

**Benjamin Hallowell:
Educational Leader of Virginia, Maryland, and Pennsylvania
1799 - 1877**

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ABSTRACT

This study is an investigation of the life of Benjamin Hallowell (1799-1877) a significant contributor to the spread of useful knowledge in the middle (1824-1877) of the nineteenth century. During this period the advancement of knowledge, once the domain of the landed gentry, became the province of the middle class citizen.

The majority of studies of individuals influential in the spread of knowledge center on persons who had a national influence or on those who were active in the northeastern United States where the leading educational efforts flourished. Using historical research, a methodical, critical gathering and interpretation of knowledge from past and present records, we examine Hallowell's work in establishing learning institutions.

Hallowell's life work was examined in the light of his use of adult education as a means of furthering his goals, and how he used his Quaker educational and scientific networks to found and operate institutions, such as his boarding school in Alexandria (1824), the Alexandria Lyceum (1834), the Maryland Agricultural College (1859) the predecessor of the University of Maryland, and Swarthmore College (1867).

This study contributes to the growing body of knowledge about middle class citizens so important to the dissemination of knowledge and the formation of the nation in the middle of the nineteenth century. Hallowell's extensive correspondence was significant as he established his scientific reputation and as he worked in support of the disenfranchised. This is especially evident in his work as an advocate for slaves rights, in his progress towards women's equality in education, and in his work with the Indians.

Hallowell used adult education techniques such as lecturing, group discussion and decision making in forming the Lyceum, Swarthmore College, and the Alexandria Water Works. Self reading and self-directed learning were important parts of his personal improvement process from his earliest years. He was an intense man of wide interests who shared his knowledge with all. He participated actively in the growth and spread of knowledge especially in the mid-Atlantic states of Maryland, Pennsylvania, and Virginia.

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I would like to dedicate this dissertation to the memory of my father, Lewis E. Winston, Sr., and my mother, Virginia Barrington Winston, who stressed the importance of learning from my earliest memory. By their example they taught me persistence, hard work, and faith in God. And finally, I also dedicate this work to my wife, Inez, who not only encouraged me every step of the way but, more importantly, showed me the meaning of love.

TABLE OF CONTENTS

Abstract		ii
Acknowledgements		iii
Chapter 1. INTRODUCTION		1
BACKGROUND OF THE PROBLEM		1
Statement of the Problem		8
Purpose of the Study		8
Research Questions		8
Significance of the Study		9
METHOD		9
Research Design		9
Primary Sources		10
Secondary Sources		11
Organization of the Study		11
Chapter 2. FAITH, FAMILY AND EDUCATION		12
INTRODUCTION		12
QUAKER FAITH		12
Migration to America		14
William Penn and the "Holy Experiment"		16
Quaker Meeting and Organization		18
FAMILY		20
EDUCATION		23
Early Education		23
The Meeting and Education		24
To Learn a Trade		27
Back to School		28
TEACHING EXPERIENCE		29
Westfield School and Self-Improvement		29
A Brief Stay at Fair Hill School		29
Return to Burlington for Self-Improvement		30
Westtown School, His Best Three years		31
Self Education		33
CONCLUSION		34
Chapter 3. HALLOWELL'S SCHOOLS		37
INTRODUCTION		37
THE ALEXANDRIA BOARDING SCHOOL		38
The Move to Alexandria and Marriage		38
Hard Times for the School		39
Other Business Enterprises		42

	Breakup of the School	43
	The Sale of the School Property	44
	PURCHASE OF ROCKLAND FARM	45
	Removal to Rockland	45
	The Philadelphia High or Central School	46
	Return to Rockland	47
	Resumption of the Alexandria School	47
	CONCLUSION	48
Chapter 4.	FOUNDER OF HIGHER LEARNING INSTITUTIONS	49
	INTRODUCTION	49
	THE ALEXANDRIA LYCEUM	49
	American Origins	49
	Hallowell and the Alexandria Lyceum	51
	MARYLAND AGRICULTURAL COLLEGE	54
	Maryland Agricultural Society	54
	Hallowell Accepts the Presidency	56
	Haverford and Swarthmore Colleges	57
	Orthodox Haverford College	58
	Hicksite Swarthmore	59
	Founders	60
	CONCLUSION	62
Chapter 5.	ACTIVITY IN THE FIELD OF SCIENCE	64
	INTRODUCTION	64
	EARLY ENCOUNTERS WITH SCIENCE	64
	WESTTOWN SCHOOL	66
	SCIENCE TO SUPPORT THE ALEXANDRIA SCHOOL	67
	Columbian College and the Smithsonian Institution	68
	Smithsonian Institution	70
	ALEXANDRIA WATER WORKS	72
	AGRICULTURAL EXPERIMENTATION AND OBSERVATIONS	74
	CONCLUSION	77
Chapter 6.	HALLOWELL AND REFORM	79
	INTRODUCTION	79
	HALLOWELL AND THE BENEVOLENT SOCIETY	80
	A BRIDGE FOR WOMEN'S EDUCATION	83
	Back to Alexandria	87
	HALLOWELL AND THE INDIANS	88
	CONCLUSION	94

Chapter 7. SUMMARY AND CONCLUSIONS	96
SUMMARY	96
CONCLUSION	97
References	109
Vita	134

CHAPTER 1

INTRODUCTION

The first half of the nineteenth century found knowledge and learning moving dramatically from the domain of the gentry to the realm of the common man. This study is an investigation of the life of Benjamin Hallowell (1799-1877), who was a significant contributor to the dissemination of useful knowledge to his fellow citizens in the mid-Atlantic states of Virginia, Maryland, and Pennsylvania. He was a Quaker educator with a wide range of interests in education, science, mathematics, and social reform. His vocation was that of a teacher and master of a boarding school in Alexandria, Virginia. Through this school and his pursuit and sharing of knowledge with adult audiences, Hallowell established his reputation. Like many middle class citizens of his time, he pursued scientific knowledge. He, however, transformed this scientific knowledge into useful knowledge and helped farmers, workers, and artisans become more productive. He founded institutions that stand today as memorials to his life. Among these are the Lyceum in Alexandria and the Maryland Agricultural College--today the University of Maryland. He participated in groups that sought to address social issues, particularly regarding Blacks and Indians. He lectured at the lyceum, local organizations, the Smithsonian, and colleges. He had a diverse correspondence network with family and contemporaries. He shared his own self-learning through lectures and writing, thus contributing significantly to the dissemination of knowledge throughout his community. Hallowell's achievements, which will be described in detail in this study, attest to his significant regional contribution to learning, science, and social reform during the years 1824 to 1877.

BACKGROUND OF THE PROBLEM

Benjamin Hallowell's life (1799-1877) spanned the more than seven decades in which the United States began to mature into a nation. During his lifetime, the United States experienced a change in governance, shifting from rule by an elite class of gentry to governance by the "common man" through popular elections. Tremendous growth occurred as the country grew from thirteen colonies hugging the Atlantic coast to a broad expanse that reached the Pacific. The country began to change from an agrarian to an industrial society. The age of science, begun during the era of enlightenment, now saw scientific theory applied to practical purposes under the theme of useful

knowledge. The belief that scientific knowledge along with the study of literature could elevate middle class people to the level of the gentry matched the republican ideal that the success of the nation lay in an educated citizenry (Kett, 1994; Brown, R., 1989; Cremin, 1980). Emphasis on useful knowledge gave rise to numerous institutions for its pursuit, such as lyceums and mechanics' institutes.

Several scholars argued that the primary catalyst that fueled and assured the change was the increasing availability of information, especially for the White population. Joseph Kett (1994), Richard Brown (1989), and Lawrence Cremin (1980) reported that literacy among Whites, both male and female, was as high as, if not higher than, any country in the Western world. Printing presses, relatively scarce in colonial America, became widespread in the nineteenth century. The federal government actively encouraged expansion of the postal service making it possible by 1830 for nearly every citizen to have access to printed material such as newspapers, periodical magazines, and pamphlets. Advances in the transportation system also helped to increase and extend the distribution of print information.

The common school movement, the growth of academies, the expansion of colleges as well as formal and informal institutions contributed significantly to the diffusion of knowledge and the opportunity for achieving the republican ideal of an educated populace. According to Cremin (1980), the republican philosophy held that the best means of providing education was the development of a national system of schools and colleges. Common schools existed in every Northern state by 1850. Many academies were established in the late eighteenth and early nineteenth centuries. College expansion resulted in the establishment of 500 new colleges between the Revolution and the onset of the Civil War. Literary societies from Colonial times, public lending and subscription libraries (established as early as 1673 in Boston, in Charleston by 1698, and Philadelphia in 1731), and various forms of mutual self-improvement groups continued to grow. They contributed in a variety of ways to the availability of knowledge and information and brought various classes of people together for a common social purpose and learning (Stubblefield and Keane, 1994; Cremin, 1980; Cremin, 1951). As these institutions blossomed, they provided a variety of venues for teaching and disseminating ideas to educate and inform a diverse populace.

Kett (1994) and Cremin (1980) observed that in the 1830's the existing professions of law, medicine, and the ministry began to set educational standards and criteria for practice. The standard often included college education. The sciences began to progress from an often amateur endeavor to a substantive profession that frequently required college training. Nathan Reingold (1976) noted in the United States "a great tendency for all occupations to strive for professional status" (p. 35). Publishing contributed to making information more readily available. It gave rise to careers in journalism and social activism that also struggled for professional status. For example, in 1831 William Lloyd Garrison established the *Liberator* that advocated the immediate abolishment of slavery. For Garrison, this resulted in a career in both publication and reform. Teachers and businessmen began to implement professional standards as well. Women entered the professional ranks through teaching, one of the few occupations to allow women to enter what was then a quasi-profession (Stubblefield and Keane, 1994; Cremin, 1980; Reingold, 1976).

From writings about him, it is evident that Hallowell was certainly a learned man, a well-regarded teacher, and an avocational scientist. His reputation spread through most of the middle and northern Atlantic states in the period from 1824 until his death in 1877. A few minor attempts have been made to examine his life. Most of these relied heavily on his autobiography and did not interpret Hallowell, as this study will, as a reflection of his time--his educational, social, and scientific accomplishments.

Hurst's (1991) study of antebellum Alexandria, Virginia covered the economy, religious activity, literary and various social organizations that thrived in Alexandria during Hallowell's residence. He paid particular attention to Hallowell's school, both under his administration and that of his son and nephews, and his role in founding the lyceum. Pugh (1982, 1978) reported briefly on Hallowell's experience at Fair Hill boarding school, his introduction to his future wife Margaret Farquhar, a teacher at Fair Hill, and his educational activity in Alexandria. Smith (1977) analyzed the literary style of Hallowell's autobiography and briefly touched on his role as educator, scientist, and Quaker. Templemann (1963) characterizes Hallowell's "international reputation" as evidenced by the sons of diplomats attending his school. In *Westtown Through the Years*, Hole (1947) gave a general account of Westtown life where Hallowell taught in his early years. Hole also provided a starting point for estimating and comparing teachers' salaries between Hallowell's time and today.

In addition to these specific works, a large body of scholarly study exists about the period in which Hallowell lived. Of particular relevance are the works of Joseph Kett (1994), Richard Brown (1989), Chandros Brown (1989), Lawrence Cremin (1980), Oleson and Brown (1976), and Carl Bode (1956).

Kett's (1994) history of discontinuous education from 1750 to 1980 held that the main focus of adult education has been to provide further learning for those who thought they had completed their education but then found a need for more. According to Kett, eighteenth century education, limited to and controlled by the gentry, consisted of liberal colleges, self-study, and gentlemen' clubs. In the antebellum years, a booming economy and the evolution of government by the common man contributed to the widespread growth of knowledge as nearly everyone turned to education as a way of improving themselves socially. For men, the public forum of politics was a significant motivator. In the 1830's, a time when citizens faced conflict between making a living and educating themselves, strenuous intermittent learning, a mix of formal and private study, was the way that most adults continued their education. Advocates of self-study touted it as a character building exercise. Kett described the evolutionary cycle of education from colonial gentrification to its democratization in antebellum times, then to a more formal mode of land grant colleges after the Civil War. In colonial times education was the domain of the upper class and those of the lower class they favored. In antebellum years, an increased availability of print material along the expanding transportation and distribution system made information available to a wider population, helping to close the knowledge gap between the gentry and the populace. After the Civil War, land grant colleges provided educational opportunities for farmers and mechanics. Initially these were not well attended but participation increased by the end of the nineteenth and early in the twentieth century. Thus, education moved from the domain of the elite to availability to most citizens regardless of social status or connections.

Richard Brown (1989) traced the diffusion of information, that is, how information "moved through society" (p. 3), from colonial times until the end of the Civil War. Using a series of personal vignettes depicting the individual lives of information possessors and users, he encompassed a variety of social levels and occupations that, Brown admits, were mostly found in the North. He explained the important ways various kinds of information were used to wield

power, do business, or improve oneself socially. He depicted how access to and use of information, in colonial times the province of ministers, merchants and gentry, became increasingly available to the public in antebellum America. He traced technology's effect, the production of large quantities of print materials and an expanding transportation system, on the diffusion of knowledge. All these changes increased the peoples' choices for acquiring information. In his view, the invention of the telegraph marked the beginning of today's near instant access to communication.

Chandros Brown's (1989) biographical study of Professor Benjamin Silliman of Yale provided a description of a Hallowell contemporary. The author described him as representative of his time. Silliman was a Yale science professor and publisher of the *American Journal of Science* from 1818 to 1838. Brown describes him as one of the learned middle class who provided leadership during the National Period, 1783-1876. Silliman is important to this study because he is one of many learned Northern men with whom Hallowell established a network relationship of correspondence and visits. Kett (1994) and Bode (1956) note that Josiah Holbrook, frequently referred to as the founder of the American Lyceum movement, studied under Silliman at Yale and that later Silliman served as his mentor.

