet earlier. I noted that changes in students’ schedules are a common part of teaching in the hospital. “Medical procedures, changes in family schedules, and students’ changing physical conditions require teachers to be flexible with time we may access patients” (Alice).

Sandy went to Neurosciences to check on a new patient. She reviewed the patient’s medical chart prior to making an initial school contact. She asked the nurse for the student’s anticipated length of stay. They discussed the patient’s status. Next Sandy spoke with the physical therapist and speech and language pathologist about the patient’s readiness for school. She provided a school brochure. Due to the patient’s condition she was unable to participate in school at this time. The patient was recovering from a fatal auto accident. She survived and was thrown from the
car. As a result, an evaluation for a head injury was being done. The results of this evaluation will have implications for the teacher’s role both instructionally and for transition planning. “In the case of a potential Traumatic Brain Injury (TBI) I will distribute TBI materials to the parents and teachers in her community school. In this case I will keep the school informed as to her ability to complete any school work.”
Table 4

Per Pupil Hours of Teacher Time – A Sample

<table>
<thead>
<tr>
<th>Major Service Category</th>
<th>Teachers Estimates</th>
<th>Range of Time Engaged in Activity (Hours per pupil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>.75 – 2 hours</td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>0 -1 hours</td>
<td></td>
</tr>
<tr>
<td>Liaison</td>
<td>1 – 11.5 hours</td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>0 – 6 hours</td>
<td></td>
</tr>
<tr>
<td>Psychosocial</td>
<td>.25 – 6 hours</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>.5 – 3 hours</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0 -.5 hours</td>
<td></td>
</tr>
<tr>
<td>Life Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data from the school’s School Improvement Plan, End of Year Status Report (1999-2000) showed the percentage of services provided by all teachers for the same categories: instruction, liaison, assessment and psychosocial. Data for the 1998-1999 and 1999-2000 school years are shown below (Table 5).
Table 5

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional</td>
<td>26%</td>
<td>33%</td>
</tr>
<tr>
<td>Liaison</td>
<td>34%</td>
<td>29%</td>
</tr>
<tr>
<td>Assessment</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>14%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Summary comments included in the document explain some of the differences in the services delivered between the two years. A decrease in the level of assessment services from 1998 to 1999 reflected a change in emphasis on the Neurosciences unit from diagnostic treatment to crisis management. The explanation for the reduction in Liaison services was explained by an increase in the efficiency of teacher communication. Faxing and email was offered as the reason for the reduction in time engaged in Liaison services (School Improvement Plan, End of Year Status Report, 2000).

Data from the same document showed the percentage of educational services delivered by the Pediatrics teachers and teachers working in Neurosciences. The percentages are shown below for the 1999-2000 school year (Table 6).
Table 6

<table>
<thead>
<tr>
<th>Major Service Category</th>
<th>Pediatrics</th>
<th>Neurosciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Liaison</td>
<td>36%</td>
<td>24%</td>
</tr>
<tr>
<td>Assessment</td>
<td>13%</td>
<td>19%</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>14%</td>
<td>19%</td>
</tr>
</tbody>
</table>

An explanation for the higher percentage of services in assessment for Neurosciences was explained by a higher emphasis on being part of a diagnostic unit. The smaller percentage of liaison services in Neurosciences was explained by teachers on that unit as being “hampered in their ability to communicate with students’ community schools because parental permission has not been given” (School Improvement Plan, End of Year Status Report, 2000, P.13).

The data show that the hospital teachers spend more than half of their time with students engaged in instructional and liaison services. The time spent assessing students varies depending upon the time of year and the need by medical teams and schools for additional information.

Additional Duties

Involvement with Parents

Parental involvement with hospital school personnel varies by medical service and by reasons for hospitalization. In addition, the interest parents show in the
school program may influence the contact parents have with teachers during hospitalization. Tom reported that he meets the parents of 95% of the students he serves on pediatrics. Teacher contact with parents is more likely to occur in pediatrics than in psychiatry. John explained that the parent contact he has consists of parents wanting to let their kids know that their life is not going to change. They will be in a transition for a while but things will be OK. “Parents want school. It is an indication that life will go on” (John).

In Neurosciences, short lengths of stay limit teacher’s opportunities to meet parents (Mary). She also noted that parent interaction can be more antagonistic than with parents on pediatrics. It can be hard to explain to the parent whose child just had a psychotic break that he is not here for school. “I’m glad we have social workers. Their particular area of responsibility is handling the parents.” Joan noted that “Parents are encouraged because with the school here, liaison can occur with the home school. The hospital teachers facilitate the communication with the schools.” She also shared that parents report “Teachers are empathetic advocates for the child, liaisons with the community schools and planners for the academic future ahead.”

John met a new student on the Burn Unit. The 16 bed self-contained unit is comprised of 12 regular rooms and 4 intensive care beds. He reviewed the patient’s medical chart for any noted changes in his medical condition and discharge date. Next John entered the room and introduced himself to the student and his mother. He asked the parent for some demographic information, such as counselor’s name and teacher’s contact information that he needed to make the school contact. The
student responded with the name of a teacher to contact. “She knows me best. She is the one I get sent to the most when I am in trouble.” John explained the school component to the parent.

What I need to do is contact the school to let them know that he will be home in several weeks and then get work and things available so you can go by and pick them up to have them at home to try to keep him on track. If they send a teacher out, great, but usually they don’t unless it is a longer period of time. By this Friday, I come to clinics every Friday, I’ll see you. We can talk and I’ll meet with the doctors once they check him out. If things are healing and all and figure out a pretty much a tentative date for when he can go back to school. If that is going to be three weeks or so we’ll set up a homebound form and maybe we can fudge a little and say it will be four weeks. That’s what they want to hear- four weeks or more. Then we can get teachers to come out to the house. They don’t come out a lot. They will come out at least a couple times a week to pick up work, check on him, and give him more assignments. It is not heavy-duty education but it is something anyway. If they don’t do that and it is going to be a short period of time, they may not come. You may need to stay in contact with the school and pick up his assignments. So no matter what I will see you on Friday in the clinic.

The mother indicated that she was only worried about the boy climbing onto the bus with his crutches. John explained
You will be really surprised. It goes very fast. His doctor and I will meet and discuss his readiness to return to school. He and I are very close on the whole thing of sending kids back to school when they are ready. Not before but not afterwards either. When they are ready to go he sends them back. We will talk about that. You will meet with a physical therapist when you come back for clinic. If he is physically capable of going back he'll go back. If he is not he won't.

John turned to the student and asked how that sounded to him. The student said “Fine.” John responded “I thought so. OK then, I'll see you on Friday.”

Enrollment - Student Accounting

Students are enrolled in the Hospital School using the state’s new computerized student information management system. The average overall length of stay for the school’s students is 9 days. “The rapid turn-over creates a revolving door of data transfers. As of 11/07/2002, we enrolled 248 students and withdrew 210” (Fran). The system, which was designed for the state’s traditional schools, creates some difficulties for the Hospital School. Fran reported that the system requires multiple reports, many of which are not germane to the hospital school setting. “Inaccuracies occur when we are forced to make up data to fit the state’s system, such as a schedule of classes, periods per day, etc.” Fran also explained that some local schools refuse to withdraw and release students to the Hospital School for enrollment. “When a student is enrolled here, his data is wiped out at his local school. Therefore, when returning, the student cannot simply go back to his original homeroom nor resume his previous classes” (Fran). “State computerized
enrollment statistics gathered at the end of 2001-2002 indicated that out of the 43 students we could not enroll because of local schools’ refusals to release them, 77% (33) came from schools on the new state computerized enrollment system” (Fran). The state does acknowledge the unique differences in the enrollment of students in hospital schools. “Hospital schools throughout the state have unique situations which require individual methods of student accounting” (State Public Schools Student Attendance and Student Accounting Manual, 2003-2004).

The enrollment procedure used by the Hospital School was developed at the school to accommodate the way in which students are identified and served. In Psychiatry students are automatically enrolled. “School there is considered an integral part of their treatment plan” (Fran). Fran also shared two issues regarding the enrollment of students unique to Psychiatry.

1) Parents often want the school services but refuse to sign permission to enroll because they do not want the traditional school to know where the student is.