Lawrence Cremin (1980) defined education as a methodical, intentional, continuous activity to transmit or receive knowledge, skills, values or attitudes and any learning that results from that activity. He described the continuing change of educational institutions, their interaction with other institutions, and the people who used them in the evolving social and economic situation during the National Period, 1783-1876. In this context he emphasized the importance of newspapers, schools, and various voluntary associations that demonstrated a uniquely American language of education made up of moralisms, democracy, and belief in practicality. In examining the diverse institutions in the growing nation, Cremin elaborated on the importance of churches, libraries, and the family as providers of education. He views education as "moving forces that compete for attention and influence what people believe is possible in the realm of education" (p. x).

Oleson and Brown (1976) recounted the development of learned and scientific societies from Colonial time to the Civil War. Four themes guided this effort: the pattern of regional and national development, how support, both public and private, affected their development, how the societies influenced American science and its study before the Civil War, and the characteristics of their members. They noted that during this period learned societies led the development of science and its scholarship in America. As the country approached the Civil War, signs of professionalization began to develop for each specialty with a specific body of knowledge, vocabulary, standards, and associations. After the Civil War, universities and government assumed the leadership role from these societies (Oleson & Brown, 1976).

Of particular interest to the study of Hallowell is Reingold's (1976) paper dealing with the classification of nineteenth century scientists. He argued that cultivators were those who engaged in science as a hobby, practitioners actually made use of their scientific training, and researchers, a small group, produced a large amount of research in "qualitative and quantitative terms" (p. 51). This study will propose that Hallowell's activities defy categorizing him in any one of these roles. His activity at any one point could be one, another, or a combination. A careful examination of his life reveals that his roles encompassed a bit of all of them. Ewan (1976) asserted that in the largely rural South learned societies formed in urban areas like Alexandria where the concentration of interested persons was greater. He describes one form of society as a "league of friendship" maintained by correspondence (p. 208). Hallowell clearly fits into such a league as he engaged in scientific correspondence, with both North and South, from one of the more Southern urban areas.

Carl Bode (1968) described the American lyceum as an American national institution broader in focus than the British mechanics institutes from which many argue it evolved. In America the lyceum became a venue for lectures, debates, and musical performances before the Civil War. It went beyond the venue of artisans and mechanics to one of general knowledge for the citizenry. He contends that the factors that led to the lyceum's success were the growing demand for knowledge and the desire for social elevation.

The lyceum was a forceful element in promoting public schools, literature and, libraries. "The lyceum system afforded aid to the public schools by creating a general atmosphere favorable to them" (Bode, p. 113). It did so by providing a non-threatening (tax and control-wise) base from

which to garner public support. Lyceums also granted preferred treatment to school teachers, visibly elevating their status, and campaigned politically for high quality free schools. Convincing support for literature was evidenced when lyceums began to pay lecturers. The lyceum system "offered the writer a means of making money and for trying his works on a captive . . . audience" (Bode, p. 224). Often, after perfecting the message, the lecturer would then publish the lecture in printed form. Bode argues that the lyceum helped form the foundation for "social libraries" which led to public libraries, the first of which was established in Boston in 1854. Typical of such support is the merging of the Alexandria Library with the newly founded lyceum company. This merger was the result of Hallowell's proposal. Their collection was housed in the new lyceum of which Benjamin Hallowell was principal leader (Proposal to merge Alexandria Library, March 7, 1839, p. 3).

Taken together, these scholarly works describe the progression of American education, during Hallowell's lifetime, from the domain of the elite to a democratized system that was becoming available to the general populace. These works trace the development of learning institutions in their various configurations and their use. The development of the quasi-profession of science grew from the providence of learned societies to that of colleges and universities. The increased availability of information acted as a social equalizer. Hallowell was actively involved in all of these events. Cremin's (1980) work gives background to Hallowell's association with various configurations of learning from his own school to the voluntary associations and his support of public schooling. Kett (1994) lends perspective to how Hallowell and others around him educated themselves throughout their lives. Kett's (1994) work also provides a framework for Hallowell's contribution to intermittent learning for those around him. Richard Brown (1989) provides the structure for examining Hallowell as a diffuser of information and knowledge, a role he clearly played as a result of his wide network of other learned people. Chandros Brown's (1989) portrait of Hallowell's contemporary, Benjamin Silliman, affords a point of reference for examining the life of a representative middle class leader, citizen, and scientist. Oleson and Brown's (1976) work helps to place Hallowell in the developing scientific community that had only begun to move toward professionalism. Finally, Carl Bode's (1968) exploration of the American lyceum gives a foundation for understanding the origins of one of Hallowell's major accomplishments--the founding of the Alexandria Lyceum--and to compare it with other American experiences.

Statement of the Problem

Study of the lives of middle class citizens who provided leadership in education and reform in the second and third quarters of the nineteenth century depicts the change that characterized those early years as the country developed. Benjamin Silliman, Yale Science professor, Josiah Holbrook, known as the father of the American Lyceum movement, and Lucretia Mott, teacher, abolitionist, and feminist, are some of the better known contemporaries of Benjamin Hallowell. They are indeed well-known and their educational and reform activities are recognized in the literature of the period. Hallowell, however, has not gained prominent recognition beyond the Quaker community. Even there very little serious study of his life exists. He has not been included in the growing body of research on the lives of middle class citizens of antebellum America who contributed to the establishment of many of today's existing institutions of science, reform, and public learning. This study centers on Hallowell and how he achieved his reputation--as teacher, scientist, reformer, founder, and active participant in enduring institutions, such as the Alexandria Lyceum and the Smithsonian--and how he used adult education to do so.

In the arena of mid-Atlantic America surrounded by many prominent families and notables associated with the federal government, Hallowell, the middle class citizen, stands out. Largely self-educated, he established institutions that flourish today. Hallowell's contributions were a result of his personal network and visits with Northern scientists, professors, college presidents, and activists. He conveyed their ideas to Alexandria, Virginia (Hallowell, 1884) where, this study will show, he formed a bridge for the diffusion of learning from the North to the upper reaches of the South.

Purpose of the Study

The purpose of this study was to investigate and interpret the life of Benjamin Hallowell, in light of his Quaker background, as one of the growing number of middle class citizens who provided leadership in fields of education, reform, and science during the years 1824 to 1877.

Research Questions

1. What were the early Quaker and family experiences and influences that shaped Hallowell's life?
2. How did he prepare himself for teaching?

3. How did Hallowell continue his own education throughout his life?
4. How did Hallowell found or partner in founding learning institutions?
5. In what ways was Hallowell active in education, science, and reform?
6. What were the outcomes of Hallowell's activity in education, science, and reform?
7. How were the meetings, lectures, committees, and associations he participated in settings in which adult education operated?
8. How did Hallowell act as an information "bridge" between the North and the South?
9. How did Hallowell's middle class life, typical of the time, contribute to and mirror the nation's change by educating himself and his community?

Significance of the Study

As every age has its heroes and prominent leaders, so too did the American National Period, 1783-1876. Volumes have been written about prominent individuals with much of the scholarly work concentrated on Northern leaders such as Ralph Waldo Emerson, Oliver Wendell Holmes, and Susan B. Anthony. They were characterized by Knowles (1977) as "notable giants of American thought" (p. 18). Kett (1994) suggests it is the study of individuals who form institutions to spread knowledge that most helps us to understand the times. This study contributes to the growing body of knowledge of middle class citizens who emerged in the antebellum period to provide community and regional leadership in the following areas: education, science, social action, and the founding of organizations for their promotion. It allows us to interpret Hallowell's life in a Southern urban setting in light of these activities and show how he used adult education to provide leadership in his community. As Richard Brown (1989) argues, "in order to understand the forest one must come to know the individual trees" (p. 6).

METHOD

Research Design

The method for this research on Benjamin Hallowell's life is historical research. This is appropriate for the study because it is a methodical, critical gathering and interpretation of knowledge from past records and the environment in which Benjamin Hallowell lived and functioned. It allows us to examine the work of those who have gone before us and gives discipline and context to present and future practice (Barzun and Graf, 1992). We examine

Quakerism and its beliefs as a way of life and gives us spiritual and social context for Hallowell's life. Next we examine his early endeavors in forming his own school and Alexandria institutions, followed by the growth of his reputation as he extended his influence beyond Alexandria to Philadelphia and points west. His maturation as a scientist and his connection with his contemporaries in the North as well as the scientific community that existed from 1824 to 1877 will be examined. Finally, we will describe his retirement and how he remained active in learning, science, and reform until his death in 1877.

Primary Sources

Hallowell's (1884) autobiography served as the starting point for a developmental chronology of his life and provided guidance for researching individuals of his time and the institutions that he founded or led. The autobiography, written during his advanced age two years before his death, may likely be the reflections of a failing memory. Therefore, various archives needed to be researched for letters, newspaper articles, and other contemporary recordings of events with which Hallowell was associated. Contextual information, both general and specific, depict the environment and provide interpretations of the time in which he lived. It is necessary to critically read supporting documents regarding individual events from as many sources as possible to corroborate findings to determine a reasonable degree of accuracy.

The sources of primary materials were newspapers, letters and documents. Newspapers describe, from the reporters' perspective, the development of his school, Alexandria waterworks, and the lyceum. Original documents including letters by Hallowell, his contemporaries and students, contracts (especially for the Alexandria Lyceum), his autobiography, and minutes of various Quaker meetings, Disciplines, Epistles, and other records provide information about his daily activities.

These materials were found in the archives of Alexandria, Virginia (Lloyd House), the Friends' Library and Archives of Swarthmore and The Haverford Friends Collections of Haverford Colleges in Pennsylvania, Sandy Springs School Museum in Maryland, Westtown School in Pennsylvania, the Archives of Arlington Virginia, the Alexandria Lyceum, the Maryland and Virginia State Archives and Historical Societies in Annapolis and Richmond respectively as well as the West Virginia Library System through Shepherd College in Shepherdstown.

Secondary Sources

Many books and journal articles provided information on Quakers, the role of women, women's studies, about American Indians, slavery, and the reform movement efforts. These can be found in the state libraries in Virginia, Maryland, and the Library of Congress. The libraries of George Mason University, American University, George Washington University, Catholic University, Shepherdstown College, and the College of William and Mary. The state archives and the Library of Congress provide contextual information and history and provide further sources of secondary material.

Organization of the Study

The dissertation is organized into 7 chapters. Chapter One provided an introduction to the study, along with the statement of the problem. This chapter identified the concepts and questions that provided the framework for approaching the research, the need for the study, and research methods and materials.

Chapter Two presents an examination of the principles of the Quaker faith that guided his life, his life beginning with his birth in 1799, his family's influence, his education experience, and his early practice as a teacher.

Chapter Three treats his experiences as a founder and master of boarding schools in Alexandria and Philadelphia.

Chapter Four addresses his leadership in founding institutions of learning and public benefit such as the Alexandria Lyceum and Swarthmore College.

Chapter Five deals with his leadership and service in science, including lectures at Columbian College, Maryland Agricultural College, and various agricultural societies.

Chapter Six treats his reform activities on the behalf of slaves and Indians.

Chapter Seven contains a summary of the findings and the conclusions.

CHAPTER 2
FAITH, FAMILY AND EDUCATION: 1799-1824

INTRODUCTION

In the first twenty-five years of his life Benjamin Hallowell, with the close support of his family and the Quaker community, established a firm foundation upon which the successes of his life were based. The years from 1799 to 1824 were filled with progress in the United States. Information was becoming readily available to the general populace, advances in transportation, not only prompted industrial and agricultural expansion, but played a significant role in the spread of information. Self-improvement institutions such as literary societies began to develop. The first lyceums were founded in the northeastern United States. They were the precursor of many including the one that Hallowell founded in Alexandria.

Hallowell's firm grounding in the Quaker faith and its ethic of hard work, honesty, simplicity, equality and peace, guided his entire life. These qualities were instilled in him from his earliest days by his immediate family and his extended family in the Philadelphia area. It was his mother who taught him to do useful chores around the house and insisted on his schooling--in spite of Hallowell's resistance. His education and entire preparation for founding his Alexandria boarding school took place in Quaker schools under the close tutelage of Quaker educators. The values and practices, both personal and professional, that he learned in this period were major contributors to his success in his founding of and associations with institutions of learning in the mid-Atlantic states of Virginia, Maryland, and Pennsylvania.

QUAKER FAITH

George Fox, a self-proclaimed itinerant preacher founded the Quakers--more formally known as the Society of Friends. The name Quakers is derived from the shaking they claimed took place as they examined their consciences (Barbour & Frost, 1988). They came into existence in 1652 at the end of the Protestant Reformation, shortly after the end of the English Civil War, when George Fox "climbed to the top of Pendle Hill in Lancashire and caught a prophetic vision of a great people to be gathered, a people in white raiment coming to the Lord" (Tolles, 1960, p. 4). Many like Fox were exasperated with what they saw as Puritan hypocrisy. Fox, who had very little formal education, was astute enough according to Loukes (1965) "to become increasingly sensitive to the difference between Puritan profession and action" (p. 17).

Early Quakers held many beliefs and practices that distinguished them from other similar groups. The key belief of their faith was that the inner Light of God resides in every human. The inward nature of heaven meant that one was responsible for obeying God's will using the Bible and interpreting it in the indwelling Light of God rather than depending on the interpretation of a paid minister. The inner Light was sufficient for each person to make a proper interpretation of how to behave (Barbour & Frost, 1988; Frost, 1973; Trueblood, 1966). Loukes (1965) describes the Quakers as a group of people who "trusted to the inward and reflected on the outward" (p.15) They rejected all religious practices not prescribed in Bible scripture, specifically outward show of sacraments (e.g., bread, wine, holy water). They opposed written prayers, statues, and icons in their place of worship, and any music other than plain song. Doing so, they believed, would reduce worship in their congregations to the simple practices of the earliest Christians. A practice that brought them into conflict with their Puritan contemporaries was their refusal to rely on paid ministers or a structured church to interpret the Bible. For them the inner Light was sufficient for each individual to make a proper interpretation of the meaning of the gospel and its applicability to any given life situation (Barbour & Frost, 1988; Trueblood, 1966). Quakers lived their lives according to the practices described in the gospel of Matthew--their basic guide for life. Quaker testimonies reflected their constant concern for honesty, equality, simplicity, and peace (Barbour & Frost, 1988; Trueblood, 1966; Loukes, 1965). To Quakers, integrity was the foundation for a religious life.

Meetings for worship found men, women, and children gathered in a home or simple meeting house. Quakers sat quietly while they examined their conscience in the inner Light and when moved to speak would do so until their thoughts were poured out.

Disagreement with Puritans over these beliefs and practices made Quakers subject to persecution during the period of Puritan control and afterward (Barbour & Frost, 1988; Trueblood, 1966; Loukes, 1965). Thus, many of the structures and practices that constituted Quaker life came into being in order to cope with the severe persecution of their fellow believers.

These disagreements were so strong that in the period of Puritan rule from 1651 to 1660 Quakers were jailed for specific interference with Puritan church services. Their persecution continued from 1661 to 1688. Quakers were frequently jailed over either trumped up minor

charges or for refusing to take an oath. To Quakers taking an oath implied that one was telling the truth on this occasion but might not tell the truth in other instances--they would however affirm. Quakers were targeted for prosecution by a series of governmental acts, like the Conventicle Act of 1664 which attempted to prevent all non-Anglicans from participating on city councils, were passed. The Conventicle Act additionally prevented anyone from attending any other than the Anglican church. Jailing, death, deportation, and unusually heavy fines ruined many Quaker families (Barbour & Frost, 1988; Trueblood, 1996; Tolles, 1960).

In the years 1654 and 1655 crowds convinced by Fox's message became converts and spread the Light to all parts of England, especially in the south. At this time some form of organization begins to emerge. Fox began to call meetings of the traveling ministers to plan the spread of Quaker belief. The Kendall fund, established to support the jailed Quakers and their families, was later used to finance traveling ministers to the Americas (Worrell, 1994; Barbour & Frost, 1988; Tolles, 1960).

Migration to America

In the mid to late seventeenth century Quakers, like many similar groups in England, Germany, and Holland, grew tired not only of religious persecution but also with the lack of opportunity. They looked toward the colonies with limitless land and trade opportunity as a place to practice their religious beliefs and to prosper (Tindall & Shi, 1996; Morrison, 1972; Tolles, 1960).

There is ongoing debate about where the first Quakers settled in the colonies. Barbour and Frost (1988) and Tolles (1960) claim that the Puritans had not only settled New England, but that all of the British colonies (as well as new Holland) contained groups of dissenting religious settlers. When the Quakers settled in areas where Puritans had settled earlier, conflict continued. The Quakers came with what must have seemed like a disturbing furor. According to Barbour and Frost (1988),

Quakers remained confident that they were to inaugurate the reign of Christ on earth . . . They approached Massachusetts as God's emissaries. They judged the New England Puritans' rejection of Quakers as signs of reign of the Antichrist. The Quaker ministers were not interested in polite discourse, civility and compromise but in overthrowing the New England church system (p. 50).

New England and most other colonies discouraged Quaker ministry usually by expelling Quakers from the colony, by imprisonment, or both.

Massachusetts hung four Quakers between 1659 and 1660 and attempted to sell some Quaker children into slavery (Barbour & Frost, 1988; Tolles, 1960). Richard Hallowell (1870) writes about the four who were hung, "all of them were persecuted and denounced as the children of Satan" (p. 22). A further example of the attitude toward Quakers is expressed in a 1656 Massachusetts court finding regarding anyone who would transport Quakers. It stated,

Whereas ther is a cursed sect of hereticks . . . commonly called Quakers . . . assisted by the spirit to speak evell of dignitjes . . . magistrates and ministers, seeking to turne the people from the faith, ang gajne proseljtes in their pernicious wajes, . . . Quakers . . . shall pay or cause to be pajd, the fine of one hundred pounds . . . and for default of payment . . . shall be committed to prison (Cited in Hallowell, R., 1883).

Quaker ministers arrived in New Amsterdam (New York) in 1657, Rhode Island in 1656, and in Maryland, near Annapolis, and the Eastern Shore of Virginia in the 1660s (Barbour & Frost, 1988). Of these locations, the most tolerant was Rhode Island, many of whose settlers had been banned from Massachusetts by the Puritans. As early as 1656, a convinced Quaker woman, Elizabeth Harris a convinced Quaker, first preached to and convinced small bands of Virginia Settlers in the Hampton area, Norfolk, Nansemond, and the Eastern Shore. She then traveled up the Chesapeake Bay to preach to the settlers in Maryland before returning to England in 1657 (Worrall, 1994). Kenneth Carroll (1996), another Quaker scholar, questions Worrall's analysis but does so only on selected parts of Worrall's five principle parts of evidence.

What is clear is that in the mid 1650s Quakers began to settle in the English colonies in America. Preaching to small groups of settlers dissatisfied with Puritan inflexibility, they converted many to the belief of the power of the inner Light and many settlements of Quaker congregations were formed. The seed of Quakerism was planted firmly enough to take root in the New World.

Beyond the migration of Quaker families and congregations were attempts to establish Quaker governed colonies. William Penn's effort to colonize Pennsylvania was not the first attempt to establish a colony governed by Quakers on the American continent. The first was in 1674 when

two Quakers, Edward Billing (Byllynge) and John Fenwick, bought the western half of New Jersey and the right to govern it from Lords Berkley and Baltimore (Tindall & Shi, 1996; Penn, 1674, 1675, 1675). After much dispute between Billing and Fenwick, mediated by William Penn, a group of thirteen proprietors formed a consortium and bought out Billings, leading eventually to the settling of western New Jersey and the establishment of Burlington (New Jersey) in 1677. Thus, before the founding of Pennsylvania in 1681, there was a Quaker government with its own assembly and liberal laws granting religious liberty, providing for taxation by the people's consent, and guaranteeing trial by a jury of peers. The problem, however, was that only the crown had the right to grant settlers the authority to establish their own government. Still in all, western New Jersey for a time managed its own governmental affairs (Unknown, 1676).

William Penn and the "Holy Experiment"

William Penn, an English aristocrat, was closely connected to the royal family. His father, Admiral Sir William Penn, was a prominent sailor and land owner in England and Ireland. In the course of his sea service Sir William provisioned the fleet out of his own pocket in the amount of some sixteen thousand pounds, a fortune in his time. Young William's connections with the crown and the money owed to his father would figure large in the founding of a Quaker colony in America.

Penn, in his twenties and living at his father's estate in Ireland, was impressed by a sermon by a wandering Quaker preacher. After a somewhat rebellious eleven years during which his father pressed him hard to gain an education, Penn again heard the same preacher speak movingly about faith. That Quaker preacher, Thomas Loe, became Penn's mentor. Penn became a convinced Quaker and began to write and preach on Quaker themes. An early composition titled "A Sandy Foundation Shaken" about the trinity caused Penn to be imprisoned in the Tower of London. He became a close associate of Fox and other Quaker leaders and one of the most prominent Quakers in England (Barbour & Frost, 1988; Tolles, 1960; Penn, 1666-1677).

After his father's death William inherited his lands and wealth. Part of his inheritance was the outstanding debt of 16,000 pounds the crown owed his father for provisioning the fleet. Penn petitioned King Charles II for the money. The king, short of cash, granted Penn the land that now constitutes Pennsylvania. By granting the land to Penn, the king saw the vacant land which was of little value to him, as a way to found a new colony (that he could tax) and pay a debt at the same time (Barbour & Frost, 1988; Dunn & Dunn, 1981).

Penn saw this new colony which he founded in 1681 as a Holy Experiment, an occasion to serve God and fellow Quakers, as well as an opportunity to gain a personal fortune. He expected that those who immigrated would live in the Light and follow Quaker principles. By doing so a new order would arise that would be a precursor to the return of Christ (Barbour & Frost, 1988; Endy, 1973; Trueblood, 1966). He recruited not only in England but on the continent, especially in Germany and the Netherlands where he had preached in his younger years. He discouraged the lazy and ne'er-do-well. To those he sought to recruit he promised hard work and a liberal government. Penn, in cooperation with lawyers John Darnell, William Blathway, and various governmental committees, developed a constitution that he called a frame of government that allowed the settlers a say in modifying and accepting the frame. The frame of government guaranteed a trial by jury. Penalties for crimes were eased with prisons taking the form of workhouses for purposes of rehabilitation (Dunn & Dunn, 1981). Penn required a moral law that prohibited gambling, swearing, and drinking in excess. For breaking these laws the guilty were generally fined (Barbour & Frost, 1988; Trueblood, 1966). Though only Christians could hold office, Penn allowed liberty of conscience and required no established or state church.

Immigration from England started in a serious way around 1682 because persecution of Quakers and other dissidents was so great. Often whole communities came together. With so many Quakers moving to Pennsylvania after 1682 the Quaker explosion in England, was brought to a halt. The Quakers in time spread beyond Pennsylvania to the south and midwest. They brought with them the organization put in place by George Fox, a hierarchy of meetings with extensive and detailed record keeping and member certification (Barbour & Frost, 1988; Tolles, 1960). This organization will be addressed later in this chapter.

In 1691 two great lights among Quakers were dimmed when George Fox, the founder, and Robert Barclay, a prominent Quaker theologian and preacher, died. Penn became engrossed in English politics and the operation of his colony. A series of controversies arose in England and in the colonies over political rights and continued Quaker participation in government. Penn served as a strong Quakers' advocate and was often in hiding or jailed for his troubles (Barbour & Frost, 1988; Endy, 1973).

In 1699 William Penn returned to Pennsylvania for the last time. He found his concept of a Quaker colony much changed. The governors appointed during his absence had taken much of the power from the people and had disregarded his original frame of government. In the next two years Penn reconstructed the frame of government renaming it the Charter of Privilege. He left Pennsylvania in 1701 for England and never returned (Barbour & Frost, 1988; Marrietta, 1984; Dunn & Dunn, 1984).

Pennsylvania saw some significant success and failures. Among the successes was the establishment of a state of understanding, respect and equality with the Indians of the area, first with the Lenape of the Delaware Valley and then with the Iroquois of western Pennsylvania (Tindall & Shi, 1996; Barbour & Frost, 1988; Dunn & Dunn, 1981; Smith, W. P., 1972; Verrill, 1959). The assembly formed to propose legislation was of such a size, 200 to 500 representatives, that it created an almost direct democracy. On the other side of the coin, Penn had formed the colony not just for a "religious experiment" but also for profit. Accordingly, he sold the land to each family while also requiring them to pay a fee for its use. The majority of the settlers were poor and resented a fee on what they owned. They had a tradition in England of disobeying any laws that conflicted with their religion. They were, to say the least, a contentious lot and unequivocally refused to pay. Barbour and Frost (1988) observe that the "Quakers in Pennsylvania needed to learn how to exercise power in a responsible manner quickly for they had almost no prior experience in governing in England" (p. 79). Melvin Endy (1973), a student of Penn's religious thought, concludes that

Penn's colony was in many respects one of the more successful of the colonial attempts to build a new society, but as a holy experiment it was a failure. Rather than providing a model of a harmonious Christian society and proving the viability of Quakerism as a social order, Pennsylvania showed that Quakers were not fitted to rule themselves or be ruled by a Friend that's a Governor (p. 367).

Quaker Meeting and Organization

Quaker meetings were first held for purposes of mutual support against intense persecution. The need for mutual support led to accompanying oversight, reporting, and documentation. The persistent need to know who was really a Quaker and thus entitled to support

drove the requirement for accurate documentation. Records of births, deaths, and burials were kept as separate entries in the ledgers of the monthly meetings. Proceedings or minutes of the meetings were kept in chronological order by the clerk of each monthly meeting. They included names of new members who brought a membership certificate from their former meeting, records of disownment in which a person would be separated from Quaker fellowship and its benefits, and other business found to be pertinent by the congregation (Barbour & Frost, 1988; Woody, 1972; Tolles, 1960).

The Quaker meeting organization that had developed by the 1700s was hierarchical in nature. The lowest meeting for business was the monthly meeting in which basic issues were raised and normally solved. If unresolved, a problem was elevated to the next level which was the quarterly meeting. If still unresolved, the problem was elevated to the next level or the yearly meeting. It encompassed all meetings subordinate to it in a given geographical area. During Hallowell's time yearly meetings on the East coast were held in Philadelphia, Baltimore, North Carolina, New England, New York, and Virginia (Barbour & Frost, 1988; Frost, 1973; Trueblood, 1966).