2) Parents want us to contact the traditional school because they are unhappy about what is happening at school but they don’t want us to identify ourselves. We can not do that.

Enrolling students in Pediatrics is not automatic. “In Pediatrics it is different because some kids are here for such a short stay they are in no shape to attend school” (Fran). The enrollment procedure for Pediatrics was described by Fran below:
Teachers obtain a daily census listing all kids under age 18. The census includes county of origin, race, medical ID, and room number. Teachers visit the kids. This is called a screening. Depending upon what the parents say, what the medical team says and what the teacher finds from the screening, we decide either to enroll, not to enroll, or to serve but not enroll. If a parent refuses services we honor that.

Teachers list the students served, but not enrolled, in a log. The log is maintained within the Hospital School but does not become part of the official record as do enrolled students. The total number enrolled for 2000-2001 was 1522. With the official non-duplicated enrollment of 771, the figure 1522 demonstrates the extent of reenrollment that occurs from students who return to the hospital for multiple visits. Each teacher maintains a roll book that is turned into the office. “The monthly enrollment usually comes out to be 30 to 41. We figure on about 50 students per day” (Fran).

Teachers use some discretion when deciding whether or not to enroll. The participants explained that service to students takes priority over enrollment of students. Sandy indicated that several situations exist that may result in a student being served and not enrolled. “We have been told that if they are here with us they should be enrolled. Practice is that enrollment depends on how long they are here. I usually use the 3 day guideline” (Sandy). She further explained that she will sometimes enroll for a couple of days to help with attendance at the community school. Sometimes she does not enroll to help the community school complete a
process for setting up a complex program or justify a need for additional support (like a nurse) for a student. Tom explained:

Each teacher screens new admissions and we try to determine whether or not school services are appropriate for the students. Sometimes it is very clear that we need to get involved in the case. It is really up to the teacher to determine if school is appropriate after meeting with the parents.

Alice explained that “the process of enrollment and communication with the schools has evolved over time and is not written down anywhere.”

Following a decision to enroll, the teacher contacts the community school to obtain assignments, plans the instruction and notifies the school in writing that the student is being enrolled. “The teacher sends a letter to the school informing them that the child will be enrolled here and that they are to withdraw the student” (Alice). Occasionally the decision to enroll is met with resistance from the student’s home school. “The local schools occasionally refuse to withdraw and release students to us for enrollment” (Fran). She explained that some schools are not willing to release students because of the effort required to reenroll them when they return. This amounted to roughly one month of enrollment. A student may not be enrolled in two in-state public schools at the same time (Public Schools Student Attendance and Student Accounting Manual, 2003-2004).

The state’s computerized enrollment system appears to lack flexibility when enrolling students in the Hospital School. Fran also explained how the computerized system can negatively impact students receiving homebound instruction.
Homebound services can be jeopardized by students enrolling in the Hospital School.

In certain LEAs if a student is on homebound, is withdrawn because of enrollment here, and then returns home. Rather than being able to resume the homebound service, the student is placed on a waiting list to receive the service when the homebound teacher’s caseload lessens (Fran).

**Teacher Job Satisfaction**

Teacher participants were asked about job satisfaction in the Hospital School. The participants expressed satisfaction with the teaching assignment in the hospital setting.

**Teacher Turnover**

There is little turnover among the staff at the Hospital School. John, an 11 year veteran at the school with 32 years in education, reported that he experienced no turnover since joining the school. He indicated for himself, “I’ve just found a niche. I just like it.”

Similarly, Sandy, a teacher at the school 13 years indicated “Not much turnover here. People like their jobs.” In comparing her job in the hospital to teaching in a regular school, she commented

You don’t have all day long responsibilities with a group of kids with adverse needs and accountability pressure. It’s not just the academic responsibility; it is sort of custodial responsibilities too. While kids are there you are a teacher, but you are also a babysitter. You do not get a chance to turn them over to anybody. You are it! I also think teachers
in school still get treated like children. We don’t have that problem here.

Tom, who has taught at the school for 23 years, agreed that the turnover at the school is low. He acknowledged that the potential for burnout is higher in Neurosciences because of student behavior but “compared to our school system as a whole, our turnover rate is much lower.”

Alice, one of the newest teachers at the school in her 8th year, explained that teachers are pretty happy. She explained that working in Psychiatry can cause some burnout because of the difficult situations students’ bring to the hospital. Likewise, she reported, “it can be hard coming in each day and seeing kids with cancer and cystic fibrosis.” Alice further explained the positive aspects of her job. “There are real positives in teaching one-on-one. You are not doing the same thing every day. If I taught algebra every day, it could get boring. Here you do a lot of different things and I find that exciting.”

**Rewards and Benefits**

Participating teachers expressed a high degree of satisfaction with teaching in the hospital setting. Each reported teaching experience in a traditional school setting and none indicated a desire to return to teaching in a traditional school. When asked to identify benefits and rewards of teaching in the hospital school, they identified several. Teachers reported autonomy, working as a team, collaborating with colleagues from different disciplines, small setting, less pressure, and the variety of instruction as the primary benefits. Some also reported experiencing a positive feeling when helping kids with a chronic illness or injury, who really need the help.
Tom described the daily choices he faces about making the best use of time during the day. Students are available at different times during the day and the teacher must establish a daily schedule to try and see each student who is available. The teacher does not have control over the daily schedule in the hospital. Tom said, “The only person who can make decisions concerning the best use of time with the students throughout the day is you. It is hard sometimes.” The teachers operate independently within the medical services locating students, contacting schools, and planning and delivering instruction.

In contrast to the independence described, a strong team orientation was also mentioned. “Hospital teachers plan together as a team. We use informal meetings to plan and collaborate” (John). The teachers share office space and attempt to meet each morning, discuss student situations, and assign the distribution of students on pediatrics. John added, “It is a sounding board for people too. That kind of informal operation is beneficial to anybody.” He described the situation as a real camaraderie. “Everyone feels close to each other, maybe closer than we should be. It is like a family. You know everybody’s business all the time.” Jane, the newest member of the faculty observed, “This group, from appearances, from observing and knowing some of the people here, seems to be a real team operated group on both a formal and informal basis.”

**Difficulties**

Teachers also indicated some difficulties they experienced teaching in a hospital. Sandy, Alice, and Tom identified the adjustment to children dying as the
most difficult. “Seeing the kids die or maybe it is worse when the kids get so sick and hang on for a long time” (Tom).

Another difficult aspect of teaching in the hospital setting was having to juggle the different curricula because students come and go so frequently. Alice reported it being difficult to teach students from different ages and having to be a “jack of all trades and knowing when to push a student and when to back off as they receive treatment.”

John added that dealing with a flexible schedule is a difficulty of teaching in this setting. Teachers in the hospital setting do not have control over the schedule of when to actually see students. “Here you are always playing second fiddle to what is going on in the medical center. As a group, occupational therapy, physical therapy, school, and nursing try to set up a schedule and people try. It just doesn’t work very well” (John). He added, “That just gets a little old after a while.” As a result John feels that some teachers would be unable to work in this setting. “Many teachers I know who are Type A personalities – it wouldn’t work. You’d drive yourself crazy.”

There is not much opportunity to go into depth academically with students. “The frequency of short student stays does not allow for much teaching. Instead, teachers talk with students about their school plans and whether they need to be changed” as a result of their illness or injury (Sandy). Tom added “You don’t get many opportunities to stand up in front of a group of people and make a fool of yourself. Sometimes I miss that.”
Autonomy was mentioned as a benefit of teaching in this setting by some participants. Autonomy was also identified by Tom as a difficulty for some. “If you are not a person who can monitor yourself, this can be a tough place. Sometimes you forget time.”

John reported feeling “disassociated with the rest of the educational world” as a hospital school teacher. He explained that he once wondered what he was missing and why as teachers in the hospital school they were not included in many of the activities of the traditional schools. “Now I just don't care,” he said.

Unique Characteristics

In some respects the Hospital School resembles the other public schools in this school district. The school is a fully accredited public school staffed with certified teachers and following, when possible, the course of study taught the students in the traditional schools (School Improvement Plan, 2000 – reference deleted to preserve confidentiality).