Just as the meeting organization had been established by 1700, so too had a strict set of rules or Disciplines been put in place. These were based on the Quaker Testimonies of honesty, equality, simplicity, and peace. Quaker success in living the Quaker life was monitored by a series of reminders or Queries that, in effect, asked each congregation if its members were in conformance. Subjects of Queries might be wide ranging: Was there excess drinking? Were the children attending school? Were the meetings requiring certificates of membership? Were members attending meetings regularly? (Barbour & Frost, 1988; Philadelphia Disciplines, 1827). These Queries from superior meetings must be responded to, usually in writing, to the immediate superior meeting (Barbour & Frost, 1988; Frost, 1973; Trueblood, 1966; Philadelphia Disciplines, 1827, 1831, 1847). Between meetings, committees called overseers had the responsibility to guard against members violating the rules, reminding members of their responsibility, gathering evidence if they thought rules were broken, and in general, keeping a tight rein on others in their meeting (Barbour & Frost, 1988).

Women in the Quaker community were held in high regard. George Fox, while encouraging meetings for the whole Quaker community, proposed that women should have their own separate meetings. Many in the early days opposed this idea but Fox insisted. What resulted by Hallowell's time was that women had meetings almost identical to the men's but separate. The only authorities that women's meetings lacked were the power to disown and the power of the purse. Members who were disowned or expelled from the community for infraction of Quaker behavior could be readmitted by admitting their wrong-doing and vowing to conform in future. They could only be restored by the men's meeting that disowned them (Barbour & Frost, 1988; Trueblood, 1966).

Thus, Quakerism shaped his early and mature life. His mother in his younger days insisted on his schooling as required by the Disciplines, taught him to work and carry out family chores and, despite their meager circumstances, managed to find the money to send him to his final year of teacher preparation at John Gummere's school. The years in which he was preparing to open his boarding school saw an abundance of five possible teaching positions offered him. In each case they were Quaker schools within the purview of the Philadelphia Month Meeting under which his monthly meeting fell. Clearly a Quaker network at Abington spread the news that he was in need of and seeking employment. In later years he operated within this network and it is likely that the Meetings helped to spread his reputation. His life work was both notable and representative of the practice of members of the Quaker faith and would serve him well his entire life.

FAMILY

Benjamin Hallowell was born on the 17th of August 1799 in Cheltenham township, Montgomery county Pennsylvania. He was the fourth son of Jane (Shoemaker) and Anthony Hallowell who were descended from those early English and German settlers that William Penn encouraged to colonize Pennsylvania as part of his Holy Experiment (Miller, 1990; Hallowell, 1894). Benjamin claimed he was a "birthright" Quaker, one born into the faith. His claim is, however, not substantiated by the records of the Philadelphia and Abington meetings. Minutes of the Philadelphia Meeting from which his parents came indicate that his father Anthony had been disowned by the Philadelphia meeting shortly before coming to Abington (Hinshaw & Marshall, 1938). Because there is no further record in either Abington or Philadelphia that his father had

been reinstated at the time of Benjamin's birth some question remains regarding Hallowell's birthright (M. E. Chijioke, personal communication, April 7, 1997). His relatives were dispersed throughout the area--the counties of Buck, Montgomery, and Philadelphia, as well as in the city of Philadelphia.

It can be assumed that his father was a farmer since Hallowell recounts that the farm next to the one where he was born was owned by his father's brother (Hallowell, 1884). Benjamin was two and one-half years old when his father died in 1802. He, along with his mother, older brother James, and younger sister Mary, moved to his maternal grandfather's farm. An older brother, Joseph, went to live with his uncle. Typical of Hallowell's time, parents often died young leaving small children. Kett (1977) observes that "shocks caused by the sudden death of a parent differed in degree but not in kind from the other dislocations which were so common as to be almost normal in the early nineteenth century" (p. 15). This pattern of dislocation was to characterize the first twenty-five years of Hallowell's life (Hallowell, 1884).

A child born of Quakers was born into two families: The child's biological family and the child's Quaker family. Both of them took responsibility for the child's upbringing. The biological family was responsible for the child's physical well being as well as the moral, religious, and practical education of the child. Family history and values, frugality, hospitality, and hard work were conveyed to young children by instruction and examples from relatives and the Quaker community (Graff, 1995; Cremin, 1980; Kett, 1977). While there is little evidence of Hallowell's life other than his autobiography that document makes clear that he was learning these values and the ability to read from his mother and grandfather (Hallowell, 1884). The child learned the important testimonies or actions that characterized the Quaker life--truthfulness, simplicity, equality and peace that came from the inner Light or Christ within each person. The involvement of the whole family, in meetings for worship, and silent waiting in thanksgiving before every meal continually reinforced the spiritualism of the Quaker faith. Example and family worship brought the family closer and taught children to "set before God their needs and thank Him for his kindness and brought God closer to them" (Homan, 1977, p. 15). In his autobiography Hallowell does not mention the Quaker faith and its impact on his upbringing however, in his older years religious practice is mentioned frequently. The example of his life being bound up in Quakerism as he grows older gives strong evidence of a firm and lasting foundation in Quakerism (Hallowell, 1884).

Hallowell's early life, typical of many youth in the early years of the nineteenth century, was one of dislocation and relative instability. Nonetheless, his mother's firm guidance and hard work clearly gave young Benjamin a base in the Quaker ethic of honesty, hard work, and though not mentioned the Quaker faith. Even when the family was divided among their relative's homes, his mother kept close tabs on him as did the relatives with whom he lived. His early life is a prime example of the Quaker family network of mutual support.

Intense reminders to raise their children well were always part of the subject matter of Disciplines of the yearly and monthly meetings. Disciplines were issued to provide guidance in the daily practice of the lives of all Quakers. Epistles or letters provided specific reminders of practices extolled in the Disciplines. Queries were used by monthly and superior meetings to inquire if practices laid out in yearly meetings were being followed. These forms of guidance-- Epistles, Queries, and Disciplines--were a constant check and reporting system that continually kept Quakers mindful of their duties toward their children (M. E. Chijioke, personal communication, April 7, 1997; Barbour & Frost, 1988; Homan, 1972; Disciplines, 1827). In Hallowell's case perhaps the most obvious Discipline that his mother enforced was that of educating the child. His mother was firmly insistent that Benjamin attend school and countenanced no excuses (Hallowell, 1884).

Homan (1972) detailed the set of rules related to parent-child responsibilities in Quaker households. Some of the responsibilities of parents were to hold authority, be worthy examples to the child, to hold the child in subjugation, to train the child in the fear and wisdom of God, and to treat their children with kindness. As was the custom in Quaker organizations the children also had responsibility. They were required to obey and honor their parents, obey God before parents if necessary, and assume for themselves responsibility for right living. These responsibilities Hallowell took seriously to heart. In his autobiography he speaks of visiting his mother at every chance he could. When he finally moved to Alexandria he took his mother with him. That he took responsibility for right living is evidenced in the fact that he was appointed a minister of the Quaker faith and in the praise he received after his death (Hallowell, 1884).

The meeting for worship was also an important part of the child's second family. Children were expected to attend both midweek and First Day meetings. They were taught by and expected to follow the example of their parents. Homan (1972) further suggests that "participation from their earliest days in family worship prepared them for meetings where they "found the same kind of silence, and it became a common and natural part of their worship experience" (p. 18). Similar modeling and constant reinforcement ingrained the faith in all the aspects of children's lives. Doubts about a family's compliance with this guidance were raised to the monthly meeting. If the consensus of the meeting thought the doubt had merit they appointed a well respected or "weighty" Friend to visit the family and talk to them regarding the problem. If the family did not comply they could face the prospect of being disowned or cast out of the Quaker community until they conformed (Barbour & Frost, 1988; Homan, 1972; Woody, 1972). Hallowell's father was indeed cast out but his mother accepted into the Abington women's Monthly Meeting as the minutes of the meeting show (Jane Hallowell's Certificate, 1797, p. 34).

Hallowell, as other children of his time, began productive work at a very early age. Until the age of seven children learned to do small chores around the house such as cooking, cleaning, churning, setting the table, and running errands. In Hallowell's case this also included helping to plant, tend crops and animals, and harvest. After the age of seven, children began to move more towards adult work (Graff, 1995; Kett, 1977; Madsen, 1974).

EDUCATION

Early Education

In the late eighteenth and early nineteenth century, the New England states led the nation in establishing a system of public schooling funded by taxes. Students in common (elementary) schools were taught to read, write, and do basic arithmetic. Grammar (high) school students, in addition to the common school subjects, were taught Latin, Greek, advanced mathematics, and other subjects to prepare them for college (Teeter, 1983; Cremin, 1980; Madsen, 1974; Meyer, 1967).

In the middle states Pennsylvania began to provide limited tax-supported schooling for children of the poor in 1802. The majority of schools however, continued to be supported by religious and benevolent groups. Madsen (1974) asserted that these groups formed a strong

opposition to public schooling until 1831 because they wanted to "preserve their own language and culture and to control the schools they had been supporting out of their own pockets" (p. 91). This was the case for the first school that Hallowell attended. Abington school was supported by the Abington monthly meeting (Woody, 1972; Hallowell, B., 1884). The Abington Monthly Meeting school that Hallowell began attending in 1804, was established in 1693 in Montgomery County as a youth's meeting in the home of Richard Worrall (Abington Monthly Meeting, 1697). The purpose for education at the time was primarily moral. Land was donated in 1696 for a meeting house (meetings had been heretofore held at individual homes) and school house. A charter was granted by the Pennsylvania Council in 1701 (Woody, 1972).

The Meeting and Education

Soon after the establishment of the Quaker meeting system in England, advice regarding education began to appear in minutes of the 1699 London yearly meeting. The theme of education repeats itself over the years. Woody (1972) notes that

the consistent themes of education were moral education according to Friends standards and training the individual in some practical employment. This was done by selecting schools with teachers of approved morality along with selecting subject matter and apprenticeship training. Schools were required in all Quaker communities and the strong communities assisting the weaker (pp. 21, 22).

These educational themes were transferred from the London yearly meeting to the meetings in Philadelphia and Burlington, New Jersey. That the guidelines were enforced is supported by the continued emphasis reflected in the minutes of all Quaker meetings.

In 1804, Hallowell's first teacher was his cousin Nathan Shoemaker. Nathan, like many teachers of the time, was probably passing time as a teacher before attending college. Hallowell reports in his autobiography that Nathan later attended college and became a physician (Hallowell, 1884). Teachers ranged in age from young people, who had no more education than the elementary students they were instructing, to college graduates awaiting professional employment (Teeter, 1983). When selecting teachers the Quakers set standards of morality and followed the recommendations set forth by Quaker meetings and individuals.

Quaker dedication to educating their children is exemplified by Hallowell's mother. She was untiring in her efforts to keep him in school despite his feeble health (Homan, 1972; Stewart, 1971; Hallowell, B., 1884). He would try every excuse he could think of, from helping with the farm chores to hiding his clothes, to avoid attending school. He admits to a fear of one of the school masters who succeeded his cousin Nathan. Hallowell recalls that the teacher patrolled the school room with a large switch and liberally applied it often "on a whole benchful successively from which I did not escape . . . the sound of a stroke upon another hurt me almost as badly, it seemed, as if it had been upon myself" (Hallowell, B., 1884).

Hallowell's first encounter with harsh discipline was a traumatic one. By and large Hallowell was fortunate in his schooling. By his own account, his teachers were less inclined toward physical punishment (Hallowell, 1884).

Hallowell's own experience is evidence that school discipline in the late eighteenth and early nineteenth century was inconsistent at best. Cremin (1980) writes that the conduct of a one room schoolhouse was inefficient at best and consisted of an informal grouping of students according to different tasks. For example, some students might be working on spelling, others on arithmetic--at times they might recite a passage in their reading or participate in a question and answer session. He further notes that because of the inefficient routine of the school, associated discipline problems were often quite serious. As an example, Cremin (1980) recounts that "The tradition of turning out the teacher . . . had a basis in reality and it was often the job of the new teacher to test his strength against that of the big boys"--students were often older and larger than the teacher--"before the class could get down to a term of serious work" (pp. 395, 396). Joseph Kett (1994) described the act of corporal punishment as main strength, a popular technique of school discipline. In Quaker schools corporal punishment seems to have been the exception rather than the rule. One significant reason may have been the adoption of the Lancastrian system. The system was developed and touted by Joseph Lancaster a British teacher. It was, in Cremin's words, based on "two sets of pedagogical innovations, first a carefully sequenced arrangement of the subject matter to be taught and an elaborate system of directives for teaching it. Secondly, older children were used as monitors to teach the younger children" (Cremin, 1980, p. 396). Cremin (1980) writes that the "Lancastrian system of monitored instruction" was adopted by Quaker

philanthropist Thomas Eddy's Free School Society in 1805, for the education of the poor, because of its more efficient way of teaching large numbers of students (p. 445). Hallowell was to experience this system both as a student at Abington and as a teacher in various schools prior to opening his own (Hallowell, B., 1884).

David Madsen (1974) writes that the Lancastrian system "shorn of its rather harsh punishments, it had a slight resemblance to teacher assistants' programs in many American universities" (p. 103). Generally though the Lancastrian system relied on humiliation to discipline students rather than corporal punishment. An example might be that a student would be placed in an uncomfortable position for a period of time though that is not to say that the rod was completely spared (Kett, 1977). Hallowell's autobiography and the letters of his students suggest that neither he nor the teachers who worked with and for him had occasion to strike a student (Hallowell, B., 1884).

As mentioned, Hallowell began his own schooling reluctantly. But seeing that no ploy of his could overcome his mother's determination that he would attend school, he resigned himself to attending and soon began to excel. He did so well that soon the teacher deputized him to "hear the lessons" of other students (Hallowell, B., 1884). This self-reported episode reinforces the importance of the mother's role in helping children learn (Graff, 1995; Cremin, 1980; Kett, 1977). It also demonstrates that some form of Lancastrian or monitored instruction was likely in place at the Abington school.

Hallowell's mother also had him attend school during times of planting and harvest even though, in rural areas, it was customary not to attend school during these periods (Graff, 1995; Kett, 1977). The farm provided an ideal setting for kindling Hallowell's interest in a variety of scientific subjects. In years to come his reputation, both in school and as a school master/teacher, would be enhanced by his mostly self-learned expertise in natural history (botany and geology) and natural philosophy (chemistry, mathematics, and physics) interests first sparked on the farm (Hallowell, B., 1884).

To Learn a Trade

Between twelve and sixteen years of age, young men entered the world of work. Often this event was driven by economic necessity when the cost of keeping a youth exceeded the value of the work performed. Some form of apprenticeship was often the path to learning a trade or profession. In the case of youths who expected to become farmers this was often done by an informal apprenticeship on the family farm. They learned about crop management, maintenance of farm property and equipment, storage of produce, and care of animals (animal husbandry). For a profession such as law or as a merchant, the youth might be hired out to a person with the appropriate specialty, for a set period of time, by a contract for board and small cash stipend. In the case of families who had no land or business practice of their own, the youth might be apprenticed to a craftsman to learn a trade (Graff, 1995; Cremin, 1980; Kett, 1977).

When young Benjamin at age 15 expressed a desire to become a builder, his family inquired about possible situations in Philadelphia and the surrounding counties. Finally his mother's cousin, Nathan Lukens, a carpenter and joiner, agreed to take him as an apprentice. Lukens not only was a carpenter but typical of many freeholders had some twenty acres of land under cultivation. When he and Benjamin were not working in the carpentry shop or on jobs away from home, they spent time working the farm. Cremin (1980) describes a "household-handicraft-mill complex that accounted for most of the manufacturing of the early republic" (p. 342). His description of the organization of such a practice fits closely with Lukens' operation combining both craft and farming with cabinets and coffins for sale, as being at its peak around 1815. This is close to the time of Hallowell's apprenticeship.

In his autobiography Hallowell is clear in expressing his personal satisfaction with learning the "builders trade" and his progress. Had it not been for a serious injury sustained while repairing a neighbor's barn, Hallowell's story might not merit study. As it was, the injury left him unable to perform hard physical work. He was disconsolate and, with his family, worried about his future. At last, they agreed that he must prepare himself to be a school teacher.

In the early nineteenth century the only criterion for becoming a teacher was the opinion of the local board or school committee. According to Cremin (1980), it was not until the 1830s and 1840s that several state normal (teachers) schools came into being. Teachers learned through their

own schooling and by an informal apprenticeship. Haberman and Stinnet (1973) report that "more than 25 percent of the nation's children were enrolled in the common schools and taught by teachers who themselves had come from common schools. In other words, the teachers offered the same amount of education as they had" (p. 30).

Back to School

His apprenticeship having lasted not even two years, Hallowell returned to the local school at Abington to begin in earnest his preparation to be a teacher. His own teacher Thomas Williams was educated at Westtown school as was to be the case for other of Benjamin's teachers (Hallowell, B., 1884). His studies advanced to more complex algebra, surveying, spelling, reading, and writing--subjects common to small primary schools (Cremin, 1980). After a little more than a year at Abington it became clear that Hallowell had learned as much as he could there. He and his family began to consider a means of further educating him and settled on John Gummere's boarding school in Burlington, New Jersey. Gummere, a former Westtown teacher, had opened his school on East Union Street in 1815 (Allinson, (no date), p. 3). From their meager resources Hallowell's family scraped together the money to pay for tuition and board. Because of Gummere's excellent reputation, the school was full but after a seemingly long wait Hallowell was enrolled (Hallowell, C., 1900, pp. 141, 142; Hallowell, B., 1884, p. 38).

Hays' (1994) description of Quaker boarding schools conforms closely with what one experiences today when visiting schools with which Hallowell was associated. Thus, we can imagine Gummere's school as "designed for pedestrians, walkways across the lawns lead to . . . dormitories, classroom buildings and a . . . Quaker meeting house" (p. 12). She further describes the Quaker commitment to simplicity that results in rather sparse living quarters for the students and faculty. An urban boarding school might be structured the same way but without the land as was Hallowell's (Hallowell, B., 1884). Student time was, and is still, structured for the entire day. Kett (1977) recounts that boarding schools or academies were marked by a "more consistent but still severe discipline" than the local or district schools (p. 50). These descriptions hold true for all of the schools in which Hallowell later taught except his own.

Hallowell's year at Gummere's school was pleasant socially but more importantly it was his first experience with complex experiments in natural philosophy. He was introduced to a variety of equipment which he would later use in his own schools and lectures to help build his reputation. Devices such as "air pumps, electrical machines, magic lanterns (slide projectors), . . . and the compound blowpipe" fired his interest in science like no previous experience (Hallowell, B., 1884, p. 30). After that school year, he left Gummere's school, presumably because he had learned nearly all he thought he could.

TEACHING EXPERIENCE

Westfield School and Self-Improvement

After a brief interval, he was approached by John Parry and another gentleman who had discovered his desire to teach and knew of his preparation at Gummere's school. They invited him to take the school at Westfield, New Jersey (in what is today Newark). He accepted happily (Hallowell, B., 1884). Thus, in the autumn of 1818, at age nineteen, he assumed charge of the Westfield Friends meeting school. He was under the supervision of a committee of Friends, both male and female. During that winter he taught and managed a mixed student body of some eighty pupils--several of whom were older than he. His use of the Lancastrian method is evidenced by his use of students as assistant teachers. The curriculum consisted of the standard grammar, writing, and mathematics, as well as specialized practical skills in geometry, algebra, and surveying (Hallowell, B., 1884). If the ideal of strenuous learning and self-education would have a model, Hallowell could well be it. He certainly showed the individual persistence described by Kett (1994) when, after only one year, he resigned his position at Westfield and used his earnings that summer to go to Philadelphia to improve his handwriting.

A Brief Stay at Fair Hill School

Fortuitously, just as his writing classes ended in Philadelphia, he was advised by a friend from Gummere's school, Jesse Wilson, then teaching in Alexandria Virginia, to apply for a teaching position at Fair Hill Friends Boarding School in Montgomery County, Maryland. With excellent letters of recommendation from the members of the Westfield committee and others, he was invited to meet with the school's superintendent and committee. On the way he took his first trip to Alexandria, Virginia to visit Jesse (Hallowell, B., 1884).

He accepted the position and reported to Fair Hill School on the first of December 1819. The school, a new enterprise, impressed Hallowell by the discipline and good order of the students (Pugh, 1978; Hallowell, B., 1884). Later Hallowell brought his sister Mary to Fair Hill School where she enrolled as a student. While there he became engaged to a newly hired teacher, Margaret Farquhar, who was to become his wife.

Early in his tenure Hallowell assumed responsibility for what was then called first and second care, that is, being in general charge and supervision of the student body's daily routine. Responsibility was shared throughout the male staff. First care appears to be the person primarily responsible for such supervision and second care that of auxiliary responsibility. He had "the general charge of the students between school, in the dining room, etc., etc." (Hallowell, B., 1884, p. 69).

The death of the superintendent left Benjamin, at age 20 the temporary head of the boys' department. He commented that he "felt the weight and responsibility of the position" (Hallowell, B., 1884, p. 57). This was to be fundamental training for operating his own school. In September of 1821 he decided to leave Fair Hill school for reasons we are unable to discover. He submitted, and the committee accepted, his resignation.

Return to Burlington for Self-Improvement

Hallowell's former teacher John Gummere offered him a job performing astronomical calculations in support of a book on astronomy that Gummere was writing. The position provided good mathematical practice and though temporary was a satisfying one for Benjamin. His work included calculating or recalculating several solar and lunar tables as well as the exercises presented in the second half of the Gummere book. He discovered major errors in time for Gummere to make the corrections which were included before publication. This served as excellent experience for writing and publishing his own texts in years to come (Hallowell, B., 1884).

Hallowell's reputation as a teacher was beginning to spread as evidenced by an offer to take the school at Ellicott City, Maryland which he "respectfully declined." Gummere soon became aware of a vacant position at Westtown school near West Chester, Pennsylvania and suggested that Benjamin apply. His letter of application states, "Understanding that one of the teachers at

Westtown is about to remove to a different institution, I feel free to apply for the situation that will thus become vacant. Being no stranger to you, I refer you for information to Charles Shoemaker, or the Committee of the Baltimore yearly meeting school" (Hallowell, B., 1821).

In addition to the references in his letter there was an excellent recommendation from Gummere. The phrase "being no stranger to you" which he used in his letter of application further suggests an active Quaker network that was clearly helpful to members of the faith. Benjamin was offered the position.

As fortune often seems to fall all at once upon some it now poured on him. While waiting for confirmation of employment at Westtown, he was offered the Friends' School in Woodbury, New Jersey. The committee asked him to come to Woodbury to look the place over, which he did. He was sorely tempted to accept the offer and sought Gummere's further counsel. With intimate knowledge of both places, Gummere recommended that he accept the Westtown offer for it provided the best chance for personal improvement. Hallowell "had great confidence in his judgment and thus accepted the Westtown position" (Hallowell, B., 1884, p. 66).

Westtown School, His Best Three years

After a short visit with relatives, Hallowell reported on December 1, 1821 for duty at Westtown Friends Boarding School. The experience would demonstrate his growing skill in innovative ways of teaching and a gentler form of discipline, all of which would serve him and contribute to his success in his Alexandria school. At the beginning, he sensed that his Westtown colleagues did not think him capable of replacing the departed teacher. Hallowell asked one of the brighter students how his predecessor conducted class. Learning his predecessor's sequence of subjects, Benjamin followed the same schedule, which seemed to put the students at ease (Hallowell, B., 1884). He taught arithmetic, mathematics, English, grammar, and history. These subjects, plus reading, writing, and geography, constituted the core curriculum of Westtown School. In addition, teachers would lecture to combined classes. His first lecture on optics was deemed successful by the faculty and students alike (Hallowell, B., 1884). Within his first month at the school, Benjamin had earned the respect of both the faculty and the students.

An early disciplinary incident provides insight into Hallowell's unique method of discipline. This strategy was to characterize his educational endeavors throughout his life. When a boy used "insulting language" to him in front of the other students, Hallowell, with the permission of the superintendent and faculty counseled the boy that he must be ill because a boy who was well would not act that way. He had the boy confined to the nursery or sick room. The boy was ashamed to tell the nurse the reason for his confinement. It was customary for the committee to visit the school on First Day and a number of Friends knew the boy's mother. When news of their impending visit reached the boy, he tearfully pleaded with Hallowell to be let out promising to behave for the rest of the school year. Hallowell released him and reports that he did behave from then on. Hallowell used this approach in a time when discipline by humiliation, while short of corporal punishment, was often physically severe (Kett, 1977; Madsen, 1974). Later he was to use the phrase "touching the right spring" to describe this technique (Hallowell, B., 1884. P. 74). Similar practice continued in other cases throughout his life. Hallowell had a faith in human good and reliance on people to do the right thing that endured throughout his life. It is quite possible that his early personal experiences with harsh discipline in schools may have been a factor in shaping this attitude (Hallowell, B., 1884).

His initial success at Westtown undoubtedly increased his self-confidence and led to a series of innovative proposals that changed Westtown routine considerably. He asked to be allowed to take complete charge of one third of the students. Rather than sharing subjects with other teachers, he proposed to teach the group the entire curriculum. In a short period of time, he recommended changing standard texts on history, proposed establishment of a planetarium, and opened his personal library for use by the students by turns. Such was the confidence of the faculty and committee that all of his recommendations were accepted. He also recommended that women teachers be appointed to help manage the boys side, reasoning that it would contribute to a family feeling with the female teacher representing a surrogate mother. Again, his idea was accepted. By 1823, presumably on the strength of his recommendation, his sister Mary and future brother-in-law, Charles Farquhar, had joined the faculty. Westtown was becoming a family affair--further evidence of the Quaker network (Hallowell, B., 1884).

Self Education

The early nineteenth century is noted for the ideology of self education and self-improvement (Kett, 1994; Stubblefield and Keane, 1994; Brown, 1986; Cremin, 1980). From the time Hallowell began teaching at Fair Hill and for the rest of his life self-education was a primary activity for Hallowell. He read not only to pass the time but to prepare himself to teach. A partial list of some of his readings suggests the volume and diversity of his inquiry. Examples that he cites in his autobiography include Clarkson's, *History of the Slave Trade*, twelve volumes of Addison's, *Spectator*, Erasmus Darwin's, *Botanic Garden*, various books on natural philosophy, chemistry, poetry, as well as books on the Quaker faith. He participated enthusiastically in faculty discussions which were not only social in nature but contained science, grammar, and other curriculum issues and current events (Hallowell, B., 1884, pp. 79, 80). Any advanced subjects he taught he learned from self-study and correspondence with contemporaries. Teacher education of his day did not provide teachers with advanced study in any subject area. These citations give evidence of his lifelong self-improvement and adult learning experiences.

After three years, Hallowell decided to leave Westtown. Two factors probably contributed to this decision. One was his lengthy engagement to Margaret Farquhar who had remained at Fair Hill. Another may have been the controversy dividing the Quakers around this time. The dispute centered around the question, should Quakers maintain the quietest ways they had followed for nearly a century, or should they follow the lead of other Protestant denominations and become evangelists? The quietest, thereafter referred to as Hicksites, argued that the quiet examination of the inner Light was the only path that Quakerism could take (Barbour & Frost, 1988; Ingle, 1986). On the other hand, evangelicals, thereafter referred to as orthodox Quakers, believed that Quakerism had lost the dynamic nature of their early days. They proposed to actively energize the faith by belonging to Bible Societies, supporting temperance societies, peace and anti-slavery movements, and in general, participate in marked activism (Barbour & Frost, 1988; Ingle, 1986).