Several characteristics of the hospital school distinguish it from a traditional public school, the first of which is in the day-to-day work affiliation of the staff. Teachers in the hospital school affiliate more with the faculty and staff of the hospital than fellow educators in traditional schools. In this setting, “teachers work together as members of multidisciplinary teams that include physicians, psychologists, chaplains, nurses, physical and occupational therapists, social workers, recreational therapists and other medical specialists” (School Improvement Plan, 2000, p. 4 – reference deleted to preserve confidentiality).
Second, instruction is delivered to students within a medical setting. The medical model drives the instruction. The fact that students are in this setting for medical treatment necessitates that their educational needs are secondary to their medical care and treatment. Teachers do not ignore the array of learning difficulties, special conditions, and developmental problems presented by some students. Instead, instruction may need to be modified to adjust to students’ treatment schedules, treatment protocols, and stamina (School Improvement Plan, 2000 – reference deleted to preserve confidentiality).

Third, educational services are provided to students Pre-K through grade 12. Teachers are required to address the academic needs for students across a wide range of ages and curricula.

Fourth, teachers serve as members of multi-disciplinary medical teams. They contribute to and learn from the expertise and information shared for each patient. Having a variety of patients/students, becoming medically informed about their illnesses and circumstances and refining the requisite skills to meet students’ specialized educational needs provide continuous stimulation that may be lacking in a traditional school setting where a teacher may work with the same age group or subject year after year. In addition, teachers must learn to deal with the stress of working with children who, for example, are abused, burned, psychotic, have cancer or who die (School Improvement Plan, 2000, p. 1 – reference deleted to preserve confidentiality).
Fifth, the physical environment makes the educational service delivery unique. The school is set within the hospital and even with classrooms and a media center students are frequently unable to be served in the space designated for the school. “School often goes to them” (Tom). Teachers work with students at bedside or on the patients’ wards; they work around IV poles, doctors’ rounds, nursing procedures, medication distributions, and a variety of other medical interruptions (School Improvement Plan, 2000 – reference deleted to preserve confidentiality).

Finally, turnover among the “students” and the corresponding need to maintain open communication with the students’ traditional schools as a liaison differentiates the hospital school from a traditional school. Data taken from the first 5 months of 2002 showed the rapid turnover. As of 11/7/02, 248 students were enrolled and 210 had withdrawn (Fran).

On average, students stay for less than two weeks, although many return for further treatment at a later time and are re-enrolled or they are followed-up in outpatient clinics. Shorter hospital stays mean that teachers spend less time in traditional, direct instruction and more time with receiving schools making referrals for special education services, offering consultation, holding community conferences with school personnel coming to the hospital or going to the school for re-entry visits (School Improvement Plan, 2000, p.2).

Teacher Accountability

Teachers were asked how they were impacted in the hospital school by an overall demand for increased teacher accountability for student performance. Some
reported they felt little or no impact in this setting (John). Tom reported feeling the impact through pressure to get kids through the state required tests. However he reported, "We typically do not have kids here long enough. I don’t worry that I have to teach to the state end of course tests. Rather, I teach what the school sends" (Tom).

Sandy indicated that the impact on the hospital school was both positive and negative. On the positive side she reported increased communication with individuals from the State Education Agency resulting in a clearer focus on what kids need to be learning. The clearer focus on using the Standard Course of Study, the state endorsed curriculum, helped with communication with the community schools. Sandy explained that the curriculum often seemed too cut and dry and generated additional pressure on kids from too much testing.

In the case of students from outside of the state, teachers reported using their screening process and communicating with the community school to ensure they are focused on the same goals.

Program Assessment

Unlike a traditional public school in the state, the hospital school is not ranked by the performance of enrolled students in the required state testing program. If tested while in the hospital, students’ scores are included in the score reports for the students’ traditional school. This is due to the fact that, with a few exceptions, students do not remain in the hospital school for extended periods of time or are too sick to participate in the testing program at the time of enrollment (Fran). Sandy explained:
Overall it is a struggle to be accountable for the results as in a traditional school setting. Some Board of Education members questioned the effectiveness of measuring your own achievement as compared to using an external assessment. The staff meets twice annually with the local board of education and they have helped board members better understand the difficulty facing the school with so many different variables affecting the ability to measure actual student performance in a traditional manner.

Basically we evaluate our effectiveness based upon whether or not we met our goals in our school improvement plan. The program effectiveness is evaluated through surveys as a part of the School Improvement Plan. They use consumer satisfaction surveys with schools served, students, parents, and hospital staff (Fran).

As a result, the staff developed internal assessment tools to evaluate the school’s performance. The Hospital School has utilized this process for over 11 years. The population surveyed is determined by the goal(s) being assessed at the time. One example is a student promotion survey.

Promotion Survey

The End of Year Status Report for 1999-2000 contains the results of an assessment on student promotion completed by the hospital school teachers. The staff surveyed school personnel in the student’s community schools. A total of 174 (96 Pediatrics, 68 Neurosciences) students were enrolled in the Hospital School program for ten days or more during the 1999-2000 school year. The committee
chose 10 days as the point they would say that “Hospital learning has had some impact on student’s learning. Ten days is what the local school districts have said you can not miss without a good excuse” (Fran). Hospital school faculty members made follow-up calls to the students’ community schools to determine which of these students were promoted. Eleven of the 174 long-term students enrolled during the 1999-2000 school year died while in the hospital. School personnel were also asked to cite factors which led to a student’s promotion or retention (School Improvement Plan, End of Year Status Report, 2000).

Table 7 shows the promotion status of the enrolled students for the two year period from 1998-1999 and 1999-2000.

Table 7

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<tbody>
<tr>
<td>Promoted</td>
<td>71%</td>
<td>70%</td>
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<tr>
<td>Non Promoted</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>Other Placement</td>
<td>5%</td>
<td>9%</td>
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<tr>
<td>Information Unavailable</td>
<td>9%</td>
<td>15%</td>
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The Other Placement category included in the table includes students placed into higher grades due to age or decisions made by a schools I.E.P. committee. The reasons cited for promotion by the community school staff offered the school staff feedback about the student population and the program’s effectiveness. The
data are constant for three years. The reasons are listed in descending order (School Improvement Plan, End of Year Status Report, 2000).

- Individual students' determination, hard work, good grades, and ability
- Special education modifications, homebound instruction, modified curricula, or state testing modifications or waivers
- Instruction in the Hospital School was important for students enrolled for the longest periods of time (some were enrolled for 180 days)
- Parent advocacy and encouragement
- Cooperation between the students’ community schools and the Hospital School

Reasons cited for non-promotion by the community schools reflect some of the difficulties faced by the population of students served by the school:

- Dropping out of school
- Prolonged academic, behavior, or attendance problems prior to hospitalizations
- Parent request for retention
- Failing state proficiency standards
- Timing of the student’s illness or hospitalization

**Community Satisfaction Surveys**

The school’s curriculum and instruction committee also used customer satisfaction surveys to obtain feedback on the school’s performance. The committee reviewed the data at the end of each year at a staff retreat.
One of the most important aspects of the Hospital School Program is ongoing communication with students’ schools in their communities. Hospital teachers share information with school administrators, guidance counselors, social workers, teachers, nurses, therapists, and psychologists. To determine school personnel’s level of satisfaction with Hospital School services, 154 surveys were distributed to the school contacts for all enrolled students during the months of March and April of 2000. Methods were taken to assure anonymity of the respondents. Surveys were color-coded to indicate Pediatrics or Neuroscience students. Sixty-two percent of the surveys were returned. Of those completing the surveys, 28 were counselors, 19 were teachers, 3 were administrators, 9 were other school personnel and 38 did not indicate their position (School Improvement Plan, End of Year Status Report, 2000 – reference deleted to preserve confidentiality).

The questions asked by the survey addressed the liaison and instructional areas of service.

1. Hospital School staff provided helpful information about the school program?
2. Hospital School staff provided helpful information about the student?
3. Hospital Staff maintained regular and timely communication between the hospital staff and the community school?
4. The student’s educational needs were met by the Hospital School program?
5. Recommendations or interventions from the Hospital School staff facilitated the student’s return to school?