Westtown School was then under the Philadelphia Yearly Meeting. While other meetings split apart (New York, Boston), Philadelphia continued to be physically, if not philosophically, united. It is in his writings that Hallowell aligned himself with the Hicksites (Chijioke, personal communication, April 7, 1997; Hallowell, 1884).

In a letter to the *Westonian*, "Recollections of a Westtown Girl" (Anonymous, 1890) observed "Benjamin Hallowell and his sister Mary were teachers at that time (1824) but the unsettlement among Friends was getting pretty warm, and they were satisfied to resign . . . the Educational Department was in a low state." In August 1824, Benjamin submitted his resignation. The committee, aware of his improvements at the school, reluctantly accepted. He speaks fondly of his experience there;

My three years sojourn at Westtown, was take it altogether, the happiest, most congenial, and most improving period of my life. It was like a little world in which I felt I was doing good, and possessed the confidence, affection, and respect of those among whom I daily moved, which was a very encouraging and grateful feeling to me . . . This training was admirably adapted to form my character, so as to meet successfully the exigencies I was about to encounter . . . (Hallowell, B., 1884, pp. 94-96).

John Gummere had been right.

CONCLUSION

Benjamin Hallowell's mother, steeped in the values and culture of the Quaker faith, was the first and continuing influence on his life. This was especially so with the death of his father when Hallowell was only two and one-half years old. It was no doubt at her knee and that of his grandfather that, typical of Quaker children, he learned the values of honesty, simplicity, fairness, and hard work as well as the practice of the Quaker faith. We may be reasonably sure of this since his mother was officially accepted into the Abington Women's Meeting in 1797 and research shows the Quaker community made sure that the parents raised their children in accordance with the Societies's guidance. Hallowell comments in his autobiography that his mother and brother in particular taught him the Quaker faith. The family was broken up early and Benjamin was sent to live with his grandfather on an adjacent farm. His mother taught him early to do small chores around the home and skills that served him well when he was sent to live with other relatives upon the death of his grandfather. These also served him well throughout his life. Nearly all of Hallowell's formal education took place through the Abington Monthly Meeting school.

He attended that school until his apprenticeship to his cousin at age 15. He studies subjects commonly taught at the time--reading, writing, mathematics, and later surveying and geometry. His second teacher at Abington school brought his first experience with harsh physical discipline and experience that seems to leave him greatly impressed because this was the only example of physical punishment that he reports on in his writing. the remainder of his teachers set a good example for him and he, at the firm insistence of his mother, came to enjoy schooling. At least one of his teachers, perceiving his brightness, called upon him to hear the lessons of his fellow students, his first experience at teaching and one he considered pleasant one. With the exception of the second teacher, the severe discipline it is likely that his teachers provided good positive role models for Hallowell.

At age 15 Hallowell was, at the agreement of this family, apprenticed to his cousin to be a cabinet maker and carpenter. The apprenticeship did not last even one year as he was badly injured in a fall from a roof of a barn that he was repairing. Clearly his injury would keep him from hard physical labor. Again the family agreed on his future. He returned to Abington School for one year. Apparently having learned all that he could after one year with the help of his family, he applied to John Gummere's school in Burlington and was eventually accepted. It was here that Hallowell saw his first scientific experiments complete with apparatus and he was enthralled though his early appreciation of natural science had begun when he was a youngster. From this point on in his life the excitement of these early encounters with science never left him. His avocation would be that of a pre (or para) professional scientist and much of his considerable reputation would come from his expertise in the area of science.

The next six years from 1818 to 1824 prepared him for his own boarding school in Alexandria, District of Columbia. Westfield School in New Jersey, Fair Hill School in Maryland, and Westtown School in Pennsylvania would complete his preparation with increasing responsibilities and freedom to implement change. It was in this environment that he honed his skills that would be his vacation and the foundation of his success.

In other parts of his faith, family, and education were the firm foundation upon which Benjamin Hallowell built his life. All combined into an intertwined network that provided him with physical, social, financial, and spiritual support for his life. This was crucial in the years 1824-1860 when he established his schools and grew his reputation as educator, scientist, leader of institutions, and reformer.

Twenty five years of formation inculcated in him the good Quaker virtues of honesty, trust, good faith, and a love for all people that made Quakers and Benjamin Hallowell a cornerstone of his community and nation. The life and accomplishments of Benjamin Hallowell are inextricably bound up in Quakerism. In the eyes of many of his contemporaries, he was the embodiment of the Quaker virtues and values that shaped and defined his life as an educator and citizen. Hallowell's life give evidence that he was, in all his endeavors, guided by the faith into which he was born and raised.

CHAPTER 3
HALLOWELL'S SCHOOLS
INTRODUCTION

This chapter chronicles Hallowell's founding and operation of two schools is chronicled in this chapter. One was in Alexandria and the other in Philadelphia. The Alexandria school was a non-sectarian private boarding school that was the basis for Hallowell's success especially in Alexandria. The Philadelphia school was a high school established to provide a curriculum supportive of Quaker teachings and values. In each Hallowell used adult education activities as a venue to promote the school and establish his reputation in education and science.

Alexandria was a deep water seaport on the banks of the Potomac River just south of the impassible Great Falls. It had its origin as a land grant by the Royal Governor to Mistress Margaret Bent on September 6, 1654 (Smith & Miller, 1994). In 1730 it became a shipping point for tobacco and other produce from Fairfax farms and plantations. A royal tobacco inspection and taxing station was established near Hunting Creek and the town grew northward from there. In 1749 the Virginia Assembly passed an act to officially establish the town (Shephard, 1988).

From 1791 to 1846, Alexandria was part of the District of Columbia. From its establishment the town grew and prospered with shipping and the subsidiary trades as its main activity. In 1817 the price of crops declined and for approximately the next twenty years Alexandria suffered an economic decline, several epidemics of scarlet and yellow fever, cholera, as well as devastating fires. The town was commercially depressed when Hallowell arrived in 1824. Its main shipping came in the form of coal. Instead of the agricultural export the town now found a major industry in the export of fish products and, in the 1820s, slaves (Smith & Miller, 1994; Shephard, 1988; Sharrer, 1977).

Benjamin Hallowell, the struggling young school teacher from Pennsylvania, after many years of hard labor would find personal and financial success in Alexandria. His boarding school and connections with other learning institutions were his means of making a living and securing his family's success. His correspondence with his peers in the North was certainly a factor that helped establish his fame, as was his close proximity to influential acquaintances in the nation's capital. By the time of Alexandria's retrocession to the State of Virginia in 1846 both Hallowell

and his adopted town were prospering--Hallowell, from application of his Quaker work ethic, honest dealings, and care of his money; Alexandria, from the more liberal laws of Virginia that promoted and rewarded commerce (Smith & Miller, 1994; Hurst, 1991; Shephard, 1988).

THE ALEXANDRIA BOARDING SCHOOL

The Move to Alexandria and Marriage

Hallowell's move to Alexandria followed several years of accomplishment as a teacher in Pennsylvania Quaker schools. He had been successful and accomplished several notable and innovative achievements at Westtown School. Among these were his suggestion to replace various texts which the faculty quickly accepted, founding a planetarium, and admitting female teachers into the faculty of the boys' side of the school.

Towards the end of the 1823-1824 school year at Westtown, Hallowell came to feel the necessity to leave. He recounts two factors that influenced him to do so. First, he had been engaged to Margaret Farquhar since 1821 when they taught at the Fair Hill Boarding School in Maryland, and both were apparently ready for marriage. Secondly, he felt himself to be in better condition financially. A third possible reason might be that he felt confident of his ability to operate his own school after his increasingly rewarding experience at Westtown. By now Hallowell was twenty-five years old and an accomplished teacher who had handled increased responsibility well (Hallowell, 1884).

Hallowell consulted with his soon to be brother-in-law Charles Farquhar who was also teaching at Westtown. They agreed to jointly found their own private boarding school. Hallowell first thought of Richmond, Virginia, an idea he discussed with Margaret and his close friend Deborah Stabler of Sandy Spring Meeting near Fair Hill School. After listening to Deborah's considered statement that "Friends do not thrive in Richmond," he changed his mind and immediately eliminated Richmond from consideration (Hallowell, 1884, p. 93). Her reasoning may possibly been influenced by the fact that Richmond had a large evangelical Quaker population. Although the separation into Orthodox (evangelical) and Hicksite (traditional) Quakers would not take place until 1827, friction between the two factions was increasing, Hallowell and Deborah were strong Hicksites. In Alexandria, the Quakers were primarily Hicksite (Barbour & Frost, 1988).

Upon his return from Fair Hill School to Westtown a vision of Alexandria (then a part of the District of Columbia) came to him in Meeting. His idea to locate the school there was reinforced by the presence of numerous Quaker acquaintances and his cousin Nancy Janney. He sent a letter to this effect to Margaret and Deborah Stabler; both approved. Hallowell was launched in his new adventure (Hallowell, 1884).

The next step for Hallowell was to set up his school. He spent the better part of August 1824 finding a house to rent in which to conduct his school, only to find shortly after signing a lease that the owner had an opportunity to sell the house. Hallowell was asked to consider canceling the contract. He kindly acceded to the owner's wishes and gave up the lease. He then sent his partner Charles Farquhar to find another. By early September 1824, a building had been rented, furnished, and stocked with the chemicals and other scientific apparatus needed to conduct the school. He went to Westtown to say his final farewells and returned to Alexandria to arrange for the remaining furnishings needed to open his new school on the target date of November 1, 1824.

Returning to Fair Hill School, he and Margaret were married at the Sandy Spring Meeting on October 13, 1824 by having their marriage certificate read in front of the Meeting (Minutes of Sandy Spring Meeting, 1824). He had written their marriage certificate himself as was often the custom (Barbour & Frost, 1988; Trueblood, 1966). They left the Meeting to immediately proceed to Alexandria. They arrived in time to witness General Lafayette's visit the next day to the widow of General Harry Lee and her son Robert E. Lee who would soon be a student in Hallowell's Alexandria school (Hallowell, 1884).

Hard Times for the School

Hallowell's school was a private boarding school not connected to or overseen by the Alexandria Monthly Meeting. It was, in effect, an academy typical of those in the early nineteenth century whose function was college preparation and "useful" studies (Cremin, 1980; Knight, 1953). Academies flourished in the antebellum South. Knight (1953) referred to them as "a product of the frontier period early national development and the *laissez faire* theory of government" (p. 2). In these academies, the curriculum often included basic grammar, reading, writing, and arithmetic. At a higher level, they offered advanced mathematics, modern languages,

philosophy, chemistry, biological sciences, and surveying, to name a few other areas of study (Teeter, 1985; Madsen, 1974; McNett, 1954; Knight, 1953). Often a student might encounter as many as thirty subjects or more in one school year. A sample of the school's curriculum reflects that of most academies except that Hallowell's school placed strong emphasis on science and mathematics.

The first students, Margaret's brothers, were taken in at the same rate, \$20.00 per quarter, as the tuition at Fair Hill School. This is an example of the mutual support typical of Quaker families and Meetings (Barbour & Frost, 1988; Trueblood, 1966). Evidently the preferred student from a financial point was the boarder, if for no other reason than it guaranteed six dollars per quarter for tuition in common or basic branches such as reading, writing, and grammar. Mathematics cost ten dollars per quarter. The boarders' fees for lodging and food provided a steady forty dollars per quarter (Hallowell, 1884).

In order to keep busy, but more important, in an effort to publicize his school and bring in more money, Hallowell undertook to offer a series of lectures to the general public on the topics of chemistry, natural philosophy, and astronomy. He placed advertisements in the local daily paper and gained immediate results, especially from members of the Alexandria Quaker community. This is a typical example of Hallowell's use of adult education to further the success of his school. As was often the custom, the first lecture was free to all and the Quaker community showed up in strength led by a locally prominent female Quaker, Margaret Judge, who invited her friends-- Quaker and non-Quaker. This event demonstrates the strength and value of the Quaker network and their influence on the community and their contribution to the success of Quaker endeavors (Barbour & Frost, 1988).

In 1825, the number of students increased. Many of the Lee family attended, including Robert who was preparing for West Point. This produced a small but steady income. Brother-in-law Charles Farquhar, awaiting admission to medical school, arrived to teach in Hallowell's school (Hallowell, 1884).

With the birth in September 1825 of their son James, Hallowell's wife fell ill. Her illness persisted into fall and winter. With the advent of spring, Hallowell, having been told that his present location was not healthy (possibly because it was on the outskirts of town and close to the

marshes lining the Potomac), found a new home for the school and family at the corner of Queen and Washington streets, a presumably more healthy location. The brick house was larger, giving the family and the school more room. They moved in immediately (Hallowell, 1884).

Hallowell's writings in the period 1825-1830 indicate that his financial difficulties continued. Hallowell comments on the generosity of his landlady, the widow Hooe, and the merchants who extended credit when he needed it. He no doubt was painfully aware of how close he was to financial failure. This was one area that could get him disowned from Meeting, especially if there was evidence of mismanagement or neglect on his part. He comments on his compulsion to pay on his debts what he could whenever he had any extra money available (Hallowell, 1884).