The survey results found that the school’s increased effort to improve communication with community school personnel resulted in increased satisfaction with the Hospital School program. Ninety percent of the community school personnel surveyed for long-term students agreed that the teachers provided helpful information about the Hospital School, and ninety-five percent indicated satisfaction with the timeliness of the Hospital School’s communication and information specific to students (School Improvement Plan, End of Year Report, 2000 – reference deleted to preserve confidentiality).

Specifically, community-school personnel surveyed responded more positively when liaison involved pediatric patients. “This may be attributed to the “sympathy factor” whereby students with visible, physical, and often times life-threatening illnesses elicit more supportive responses than students with behavioral and/or neurological illnesses” (School Improvement Plan, End of Year Status Report, 2000, P.25). The pediatric survey responses indicated a 100% satisfaction level for questions 3 and 4.

Summary

The Hospital School is a collaborative endeavor that supports the overlapping needs of two organizations with different missions. The hospital’s focus is to treat the medical needs of children. The school system is charged with meeting children’s educational needs while they are out of school for medical treatment. Both organizations work cooperatively to return the children home with as little disruption in their lives as possible. Each organization desires that the children return home to
enjoy a high quality of life. The delivery of school services in the hospital supports children’s recovery and their return to school with minimal educational disruption.

Funding for the Hospital School is also collaborative. Funds supporting the staffing and instructional and operational expenses are provided from the State Education Agency, the Local Educational Agency, and the Hospital. If solely funded as a traditional public school, the school’s monthly enrollment alone would not generate the staffing or funds necessary to support serving the 771 enrolled students and 1500-plus non-enrolled students over a 12 month period.

Considered one of the state’s 2,158 public schools, the school organizationally resembles most traditional schools in many respects (reference deleted to preserve confidentiality). The on-site principal is responsible for the successful operation and management of the school. Teachers operate somewhat autonomously. Through site-based decision making the school uses shared decision-making and an annual School Improvement Plan to set goals. Teachers are fully certified and the school is accredited.

Aspects of the school not found in a traditional school focus on instruction. Teachers instruct students grades K-12 and deliver the full course of study. Teachers are aligned with medical services, not grade levels. The majority of instruction is delivered to students individually and frequently at bedside. The school’s administration is accountable both to the local school system’s Superintendent and the hospital administration. The Hospital School operates 12 months a year delivering instruction to students at bedside, in small classrooms, and in medical clinics.
School within the healthcare setting offers students a familiar “normal” routine along with hope and encouragement as they pursue the work of school during the disruption of experiencing a chronic illness or injury. Teachers manage the educational services with school personnel, parents, medical staff, and the students themselves with a desire to successfully return students to a traditional school setting. They deliver direct instruction, assess students’ academic skills, behavior and readiness, serve as liaisons to support transitions back to school and community, and advocate for the students. Unlike a traditional school, the instructional schedule fluctuates daily and is set by medical procedures, clinic appointments and students’ physical and mental ability to focus on school.

Teachers frequently modify their instruction and expectations while delivering the state curriculum to students ranging from kindergarten through high school. Qualifying Pre-K students with disabilities are also served. Approximately one-fourth of a teacher’s time is spent delivering instruction to students. The remaining time is occupied by communicating with schools to plan and advocate for students’ successful return to the regular school setting. Teachers also assess students’ academic performance and participate in activities designed to promote students’ psychosocial development.

Hospital School teachers reported a high degree of job satisfaction. The school has a low turnover history among the staff members. Teachers reported the variety of instruction, autonomy, team work, the small setting, less pressure, and collaboration with professionals from other disciplines as benefits to teaching in the Hospital School. Among the difficulties teachers reported for working in the Hospital
School were observing children die, juggling the different curricula on a regular basis due to the fluctuation in enrollments, and the limited opportunity to engage students in the curriculum material in depth due to the continuous movement of students in and out of the school.

An evaluation of the school’s performance among community school personnel included a follow-up of students’ promotion rates upon returning to school and satisfaction surveys with community school personnel concerning communication between the Hospital School and the community schools. Seventy percent of the students enrolled in the Hospital School for ten days or longer were promoted at the end of the 1998 and 1999 academic years. The results of the customer satisfaction surveys conducted by the school staff indicated satisfaction among community school personnel for the liaison and instructional services provided by the Hospital School.
CHAPTER FIVE: DISCUSSION AND IMPLICATIONS

Introduction

The purpose of this chapter is to interpret the findings of the case study. Based upon the findings, the delivery of educational services provided to school age patients with varied medical diagnoses is described for one health-care institution.

This case study was designed to examine a Hospital School and to provide insight into the role and operation of the school using document analysis, observation, and interviews with school and hospital personnel. The case study sought to answer these research questions:

(1) Why operate a school program in a hospital?
(2) How is the hospital school administered?
(3) Who is served by the hospital school?
(4) How is teacher time utilized?
(5) How is the effectiveness of the school program evaluated?
(6) How can the hospital school respond to the curricular requirement of the traditional schools?

Review of the Data

Participants in the study described multiple aspects of the school, including the school’s organization and administration, role of the school in the health-care setting, the teacher’s role in the hospital environment, and the school’s formal and informal assessment of the educational services delivered to patients. The school was established in 1965 and received financial support from state and local public school funding, the hospital, and the school’s Parent Teacher’s Association (PTA).
The description reported refers only to this school. There was no intent to offer a
generalizable overview of similar schools.

The experience of teaching school-age patients in a health-care environment
was reported by the six teacher participants as being positive and rewarding. Each
expressed a high degree of job satisfaction and little desire to return to a traditional
school setting. Teachers who participated in the study represented an average of 26
years in education and averaged 15 years of experience in a hospital setting. The
average age of the participating teachers was 51 years.

The role of a hospital school described by the participants supports the limited
information available in the literature. The Hospital School offers students and
families a link with their community schools while delivering educational services to
students in the local educational and health care system where the student receives
medical treatment. The educational services delivered in the hospital modify the
instruction in response to the patient’s needs within the health system (Searle,
2001). Hospital school teachers serve students in multiple roles. The Liaison,
Psychosocial, Assessment, and Instructional services delivered by the school are
examples of the school’s components connecting to each of the three overall
systems: community, health, and education (Lubker & Vizoso, 1993). The staff
works in the overall community through its psychosocial efforts and serves the
medical and educational communities through the liaison, assessment, and
instructional services to patients.

Differences were noted in the instructional role of teachers in pediatrics and
psychiatry. Teachers in pediatrics have more contact with patients’ families and work
with patients as both inpatients and potentially as outpatients through their assigned medical units. They focus more on the curriculum needs of students from numerous traditional schools. Teachers in psychiatry tend to concentrate more time on successful transitions back into school and less time on keeping students caught up in school. Psychiatric school-age patients experience shorter inpatient stays than do students in pediatrics. As a result, teacher time is spent on planning a smooth return to school as opposed to completing missed assignments.

The School

Why Operate a School Program in a Hospital?

The Hospital School serves as a state-wide resource for students with chronic illnesses or injuries that require extended hospitalization that prevents their regular school attendance. Participants identified several examples that support the rationale for students to receive school services while in a hospital. The examples offered suggest that school in the hospital:

(1) Created an opportunity for continued learning.

(2) Provided a normalizing activity for kids in the health care setting.

(3) Assisted some students fill academic gaps they have as the result of frequent school absences due to illness or injury.

(4) Prevented some students from falling behind in school as they experience the diagnosis and treatment of their medical condition.

The school’s mission states that school in the hospital offers hospitalized students a normalizing experience and hope during recovery.
In addition to addressing school truancy and attendance, the delivery of educational services in the hospital appears to support students’ academic and psychosocial needs.

_How is the Hospital School Administered?_

The Hospital School is one of the local school system’s public schools. The school operates under the same state and local regulations as a traditional public school. The school’s principal serves two very different organizations. The local school system employs the principal who works in the hospital. The responsibilities for the position include expectations from both organizations. Hospital School Principal Fran identified the traditional duties of a school principal that coincide with her hospital school assignment as staff supervision, budget, public relations for the school, facility supervision and maintenance and student enrollment and data management. She also reported that many administrative issues faced by other principals in the LEA, such as student discipline, are frequently not relevant to the role she serves in the hospital setting.