In 1827 Margaret was asked to open a school for girls. She did so and soon filled the classroom provided for her use. Mrs. Porter and Mrs. Waugh, mistresses of local girls' seminaries, had their students attend Hallowell's lectures. When some unspecified disagreement took place between Mrs. Porter and Mrs. Waugh, the latter asked Hallowell to give separate lectures to her students for thirty dollars for the winter quarter (McNett, 1954; Hallowell, 1884).

In the autumn of 1828 Hallowell started giving private lessons, an enterprise he considered "humbling to me, but I was in debt and desirous of doing anything honourable to get out of debt and make a living" (Hallowell, 1884, p. 107). His workday must have been grindingly difficult for he seldom got to bed by midnight. He would use the time before dawn to prepare his school for the coming day. In the winter he had to transport his only stove from Margaret's classroom to the lecture room for evening lectures and back early the next morning.

His school day started at about 6 o'clock in the morning and continued with few breaks until after 3:30 in the afternoon (Hallowell, 1884; Griscom, 1844). He spent the remainder of the afternoon giving private lessons in his students' homes. After dinner or tea in the evening, he taught a class of girls in his school until about 8:30 when he allowed himself a brief rest before preparing his classroom and apparatus for his evening lectures (Hallowell, 1884).

Private lessons and lectures not only earned him extra money; they spread his reputation.

Hallowell (1884) notes that

on the 17th of ninth month, 1830, I commenced giving lessons to Angela Lewis, daughter of Major Lawrence Lewis (who was a nephew of General Washington . . .). These lessons continued through the year for which I charged fifty dollars . . . Angela's mother always attended her daughter's recitations . . . so that her influence which she afterwards exerted in my favor . . . was of greater value to me than the amount received in hand for teaching her daughter (p. 108).

In 1830 Hallowell petitioned the widow Hooe to raise the roof of his school about four feet, offering to pay her double the rent. She agreed, thus making room for more students as his reputation spread and enrollment increased. By 1831 he wrote to his brother-in-law Charles, who had left to study medicine; "my school is very full, twenty-one boy boarders under Caleb (his nephew) and more to come--upwards of eighty all together. Margaret's school is also full. One boarder and three or four coming from Sandy Spring" (Hallowell, B., 1831).

By 1832 his hard work and long days had paid off. His letters to his brother-in-law Charles testify to his success. Charles was still a partner in the school while practicing medicine in Maryland. In the letter he told Charles "my school is entirely full and I have a night class of ten girls twice a week regularly. I have a lecture this evening so thou might judge I am greatly busy" (Hallowell, 1832).

Other Business Enterprises

Now that Hallowell's boarding school was prospering to his satisfaction there is no indication that he lessened his efforts to make money. His lectures continued as did his private lessons. This is evidenced by a continuing mention by Hallowell of preparing lectures for the general public on various, primarily scientific, themes and in later life on the useful application of science to agricultural pursuits. He responded to letters soliciting his private help. For example, we find him giving the first lyceum lectures on agriculture (Lyceum lectures, 1839; Hallowell, 1884). He lectured the Loudoun County Agricultural Society and many more (Loudoun County Agricultural Society, 1840, November 17). James Washington (1838) wrote to him requesting help with his writing--especially grammar and style. Like a good Quaker, Hallowell was as fervent

in his business pursuits as in his worship--with one foot in the Meeting house and the other in the counting house (Tolles, 1948). With financial security, he purchased, in cooperation with Deborah Stabler, parcels of real estate in the city of Washington (Tax Receipt, 1855, July 2). He made several loans to Alexandria citizens and was appointed city surveyor which provided a regular source of income. Hallowell refused payment for surveying jobs that he used as practical exercises for his students. From 1832 to 1833 he was appointed police constable and from 1842 to 1843 he was appointed measurer of lumber (Miller, 1992). His reputation in the sciences grew and he was often called upon to lecture and perform various chemical analyses. This will be further described in chapter 5. Apparently his financial status was such that he could, as he judged appropriate, refuse payment for his work (Hallowell, 1884).

Breakup of the School

While the family's economic condition was improving, tragedy struck. In the year 1831 Benjamin and Margaret lost three of their four children to scarlet fever. Mary Jane, age 2, in April; James, age 6, in July; and Charles, age 4, in August. The effects of scarlet fever as related by (Lena Andrews personal communication, September 12, 1996), matron of an English hospital from the 1930 to the 1960, who experienced the terrors of a scarlet fever epidemic, described the fever's course as beginning with a rash of blotchy skin, followed by a frightening and rapid contagion, and sudden death. This must have made the disease even more traumatic in Hallowell's time and been a terrible blow given all of Hallowell's efforts to provide for the family. Seemingly only their strong character and faith got them through this tragedy. This was but one of the epidemics that raged through Alexandria between the mid-1820s and the 1850s (Shephard, 1988). The death of his third child, Charles, in 1831, convinced Hallowell that for the sake of his family and his students' health he must suspend the last two months (July and August) of the school year. He took his family to Fair Hill, Maryland, near Sandy Springs (Hallowell, 1884).

Leaving Margaret and Henry with his in-laws, Hallowell made use of this extended vacation to tour New England and New York. He visited the president of Cambridge and the school's scientific exhibits. He visited Nathaniel Bowditch, author of the seminal work on celestial navigation. Bowditch's *Celestial Navigation* is still used today by the world's seamen. From Massachusetts he journeyed to New Haven to visit Professor Silliman at Yale who edited and

published the *American Journal of Science* in which Hallowell had published numerous papers and articles (Hallowell, 1884). His tour completed, Hallowell returned to Alexandria to inspect his home and school. Seeing all was well, he immediately decided to bring Margaret and Henry back to Alexandria and did so the following day.

The Sale of the School Property

In August of 1831 Hallowell's landlady, the widow Hooe, died. Due to conditions of her deceased husband's estate, the buildings and property that were being rented as a home and lecture rooms to Hallowell were sold. The sale was concluded in the second month of the school year with the caveat that Hallowell would be given three months notice before the property was to be evacuated. In the interim Hallowell and his wife began to look for another location. They found that the sugar house, a warehouse that was part of Mrs. Hooe's estate, had been bid on and bought by the Bank of the Potomac. The next day Hallowell went to the bank and proposed to buy that part of the property for what the bank had paid for it. His bid was accepted. Renovating the sugar house gave him a nice roomy house and more classrooms than he had in the schoolhouse (Hallowell, 1884). The craftsmen and suppliers who helped in this effort would later contribute their efforts to the building of the lyceum. It is interesting to note that some of their decedents still practice their same trades in Alexandria today. The expansion of the school quickly paid for itself and came to be referred to by the students as Brimstone Castle (Smith & Miller, 1989; Griscom, 1844). The school's growth and Hallowell's increasing good reputation combined to increase his income significantly, allowing him time to explore other interests. Hallowell (1884) remarks,

my school increased in popularity and in the number of boarding scholars. Robert E. Lee, George Turner, Fisher Lewis and several others . . . had gone to West Point, graduated from that institution with marked distinction so that persons who consulted with the authorities at West Point . . . were advised to send him (the prospective cadet) to my school to prepare him for mathematics (p. 123).

In addition, congressmen and foreign diplomats from various countries stationed in Washington came to hear of his reputation. Soon Hallowell was taking students from all over the Americas, gaining him a truly international reputation (Smith, 1977).

Around 1835 he had increased the size of the school again with a resulting requirement for more teachers. Including himself, he had a minimum of seven teachers, instructing a wide array of subjects, and anywhere from two to four tutors as needed (Hallowell, 1884). The increased staff must surely have relieved him of some of his duties in the school and allowed him time to lecture and conduct scientific research. Between 1835 and 1842 his school was so much in demand that he had to turn away prospective students. One gets the sense that he did not want the school to grow too large and lose the personal touch that he clearly favored.

PURCHASE OF ROCKLAND FARM

In the spring of 1838 another brother-in-law, Granville Farquhar, in poor health, had let Hallowell know that he wished to move to a farm in the country. The previous year Hallowell had purchased Rockland Farm near Sandy Spring, Maryland. He agreed to build a house large enough to house both the Granville Farquhar family and Margaret's mother. Later that year both families moved into Rockland (Hough, 1924; Hallowell, 1884). The house and farm together would soon provide a haven in which Benjamin and his family would find rest and relaxation. After eighteen years of hard work he had paid off all his debts and established a widespread reputation for himself and his school.

Removal to Rockland

The strain of providing for his large extended family, teaching, lecturing, and keeping his own account books from 1824-1842 began to take a toll on Hallowell's health. In the spring of 1842 Hallowell decided that his nephews Caleb and James Hallowell should take over the Hallowell school. Benjamin, Margaret, and their children, now numbering five, would move to Rockland. His brother-in-law, Granville Farquhar, had moved to Calvert County Maryland to resume the practice of medicine. So with some small modification the house would shelter not only Margaret's mother but Benjamin's family as well (Hough, 1924; Hallowell, 1884).

Hallowell commenced farming with considerable enthusiasm. Finally, he was able to experiment with some of the fertilizers he had only researched when in Alexandria. After a year of chiding from his neighbors regarding the expense he put into these experiments. Hallowell was successful in selling his crops for a tidy profit (Hallowell, 1884). During this brief respite Hallowell was appointed road supervisor for the road in front of his house that connected two

turnpikes, but this was not a paying job. He supervised the work of men provided by each property owner along the road to keep it maintained throughout the year. His gentle method of managing these laborers was much like his technique with students of "touching the right spring" or psychological motivation as opposed to threats (Hallowell, 1884, p. 125).

In 1843 he was asked by the medical department at Columbian College (now George Washington University) to assume the chair in chemistry and lecture three times a week. Hallowell quickly found that the students and the college did not regard chemistry, his subject, to be very important and that as a result the students came ill prepared. This attitude, the lack of regard for Hallowell's favorite subject, and his absence from his family and home prompted him to submit his resignation as soon as he had signed his last diploma from the school (Smith, 1977; Hallowell, 1884). His resignation accepted, Hallowell returned to Rockland and farming (Hallowell, 1884).

The Philadelphia High or Central School

The summer of 1845 found Hallowell being called to establish a Friends' high school in Philadelphia (Hough, 1924). The letter from two prominent Quakers, James Wharton and Dr. John Griscom, informed Hallowell that the Philadelphia yearly Meeting wished to establish a school for the "guarded education of Quaker children." This meant that the school would be guided by Quaker rules and that any subject or practice that went against Quaker doctrine would not be included in subject matter or practice. The Quaker faith and its principles for living were taught also, unlike Hallowell's private school (Frost, 1975; Loukes, 1965). Thus the request to Hallowell came as a responsibility of a religious duty. By now Hallowell had earned enough to support himself and his extended family in comfort, so he was reluctant to go to Philadelphia--yet after much self examination he consented to do so (Hough, 1929; Hallowell, 1884).

Hallowell spent the better part of September 1845 getting his classrooms set up and finding assistant teachers. Early in the school year Hallowell (1884) comments

all the reputation I had acquired by the success of my school in Alexandria, and which would have been of avail to me almost anywhere in the South was, here in Philadelphia, entirely lost. I had a new one to form (p. 143).

Shortly thereafter a group of Friends suggested that Hallowell form an evening class for adults. Like the evening lectures at the Alexandria school they bore fruit and he quickly built his reputation among the Quakers in Philadelphia.

Return to Rockland

At the end of the 1845-1846 school year the obvious strain of establishing a new school combined with his absence from his family again grew too great. Even though he felt he had "done the best that I could under the circumstances," he submitted his resignation to the committee (Hallowell, 1884, p. 152). In appreciation for his services his evening lecture group presented him with several new pieces of scientific equipment. He speaks joyfully of his return to his farm and his observatory, library and shops. He clearly was looking forward to a pleasant retirement after some twenty-two years of arduous labor. These well laid plans would, alas, soon go awry.

Resumption of the Alexandria School

In September of 1846 Hallowell received a letter from his nephews, Caleb and James, whom he had left in charge of the Alexandria School. The two of them had given less than two months notice leaving Hallowell to make other arrangements. He therefore decided to resume charge of the school himself. With his family he returned to Alexandria in October of 1846.

The school had continued with its complete curriculum with an emphasis on chemistry and mathematics. Hallowell did, however, initiate some new policies. First, he forbade the use of any tobacco products in the school and so informed the parents with a letter he had them sign to acknowledge its receipt. Secondly, and many hold that Hallowell was the first to do this, he established the nine-month school year by adding July and August to the vacation period. It now included July, August, and September. His rationale was that the hot months of July and August were the most unhealthy. No doubt this was due to his experience during the scarlet fever and other epidemics (Hurst, 1991; Hallowell, 1884). He would, as will be discussed later, be instrumental in helping solve part of that problem in 1851 when he was a significant player in establishing the Alexandria Water Works (Hallowell, 1884).

Hallowell's scheme now was to prepare his son Henry and nephew Francis Miller to take over the school -- then Hallowell planned to retire once again. For the next nine years he lectured at the school, the lyceum, and various agricultural societies. He maintained two homes, one in

Alexandria and the other at Rockland Farm near Sandy Spring, Maryland. In 1855 his bubble burst. Henry's health failed and Henry and his mother moved to Rockland. Francis Miller decided that if he were to be alone he would rather be in the country. One must wonder how three nephews and one son could not, in tandem with Hallowell and a battery of teachers, keep Hallowell's school in operation. Though there is no evidence, one might conjecture that they may not have possessed their father's/uncle's work ethic. At this point Hallowell had no option but to sell the school. It was sold in the summer of 1858. Hallowell remained in Alexandria until 1859 when he moved his entire family to Rockland for his well-deserved retirement (Hurst, 1991; Hallowell, 1884).