Fran indicated that the majority of her time as principal is spent with the school program serving students in psychiatry. School is an integral component of the daily treatment program in child and adolescent psychiatry. Regular school hours are built into the students’ daily schedule. As a result, the principal is more directly involved in the school program with issues such as teacher coverage due to staff absences and the school’s schedule and calendar as these affect nurses’ schedules on Neurosciences. Fran explained that neither the local school system nor the hospital understands the extent of her job as a principal in the hospital environment.
Truly a year-round school, teachers work 12 months to address the needs of hospitalized students enrolled throughout the calendar year. The rationale for the 12-month school program is based upon two main issues. First, school is considered by the hospital and the school staff as a primary component in the treatment of students hospitalized with psychiatric diagnoses. Second, school is a scheduled aspect of the treatment protocol. School for pediatric patients addresses the gaps in concepts frequently observed in chronically ill students as the result of multiple school absences due the illnesses. The summer months are often used for elective surgery and offer a time when students can receive additional academic support.

Some issues identified by participants as being unique to the administration of a hospital school include:

1. Confidentiality agreements required annually from all personnel
2. Few student disciplinary issues
3. Greater teacher autonomy within the school organization
4. Reduced teacher accountability for student performance
5. Operating a school between two organizations with different missions
6. Delivering instruction to students on a twelve month basis

Who is Served by the Hospital School?

Neurosciences.

Daily school services are included in students’ treatment upon admission to the psychiatric inpatient program. Teachers serving the psychiatric unit serve as members of the medical treatment team and assess students’ academic readiness to return to school as one aspect of their instructional responsibilities. In addition,
liaison services make up a large component of the school services provided by the school personnel. The lengths of hospital stays remain short for most students in psychiatry (SIP 2000).

*Pediatrics.*

Students admitted to the pediatric medical divisions are seen by school staff 3 to 5 hours per week. The daily school schedule is determined, in part, by students’ medical ability to participate in school. The schedule can vary on a day to day basis and is influenced by treatment schedules, the patient’s condition, and the anticipated length of hospitalization. As in psychiatry, liaison efforts are considered an important service to many pediatrics patients.

*School-Wide.*

The school serves both enrolled and non-enrolled students, working closely with the traditional schools and planning for students’ eventual return to school. The school’s annual enrollment fluctuates. The school enrolled 771 and 683 students respectively during the 2001-2002 and 2002-2003 school years. The figures do not reflect students served who were not formally enrolled. The hospital school’s annual enrollment resembles that of a small elementary school in this geographic area. However, a more meaningful figure is the number of students enrolled in the school on any given day. This daily enrollment figure averages 50 students (Fran). In addition, teachers in the hospital face the reality of a higher fatality rate among enrolled students than in a traditional school. During the 1999-2000 school year out of 174 students enrolled in the Hospital School 10 days or longer, 11 died while enrolled (End of Year Report, 2000).
How is Teacher Time Utilized?

The participating teachers reported that more than half of their time with students involved instructional and liaison services in the Hospital School. In describing instruction they included: maintaining a normal school routine, maintaining continuous school attendance, instructional preparation, direct instruction, providing students an opportunity to earn credit for completed coursework when medically possible, establishing an ongoing dialogue with school personnel about the students’ status, diagnosing and reporting student performance to medical teams for purposes of discharge planning, and school readiness.

The Hospital School teachers receive lessons and activities from the home schools, make instructional modifications, and communicate the unique instructional needs of the students to the home school contacts.

Teachers in the school adapt the delivery of instruction within the health-care environment to accommodate medical limitations students may have. Frequently instruction occurs at bedside. Modifications in curriculum are made to accommodate students’ needs. Instructional modifications may occur in many forms. Instruction is typically individualized, assignments are modified to focus on mastery of the key principles as opposed to the completion of lengthy assignments students may be expected to complete when in regular school classes, and the materials used to teach the concepts may be different than those used in the students’ traditional school. The Hospital School’s local school district goal for teachers is
to create a flexible instructional program and a class environment favorable to
learning and personal growth; to establish positive rapport with pupils; to
motivate pupils to develop skills, attitudes and knowledge needed to live a

Liaison and advocacy efforts also occupy large components of teachers’ time
with hospitalized students. Considered by participants to be as important as direct
instruction, the time spent preparing students, families, and home schools for the
students’ eventual return includes educating the schools about the students’
ilnesses, instructional modifications, and potential limitations the students may have
upon return to school. Teachers serve in a child advocacy role with the hospital and
the schools, working to meet students’ unique needs. In some cases such as burns
or traumatic brain injury, the student who returns to school is not physically or
cognitively the same as he was when he left. Hospital teachers participate as
members of I.E.P. committees and Section 504 planning committees, when
necessary, to provide for successful transitions back into school. They may also visit
students’ classrooms to help prepare the class, the teacher(s) and the school as a
whole for the students’ return.

Unlike a teacher in a traditional school setting, Hospital School teachers in
this school take instruction and the instructional materials and equipment to the
students. Frequently, when students arrive they are not available for instruction due
to scheduled treatment and their physical or emotional condition. As a result,
teachers adjust to students’ schedules. They adapt instruction and transport
instructional materials to the student as opposed to the students making adjustments
for the teachers. Instructional time is consequently impacted by teachers’ mobility, students’ availability, students’ condition and changes. Teachers in pediatrics may make several attempts within a day to identify a convenient time for school. This may mean making multiple visits to the patients’ rooms. Teachers need more flexibility when serving pediatric inpatients than they do with psychiatry patients. In addition to the inpatient population, pediatrics teachers frequently schedule instruction with outpatients around their clinic appointments. A school schedule built around clinic appointments can offer additional structure for pediatric patients. The inpatient treatment schedule for psychiatric inpatients includes regular hours for school, providing more of a regular daily routine than for teachers in pediatrics.

Generally, instruction for both sets of teachers occurs after 9:00 a.m. leaving the 8:00 to 9:00 time for planning and school contacts while inpatients wake up, eat and prepare for the day. Hospital School teachers’ instructional planning includes communication with the traditional school contacts to obtain class assignments or general curriculum guides to implement with students. Planning also involves communication with medical teams, parents, and school contacts about the return to school and special accommodations students may need upon return (End of Year Status Report, 2000).

Teachers’ interaction with parents in the Hospital School varies, based upon the student’s reason for hospitalization, length of stay, and parental interest in school at the time. Parental contact with teachers is more common on the pediatric units than in the psychiatric units. In general, parents are comforted by the inclusion of
school services in the hospital. John reported that for students with a very serious illness or injury the continuation of school can indicate that life will go on.

The continuous enrollment and withdrawal of students changes instruction for teachers on a regular basis. As a result, teachers’ caseloads fluctuate. During the first half of the 2002-2003 school year the average length was 9 days. In contrast, the average length of enrollment for the 1999-2000 school year, which reflects both initial and re-enrollments of students, was 31 days.

Instruction is not automatic for all hospitalized school age patients. While psychiatry includes school as a component of treatment, pediatrics patients are enrolled in school, in part, based upon the judgment of the teachers. The shortened stays and physical condition of the patient influences teachers’ decisions. In some cases students may be served by the teachers but are never enrolled in the Hospital School. Teachers may choose to serve students while leaving them enrolled in their community school. This determination is made based upon the anticipated length of stay. When students are served but not enrolled in the hospital school, the regular school may not be officially contacted and students remain enrolled at the home school and are counted absent. Alice indicated that the process of enrollment has evolved over time but is not written down. Occasionally, students’ community schools refuse to cooperate and do not withdraw the students. The result is a reduced enrollment for the Hospital School that could result in a reduced budget allotment for instructional supplies and materials which is based upon the school’s enrollment.
Teacher time is also utilized in assessment of students’ academic performance, in instructional planning, in administrative duties such as student enrollment, and in supporting the psychosocial needs of students, classmates and families often tied to the transitions back to school. Teachers emphasized that the factors they encounter with each student influence the time spent with students. Teachers in the school spend a majority of their time communicating with students’ schools about the instructional services to be delivered in the hospital and planning students’ return to school.

*How is the Effectiveness of the School Program Evaluated?*

*Self Assessment.*

Most state mandated testing of students required for students attending traditional schools to measure school performance is not applicable in the Hospital School. The Hospital School’s mission “to provide educational services that meet the unique needs of children and adolescents” at the hospital does not address improved standardized test results (School Improvement Plan 2000-2003, p.30). The length of hospital stays, fluctuating student enrollment, and students’ medical condition at the time of testing frequently prevents the school-wide use of the tests during hospitalization. Increasingly however, students, when medically able, take grade appropriate tests when enrolled at the time of testing to avoid having to make up the testing at an alternate time. Currently, the majority of enrolled students are not tested using the mandated tests. A student’s medical condition, time of enrollment, anticipated short length of hospitalization, and consultation with the traditional school staff influences the decision. Therefore, student performance data
are not available to assess the school’s performance as in a traditional school. As a result, the Hospital School staff has sought alternative approaches to measure the school’s performance.

The Hospital School establishes annual school improvement goals and measures whether or not the school met the goals. Two areas identified by the School Governance Committee as performance indicators of the school’s success were student promotion and communication with the traditional schools. In the place of individualized student test scores the Hospital School uses consumer satisfaction surveys to evaluate the school’s performance.

One indicator used to assess the school’s performance identified the end of the year promotion status of served students who successfully returned to school with as little interruption in academic progress as possible. Using an end-of-the-year survey the school asked the community schools whether or not students who were served in the Hospital School 10 days or longer were promoted to the next grade. For the 2 years the survey was used 70% or more of the students were promoted.

Hospital School communication with the community schools was the second indicator measured using a customer satisfaction survey of community schools. The survey found that increased attempts by the Hospital School teachers to improve communication with community school personnel increased satisfaction with the school program (End of Year Status Report, 1999-2000). Communication with the traditional school is a critical component in students’ successful return to school. Communication is a component of the liaison services which make up 29% or more of the time teachers spend working with students’ schools.
How Can the Hospital School Respond to the Curricular Requirements of the Traditional Schools?

The Hospital School teachers adapt school requirements to the unique needs of each enrolled student, when possible. Unlike teachers in a traditional school, where the grade level curriculum serves as a teacher’s instructional guide, teachers in the Hospital School engage the experience of their colleagues in the traditional schools for guidelines. Combining their individual expertise in delivering instruction in the hospital setting, teachers work with regular classroom teachers to prepare students for the return to school. In addition to their focus on students the Hospital School teachers help the traditional school personnel gain a better understanding just what is possible for students while they are hospitalized or receiving treatment as outpatients.

Participants offered multiple descriptions of the school’s instructional role. “Every case is different” was the qualifier utilized to describe the instructional role of the school. Alice suggested that the instruction helps students get caught up in school, helps students organize their assigned work, and maintains school to provide some normalcy for kids in the healthcare environment. In contrast, John indicated that some students cannot get caught up. He described the teacher’s role as helping the traditional schools understand that the kids can’t catch up and asking them not to require so much while the students are hospitalized. Joan described the school’s role as a focus on discharge as opposed to curriculum. Betty described the role as supporting students and parents by helping reduce concerns about school during hospitalization. The hospital school fills multiple roles. It supports parents,
medical teams, classroom teachers and students to maintain a focus on the successful return to school SIP (2000).

**Instruction**

Teachers deliver direct instruction to inpatient and outpatient students, typically on an individualized basis. While in the hospital, long-term students enrolled for 10 days or longer receive daily instruction whenever medically possible. The instructional services may also include teacher assessment and transition planning. Hospital school teachers may arrange homebound instruction in coordination with students’ home school for students leaving the hospital but medically unable to return to school. The unpredictable arrival and departure of students from the Hospital school requires that the delivery of instruction be very individualized. Teachers serving multiple grade levels are required to have a general understanding of curriculum standards for grades K-12. For this reason, communication with the community schools is a key component to the successful continuation of instruction in the hospital. The school responds to the curricular demands of the individual community schools through close communication and, when necessary, the modification of instruction and curriculum to fit students’ unique situations. Even with a focus on students’ successful return to school, meeting the curricular requirements of each class may not be possible for the hospital school teacher. Frequently, student’s immediate medical needs, rather than the school’s curricular demands, drive the decisions.

One variable that may support the school’s ability to respond to the curriculum demands for students from multiple grades and multiple school districts is the
teachers’ longevity with the school. They remain familiar with the material and have many school contacts, particularly with returning students. Identifying variables that contribute to teacher longevity in the school needs additional study.

Implications

Continuous Student Progress

Continuous school enrollment of students during hospitalization and during their time out of school for recovery and outpatient treatment appears to fit the adequate yearly progress (AYP) mandate of the No Child Left Behind legislation, the reauthorization of the Elementary and Secondary Education Act (Olson, 2004). Through the Hospital School, students engage in the continuing pursuit of academic success in spite of facing difficult medical obstacles, and are offered support for continued academic success in school, linked with their regular school to discourage dropping out, and provided opportunities and support for the successful return to school with as little instructional interruption as is possible. In addition, the larger implications suggest that students’ participation in the Hospital School is more than a legislated mandate for school attendance and monitoring. Issues raised in the study suggest that school participation during hospitalization may also have a normalizing influence on children, provide encouragement and hope for longevity of life, and ease students’ successful return to the regular school program upon their completion of medical treatment for chronic illnesses. The Hospital School may serve as a supportive link with the families and a resource for the regular school to prepare for the successful return to the familiar atmosphere of a regular classroom. After experiencing a medical crisis and completing the sometimes life-saving treatment,
the families and children return to school. “School reentry allows parents to envision futures for their children” (Sullivan, Fulmer, & Zigmond, 2001, p.4). The Hospital School serves as a familiar place for parents, siblings, and children during their experience with chronic illness.

Impressions

From this case study of a hospital school I formulated the following impressions about school within the healthcare setting that could lead to additional study. These impressions were not the focus of this study but surfaced during the study. They include:

1. School age patients are typically eager to participate in school.
2. Parents are generally supportive of the school program.
3. Physicians and nurses are supportive and respectful of the school.
4. State or federal guidelines specifically addressing the operation and performance of hospital school programs are limited in contrast to guidelines available for students educated in the traditional public schools.
5. Guidelines to standardize educational services available to children in hospitals do not appear to be available.

Policy Recommendations

Recent efforts to form a professional organization for teachers working in hospital settings throughout the United States received a positive response from hospital-based school personnel (Cullen & Short, 2001). Children’s Healthcare of Atlanta, Georgia and Children’s Hospital Medical Center in Cincinnati, Ohio
sponsored conferences in October 2001 and November 2002, respectively, in an
effort to establish a professional organization for hospital school teachers.
Conference participants identified instructional and administrative issues common
among many of the hospital school programs represented (Bagnal & Moody, 2001).
Teachers from 35 states and New Zealand participated in the conferences, including
attendees from three North Carolina hospital schools, where an active state level
organization already brings teachers together annually. Participants at the third
annual meeting sponsored by the University of Texas M.D. Anderson Cancer Center
held in November 2002, formally adopted a board of directors and named the newly
established organization, The Association of Educators for Children with Medical
Needs (AECMN). Participants identified three major goals at the fourth meeting in
October 2003 in St. Petersburg, Florida. The goals include addressing instructional
standards, organizational standards, and teacher qualifications and licensure. The
organization seeks to address issues common to teachers in hospitals on a national
level and to establish standards that guide teachers in these non-traditional school
settings (Jansen, 2003).

Questions about instructional standards and guidelines for teachers in
hospital schools concerning school administration, teacher time, and program
evaluation were raised for this single school. Policies addressing common standards
could be used to guide hospital administrations, local school districts, and state
departments of education in establishing, operating and evaluating hospital school
programs available to patients in their areas. The Florida Department of Education,
for example, is considering the possibility of grouping all hospital schools in the state
into a single LEA for purposes of monitoring and assessment, in an attempt to improve services to hospitalized and homebound students (Penn-Williams, 2003). The development of standards could also serve as professional development opportunities to guide the scope of instruction in hospitals. Professional development among hospital school educators could reduce isolation from other educators noted by some participants in this hospital school, and assist small school programs to conduct self-assessments and link them with mentors from larger hospital schools with greater resources.

State departments of public instruction may closely examine the role of hospital schools under the No Child Left Behind mandate to determine how these schools serve students for extended periods of time away from school. Failure to address this small population of students could result in students being penalized due to the absence of policies accounting for their unique and individual needs during a time of school-wide and system-wide assessments.

Suggestions for Future Research

Additional research on the role of hospital schools could add to the currently limited scope of literature on the topic. Suggestions made in the literature concerning the importance of school services in hospitals and the impact of hospital schools on students’ school success and psychosocial development need further study. The bulk of the literature identified during this study comes from medical and psychological sources and not education. Specifically, further research should examine:

(1) The influence of hospital school services upon the school-aged
patients. Do school services offer hope for the patients as they experience treatment?

(2) How do students and parents perceive school in the hospital? Do they consider the continuation of school vital?

(3) The impact of cognitive deficits experienced by surviving students from treatment that saves their lives and what, if any, role hospital school teachers play in such impaired students’ return to school.

(4) How the absence of state or national guidelines specific to the operation of hospital schools impacts services among hospitals.

(5) Whether or not national standards are needed to guide the delivery of instruction to students in hospital schools.

(7) Case studies of chronically ill students’ who receive school in the hospital and then return to school. More information is needed on students’ transition and adjustment in the return to school.

(8) Is additional teacher training needed for regular teachers who are serving children with chronic health conditions? Who should deliver this training?

(9) The normalizing effect of school attendance on hospitalized children mentioned needs further study.

10) The depth of teaching experience and longevity of hospital school teachers who participated in this study needs to be examined. Is this a factor present in other hospital schools? If so, Why?
Conclusions

The Hospital School presented in this study serves as a school away from home for participating patients. The impact of chronic illness on academic development is documented in the literature (Sanger et al., 1991 and Armstrong et al., 1999) suggesting that the inclusion of school is an important component in the treatment of children in hospitals. Children served by school in the hospital experience a validation of the future through their participation in and planning for continued instruction (Maul-Mellott & Adams, 1987).

The Hospital School studied operates as a separate, independent school with teachers, a media specialist, a principal, and a secretary. The school is a visible and viable school in the hospital environment and the local community. Students who are medically able to participate may receive services from the Hospital School which operates with support from the local board of education, the state’s department of public instruction, the hospital and a parent group in the form of a Parent-Teacher Association (PTA). The Hospital School provides a temporary school site for students and represents both the local educational system and the health care system. The school depends upon cooperation from parents for access to the students, traditional schools for students’ academic assignments and curricula, the hospital for space, financial support, and access to the patients, and medical treatment who support students’ in-hospital school experience and transitions back into the regular school setting. The school's stated mission “to provide educational services that meet the unique needs of children and adolescents” at the hospital (School Improvement Plan 2000-2003, p.30) is deliverable only with support from
the local school district and the hospital. The school plays an interactive role serving the family, the traditional school and the healthcare system with its focus on the educational needs of the students away from school.

In the Hospital School, student performance is not measured in traditional ways. Students benefit from a variety of school services that extend beyond the instructional process. Teachers focus on the students’ successful transition to traditional school settings in addition to addressing the immediate instructional needs. The transition is often the focus and supported by students’ continuous school attendance during their hospitalization. The completion of assignments from the regular schools helps prevent students from falling behind while away from the classroom. A focus on identified gaps students may have from frequent absences due to illness and treatment, the modification of instruction that enables students to remain engaged in meaningful instruction, and the maintenance of school as a normalizing activity for students would not be available to students during treatment and recovery without the Hospital School.

The study also identified some larger issues that raise questions for additional examination that extend beyond this one school. Conflicts between the Hospital School personnel and parents, regular school personnel, and students occur as teachers attempt to deliver instructional services to these students away from school. Parents may refuse the services, local schools may refuse to cooperate with this unusual public school by refusing to withdraw and release students, and students may refuse to participate actively in the school program. It is critical to note that the Hospital School responds to the conflicts with flexibility and with a focus on
the students’ instructional needs. The school serves students they do not enroll. This is not a practice common in other public schools in the state. When students will not be in the hospital long enough to warrant the withdrawal from the regular school or when the regular school fails to cooperate by releasing the students, the Hospital School provided services. This issue does not deter the Hospital School from addressing students’ educational needs. This issue of cooperation may be related to the new computerized student enrollment system being implemented within the state’s public schools. Fran reported that of the 33 schools refusing to release students during the 2002-2003 school year, 77% were from schools using the new computerized system. Fran indicated that when a student from a school using the system enrolls in the Hospital School his data is wiped out at the local school. When he returns to his school following treatment, he cannot easily go back to his original homeroom nor resume his original classes. “This is a major drawback and one that has prompted several schools within the system’s pilot sites to refuse to release the student to us for enrollment” Fran. When parents refuse the services of the school, Hospital School teachers periodically return to check with the family and inquire about the students’ school status. Refusal of school services occurs with parents who home school their children, with students enrolled in private schools, and with parents who wish to focus, solely, on the students’ healthcare. Occasionally students may not respond immediately to the school services. Hospital School teachers bring experience in both the regular classroom setting and in the hospital and work closely with students to engage them in meaningful instruction.
A second area for consideration is the longevity and experience reflected by the teachers in the Hospital School. The profile of the participating teachers’ in this school indicated that each has an advanced degree, five of the six have at least twenty-five years experience in teaching, and are at least fifty years old. The non-participating members of the faculty at this school reflect a similar profile as do the faculty members in the school I administer. I reported in the findings that participating teachers expressed a high degree of job satisfaction. At a time when teachers are reported to be leaving the profession, particularly in urban school districts (DeStefano & Foley, 2003) the job satisfaction of teachers in this school is high. The Hospital School reported little teacher turnover.

A final area for further consideration is the question of working conditions for teachers in the Hospital School. In spite of the reported stress that comes with adjusting to students dying, juggling multiple curricula, and a lack of control over schedule of instruction, participants indicated satisfaction with the working conditions. The State’s Governor is seeking teacher feedback on working conditions in the state’s schools through the use of a state-wide survey. The Governor reported that the teachers cited poor working conditions as the second most important reason for leaving the profession (Doherty, 2004). The results of the survey may offer additional information for use when examining similarities and differences among the working conditions teachers experienced by teachers the hospital setting.

The role that school plays in the lives of each school-aged child coping with chronic illnesses is individualized. The outlook for many of these children is more
optimistic today than it was in the past. Childrens’ educational needs as both inpatients and outpatients are likely addressed by school systems throughout the United States in different ways. This Hospital School promotes the normalizing of childrens’ lives by focusing on their return to regular school. Sullivan and Zigmond (2001) reported one child’s description of returning to school. “I liked mainly everything [about returning to school]....If you have something and they take it away, and then you go back, you like it a lot.”
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*Education Week*.


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among children and adolescents: United States SEER Program


Sheridan, R. L., Remensnyder, J. P., Schnitzer, J. J., Schulz, J. T., Ryan, C. M.,


APPENDICES
Appendix A
Date: February 23, 2001

Project Title: A Study of Policies Governing Public School Instruction to Students in a Hospital Setting

IRB#: 1321

Dear Richard E. Lemke:

Based on the information provided, this project is exempt from the policy as outlined in Code of Federal Regulations (Exemption: 46.101.b.2).

Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects the Assurance Number is: M12G3; the IRB Number is: O1XM.

2. Review de novo of this proposal is necessary if any significant alterations/additions are made.

Sincerely,

Matt Zing,

cc: Dr. R. C. Serow
Appendix B
January 12, 2001

Mr. Richard Lemke
3305 Waterbury Drive
Durham, NC 27707

Dear Rick:

This letter serves to document permission to conduct a case study of the Hospital School at UNC Hospitals as part of your Ph.D. dissertation. It is my understanding that patients will not be involved, except when you are observing a teacher instructing a student. In that case, parental permission would need to be obtained prior to the observation.

I look forward to working with you on this project.

Sincerely,
Fran, Principal
Dear Fran,

I am writing to secure formal written permission to conduct my research, an intrinsic case study, at the Hospital School. The research is designed to satisfy the requirements for a Ph.D. at North Carolina State University.

As I shared with you briefly over the telephone, I intend to conduct an intrinsic qualitative case study of the school. The focus of the study is on the administrative policies and procedures guiding the operation of the instructional program.

The methods I chose for data collection include document analysis, interviews, and observations. I intend to review written policies, procedures, and general correspondence, interview hospital teachers and yourself, and observe the delivery of instruction. The proposed participants include the principal, teachers, and hospital administrator(s) you identify as being informed about the operation of the school. No students or parents are direct participants in the study. The timeline for data collection, while flexible, is from late January through April 2002.

I appreciate your support in allowing me access to your school and look forward to hearing from you soon.

Sincerely,

Richard Lemke
Appendix C
Appendix C

North Carolina State University INFORMED CONSENT FORM

A Study Of Policies Governing Public School Instruction To Students In A Hospital Setting: A Hospital School
Principal Investigator: Richard E. Lemke
Faculty Sponsor: Robert Serow, Ph.D.

You are invited to participate in a research study. The purpose of this study is to closely examine the administrative
policies and procedures, which guide the delivery of public school instruction to students receiving school while in the hospital
or while receiving therapy and treatment as outpatients.

INFORMATION

1. Procedures/Time
An Analysis of written school policies and documents governing the delivery of instruction will be conducted. Interviews will be
scheduled with each participant (Hospital School Principal and Teachers). All interviews will be audio taped,
with prior consent of the participant. Transcriptions will be used during data analysis. My initials indicate my consent to be
audiotaped __________________. Observations of the instructional delivery process will be conducted (Hospital School
Teachers) Up to three hours of time spent with each participant is anticipated. Researcher observations may require additional
researcher time and is not included in this estimate.

RISKS
With the exception of time spent answering questions about the delivery of instruction and the experience of being
observed in the delivery of instruction, no risks are anticipated. Confidentiality will be strictly observed and
participants, if experiencing discomfort as participants, may withdraw from the study.

BENEFITS
An anticipated benefit of the study, is a better understanding of the policies and procedures guiding the delivery of instruction to
students in hospitals.
A secondary anticipated benefit is the contribution of the study to the limited body of knowledge in the literature on the topic.

CONFIDENTIALITY
The information in the study records will be kept strictly confidential. Data will be stored securely and will be made
available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No
reference will be made in oral or written reports, which could link you to the study.

COMPENSATION – Not applicable
For participating in this study you will not receive any monetary compensation.

EMERGENCY MEDICAL TREATMENT - Not applicable

CONTACT
If you have questions at any time about the study or the procedures, you may contact the researcher, Richard E
Lemke, at 3305 Waterbury Drive, Durham N.C. 27707, or (919) 493-7295. If you feel you have not been treated
according to the descriptions in this form, or your rights as a participant in research have been violated during the
course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in
Research Committee, Box 7514, NCSU Campus (919/515-7856) or Mr. Matthew Ronning, Assistant Vice Chancellor,
Research Administration, Box 7514, NCSU Campus (919/513-2148)

PARTICIPATION
Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to
participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you
are otherwise entitled. If you withdraw from the study before data collection is completed your data will be returned
to you or destroyed.

CONSENT
I have read and understand the above information. I have received a copy of this form. I agree to participate in this
study.
Subject's signature_______________________________________ Date _________________
Investigator's signature__________________________________ Date _________________
Appendix D
Appendix D

Document Summary Form

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Purpose(s) of Document:

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Document is important to study because:

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Summary of the document:

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Appendix E
### Appendix E

#### Instructional Time Group Interview Guide

Describe a student you have served or are presently serving, and the instructional service(s) provided by estimating the time spent in the preparation and delivery of instruction.

Medical Division_______________________________ Length of Stay_____________

Check the services provided and the amount of time utilized for each:

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**Liaison**

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<td>Educational Summary to Medical Staff</td>
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<td>504 Referral Meeting</td>
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**Student Assessment**

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**Psycho-Social**

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<td>Parent Conferencing</td>
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**Administration**

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<tr>
<td>Enrollment</td>
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<tr>
<td>Discharge Summary</td>
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</tr>
</tbody>
</table>

**Other**

__________________________ |                |
Appendix F

Interview Guide 1

1. Describe the school’s purpose and mission.
   a. Is the purpose and mission written?
   b. Do the teachers have copies?

2. What local, state, and/or federal policies mandate or support in hospital school services?

3. How are students enrolled in your school?

4. What is your school’s average daily and annual enrollment?

5. How are students identified for school enrollment?

6. Who employs the school personnel? Hospital, Public School, Other?

7. What funding sources support your school program?

8. How do you evaluate the overall effectiveness of your school program?

9. How do you measure student progress?

10. How are teachers assigned throughout the hospital?

11. How are services delivered to students as inpatients?

12. How are services delivered to students as outpatients?

13. How, if at all, is the N.C. Standard Course of Study used in the instructional program?

14. How is N.C. required testing program implemented in the school program?

15. How is technology integrated into the instructional program?
Appendix G
Appendix G

Interview Guide 2

1. What do you consider the main responsibilities of teaching in the hospital?
2. Contrast these responsibilities with teaching in the hospital.
3. What do you consider the most rewarding aspect of teaching in the hospital school?
4. What do you consider the most difficult aspect of being a teacher in the hospital?
5. What experience have you had with teacher turnover in the school?
6. Describe a memorable student or students you have had since being here.
7. What are some benefits of teaching in the hospital school?
8. What are some disadvantages of teaching in the hospital school?
9. How much does the principal know about what is happening in the school on a day to day basis?

Interview Guide 3 – Hospital Administrators

1. Why does the hospital have a school program?
2. What is your role regarding the school?
3. Describe your role in the hospital.
4. What written hospital policies guide the operation of the school?
5. Identify some benefits the hospital receives from having the school?
6. Describe any comments you have received from parents about having the school in the hospital.
7. How does the hospital support the school program?
8. How does the school fit in the Quality Assurance efforts conducted by the hospital?
9. Do you view the operation of the school by the local public schools as an advantage or a disadvantage? Why?
Appendix H
Appendix H

Initial Codes: 

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Appendix I
Confidentiality Statement

As a user of information at [____] Hospital and/or the School of Medicine you may develop, use, or maintain patient records (for health care, quality improvement, peer review, education, billing, reimbursement, administration, and research) or personnel records (for employment, payroll, or other business purposes). Patient and personnel information from any source and in any form, including paper record, oral communication, audio recording, and electronic display, is strictly confidential. Access to confidential patient and personnel information is permitted only on a need-to-know basis.

It is the policy of [____] Hospital and the School of Medicine that users (i.e., employees, medical staff, students, volunteers, and outside affiliates) shall respect and preserve the privacy and confidentiality of patient and personnel information. Violations of this policy include, but are not limited to:

- accessing information that is not within the scope of your job;
- misusing, disclosing without proper authorization, or altering patient or personnel information;
- disclosing to another person your sign-on code and password for accessing electronic or computerized records;
- using another person's sign-on code and password for accessing electronic or computerized records;
- leaving a secured application unattended while signed on; and
- attempting to access a secured application without proper authorization.

Violation of this policy by employees, staff, or volunteers of [____] Hospital or the School of Medicine may constitute grounds for corrective action up to and including termination of employment or loss of Hospitals privileges in accord with applicable Hospitals or University procedures. Violation of this policy by students may constitute grounds for corrective action in accordance with applicable [____] Hospital or University procedures. Violation of this policy by outside affiliates may constitute grounds for termination of the contractual relationship or other terms of affiliation between the outside affiliate and [____] Hospital and/or the School of Medicine. Unauthorized release of confidential information may also have personal, civil, and/or criminal liability and legal penalties attached.

I have read and agree to comply with the terms of the above statement and will read and comply with the Hospitals' Information Security Policies and Standards or the School of Medicine's Clinical Information Security Policies and Operational Standards, whichever is applicable, a copy of which is attached hereto.

Name:
Affiliation:

[ ] Employee [ ] University Employee [ ] Medical Staff [ ] Volunteer
[ ] Referring physician [ ] Student
[ ] Vendor
[ ] Other

Signature/Date

Central Records copy