CONCLUSION

Hallowell's Alexandria years were by far his busiest. It was not uncommon for him to work 16 to 18 hours a day -- his primary focus was to expand his school and grow its reputation. This in turn built his own reputation as educator, scientist, founder of institutions, and reformer. All of these activities were possible because after nearly 31 years of ceaseless toil his school, investments, and properties, made him prosperous enough that he could turn his attention to his private interest of science and mathematics -- subjects that had been his and his school's specialty. For example, his school had been recommended to prepare young men to enter the prestigious military academy, West Point. It is likely that his lectures, as was the custom in antebellum American, gave him the time to rehearse what would eventually become articles in Professor Silliman's *American Journal of Science* as well as other scientific journals.

Clearly the school not only established his personal reputation but the resulting income provided for his immediate and extended family. It also afforded him a comfortable income to support his family in retirement. One might say that his Alexandria school was the foundation for his success in all of his endeavors -- especially those that involved the education of the adult community through his lectures, writings, group meetings, and other activities that today are considered adult education -- pretty impressive for a one-time aspiring woodworker.

CHAPTER 4
FOUNDER OF HIGHER LEARNING INSTITUTIONS
INTRODUCTION

Benjamin Hallowell's educational influence reached far beyond the schools he established in Alexandria and Philadelphia. This chapter investigates the other educational institutions that he established or was associated with. Some of these are the Alexandria Lyceum, Maryland Agricultural College (which evolved into today's University of Maryland), and Swarthmore College (the Hicksite Quaker's version of Haverford College). In establishing the first two he was one of the most influential members among those proposing their foundation. In the case of Swarthmore he was one of the two chief founders, using Haverford as a model with the same basic educational philosophy without the Orthodox practices. These institutions continue in operation today.

THE ALEXANDRIA LYCEUM

Antebellum America saw a major explosion of printing, post offices, and transportation which resulted in widespread access to the written word. So too did America see a similar explosion of institutions to spread knowledge to the populace. The lyceum was one of those institutions. There is no doubt about the learning nature of the lyceum. It offered public debate, lectures on a myriad of subjects (including scientific topics), hosted musical and choral recitals, and a variety of adult educational events (Kett, 1996; Bode, 1968).

American Origins

The founder of the American lyceum movement was Josiah Holbrook--student, scientific lecturer, farmer, school master--a protégé of eminent Yale professor Benjamin Silliman. The first lyceum was established in Millburg, Massachusetts. Holbrook, in a move that foreshadowed the popularity and rapid growth of the movement, named it "Millburg Lyceum Number 1 Branch of the American Lyceum" (Cremin, 1980, p. 313).

Among the lyceum's supporters were a number of scientists with whom Hallowell was likely to have been acquainted either through his network of correspondence or his self-educational activities. He contributed articles to Silliman's *American Journal of Science*. In 1831 Hallowell visited Silliman at Yale who took him on a tour of the college's scientific exhibit.

Before he founded the Alexandria Lyceum, Hallowell also visited Stephen Rensselaer's Polytechnic Institute and saw the work of Joseph Henry future Secretary of the Smithsonian (Stubblefield & Keane, 1994; Hallowell, 1884). Additionally in the 1850s and 1870s there is ample evidence of scientific and social correspondence with Professor Henry (Henry, J. 1870, 1850; Hallowell, B., 1867). Hallowell may have been acquainted with Henry through Silliman's *American Journal of Science*. According to Lawrence Cremin (1980) in addition to creating a system of educational associations, Holbrook had two objectives,

first to procure for youths an economical and practical education and to diffuse information throughout the community generally; secondly to apply the sciences and the various branches of education to the domestic and useful arts, and to all the common purposes of life (pp. 312-313).

Kett (1994) as well as Stubblefield and Keane (1994) cite Holbrook's purpose for the lyceum as the association of adults for mutual improvement Kett (1994) observes that the institutions themselves did not spread knowledge but to their founders and patrons were the means of diffusing knowledge and education (p. 39).

Lyceums were usually started by committees of citizens interested in self-improvement (Kett, 1994). They were financed by subscriptions--memberships dues and ticket sales to each event (Bode, 1968; Hallowell, 1884). The lyceum audience covered the spectrum of the American citizenry especially the middle-class bent on self-improvement. Stubblefield and Keane (1994) report a variety of specific lyceums such as "ladies lyceums, the Negro lyceum, army lyceums, seamen's lyceums" etc. (p. 88).

The hub of the lyceum movement was New England. Bode (1968) argued that in this region the "upper class were merchants, manufacturers, and professional men who offered the lyceum movement a larger degree of leadership than did their peers in any other part of the nation" (p. 43). Under the evangelistic nature of Holbrook's advocacy, and due in large part to the booming demand for knowledge, the movement spread rapidly through the new England and Mid-Atlantic states to Philadelphia and Baltimore--two cities Benjamin Hallowell had close ties to through the Quaker hierarchical network.

Hallowell and the Alexandria Lyceum

In 1834 the lyceum movement came to Alexandria. It is probable that Hallowell and other Quakers in Alexandria were influenced by their correspondence with Quaker Friends and family in Baltimore and Philadelphia. Each city had Orthodox and Hicksite Yearly Meetings and both were sites of successful lyceum companies in the Mid-Atlantic states (Bode, 1968). It is equally likely that Hallowell's connections with Holbrook's early supporters, specifically Holbrook's mentor, Professor Silliman, influenced him, as did his correspondence, readings in Silliman's *American Journal of Science*, and other publications (Stubblefield & Keane, 1994; Hallowell, 1884).

In 1834, Hallowell (1884) reports that he along with a group of prominent Alexandria citizens gathered to form a lyceum whose purpose was to "present lectures once a week on some literary, historical, or scientific subject followed by a debate on some topic that was neither political nor religious" (p. 128). The other citizens were Thomas William Smith, William Stabler, Robert H. Miller, Elias Harrison, John McCormack, and Edward Hough. This group called for a public meeting of the citizens of Alexandria to put the proposal before them. The meeting was held at the Lancastrian School house, just behind a lot owned by Hallowell (Hurst, 1991; Miller, 1990; Hallowell, 1884). "The meeting was well attended" and Hallowell, to his surprise, was elected the first president (Hallowell, 1884, p. 128). After that first gathering, meetings of the Lyceum were held in Hallowell's school lecture hall, located in what had once been a sugar and tobacco warehouse south of the site of his second school building. Lectures and debates were given there until 1839 when, for a brief period, they were given in the remodeled Lancastrian school house which soon proved to be too small.

The lack of space and large attendance at the lectures prompted the Lyceum Company to build a new structure to house the Alexandria Library and the Lyceum Company. Many of the citizens involved, including Hallowell, served on the committees for both entities. In March of 1839, the participants agreed and published a notice that a "joint committee proposes to unite the Alexandria Library Company and the Lyceum company. They propose to have the library reside in the lyceum and have arranged to procure a supply of newspapers to develop a reading room wherein will reside a collection of minerals and exhibits of natural history. They further offer stock to the public in order to finance the proposed for the new building each share to be \$25.00" (A Proposition to Unite the Alexandria Library . . . , 1839, March 8, p. 3).

A sequence of deeds of proposals and contracts gives a sense of the time required to build the new building and begin meetings there. A diagram of the lot at the corner of Washington and Prince streets, dated June 22, 1839, indicated the first move in building the Lyceum. It notes that the land was bought from "Wm. Fowle and was deeded to Benjamin Hallowell and other members of the Alexandria Library and Lyceum Company in trust for its stockholders" (Deed and Diagram, 1839). It can be surmised from these documents that the construction took place from roughly June of 1839 until completion of a usable building in December of the same year. A proposal to lay the foundation and do the stone work is quickly followed by one to bring the "bricks and stones" from old St. Mary's Chapel and lay them in the Lyceum (Phillips, 1839). The carpentry work was proposed in two phases. The first phase of the carpentry work was not to include the portico (Price, 1839). The next day a proposal was received to frame roofs, windows, and stairs with finest pine and other materials (Price, 1839). Later stages of building are evidenced by proposals to plaster the interior of the Lyceum by James Phillips (Phillips, 1839). All the proposals are followed by the awarding of a contract on behalf of the Lyceum and Library Committee. This suggests the eagerness of the Committee to complete the Lyceum.

The Gazette announced "the opening of the new Lyceum Hall" in September of 1839. The introductory lecture was given by Daniel Bryan and was attended by a large crowd all of whom were well satisfied" (Opening of the New Hall, September 10, 1839, p. 3). Hallowell notes in his autobiography that "the lyceum met in a well arranged and handsome lecture room on the second floor. Lectures were given by distinguished men--John Quincy Adams, Caleb Cush, etc. The lyceum season ran from November 1st to April 1st" (Hallowell, 1884, p. 129).

Hallowell claims to have given "the introductory lecture which was published" (Hallowell, 1884, p. 129). Yet, as noted earlier, the Gazette reports that Bryan gave the first lecture. These accounts pose a perplexing question: Who actually gave the first lecture? Who is right? They both may be. It is well to remember that about 35 years elapsed between the event and Hallowell's writing of it in his autobiography. His mind may have been failing or he may have slightly jumbled the events. Another alternative is that two things may have happened. Hallowell may have recalled giving the first lecture when the Lyceum Company was formed. After all, the first meetings were held in his school.

A third possible explanation also exists. In the proposals to work on the building in September of 1839, George Maxwell, a craftsman, proposes to Hallowell and the lyceum committee to do "exterior plastering and marbleizing" (Maxwell, 1839). The actual contract was not awarded for this work until May of 1840 to William Worrell on behalf of the Lyceum Company (Worrell, 1840). Lyceum events were well followed and the entire text of a lecture given on vegetable physiology was reported in the Gazette in November of 1840 (Alexandria Gazette, 1840, November, p. 1). A clue to the solution may lie in a practice still followed today in several European countries. In Germany and Yugoslavia in particular, and possibly several other countries, a home is not considered completed legally until the exterior is plastered or painted. It is common for families to leave the exterior unfinished while actually using it. In the specific case of these two countries, tax is avoided on the building because the law allows taxes to be collected only on completed buildings (I. Pusenak, personal conversation, January 25, 1992; S. Wotowa, personal conversation, May 28, 1977). So Hallowell either may have been referring to the first lecture given in 1834 in his school for the Lyceum Company or to the first lecture given in the completed (with the exterior plastered) Hall in 1840. Either case would not be in conflict with the report of Bryan's lecture in the Gazette of December 1839. This is certainly a subject for further research.

Nonetheless, the community was well pleased with its institution. A letter to the editor, regarding the opening of the reading room, reflects one citizen's pleasure with the Lyceum. "nothing can be in better taste that the whole arrangement of the Lyceum establishment . . . the building itself is an ornament to our town . . . I passed yesterday an hour in the reading room and library, and was delighted to experience that sort of quiet ease which so well befits the mind for literary recreation The Lyceum is now a matter of town pride as well as utility, and will continue to prosper" (Opening of the Lyceum . . . , October 30, 1840, p. 3).

The Lyceum did in fact prosper. In 1841, Hallowell was once more elected president, a position he would hold until his first retirement in 1842 (Hallowell's Election, 1841, p. 4). Thirteen years later, the Gazette reports "A large and respectable audience enjoyed Benjamin Hallowell's lecture. The lyceum is soliciting subscriptions of \$50.00 for books for the library housed therein. Subscribers will be free from dues for 20 years" (Library Subscription, 1854, 6 April, p. 2).

In 1858, the same year that the lyceum was refurbished, Hallowell's son Henry and son-in-law Francis Miller, who were sharing the running of his boarding school, retired--Henry because of poor health and Francis to establish his own school in Montgomery County, Maryland. Hallowell, wishing to retire because of declining health, put his house and school up for sale. In the spring of 1860 he moved his family to Rockland in Maryland (Hallowell, 1884, pp. 169-170). The following spring the Civil War broke out. Hallowell comments that the blessings of God must have influenced his move, especially considering the damage to property that occurred during the occupation of Alexandria (Hallowell, 1884; Hurst, 1991).

MARYLAND AGRICULTURAL COLLEGE

Maryland Agricultural Society

For many years attempts by various groups of Maryland's most influential farmers to found a permanent college in the State of Maryland met with no success. A committee of farmers, primarily members of the Maryland Agricultural Society, set out in 1848 to found an institution that would help both the major planters and the small farmers keep current in the latest farming practices. Led by Charles Calvert, Maryland's most prosperous planter, they agreed that an agricultural college would help them meet their goals and thus allow them all to stay solvent (Calcott, 1966). Maryland was one of the earliest states to see its soil depleted by intense farming that resulted in farmer's leaving for richer soil in the Western United States and territories. Thus agriculturally depressed, particularly in tobacco farming, wiser Maryland farmers sought scientific guidance to improve production. Now, rather than grow crops that only depleted the soil, such as tobacco, rural Marylanders began to investigate scientific means of improving crop production. This meant approaches such as crop rotation on a given piece of land, use of new fertilizers and crops, and vehicles for spreading the resulting knowledge. Calcott (1966) wrote that "Maryland assumed leadership in the movement of agricultural societies, fairs and publications to aid the farmer" (p. 133). This fits very closely with what Cremin (1980) described as New England businessman Elkhana Watson's "Berkshire Plan" that became a "distinctively American institution in nineteenth century America" (p. 329). These societies and the emphasis on the gleaning of knowledge became a part of the American education system (Kett, 1994; Cremin, 1980; Calcott, 1966).

The aim of both Watson's Berkshire model and Calcott's description of the Maryland Agricultural Society were to experiment with crop rotation and fertilizers as well as to share the resulting knowledge. Maryland State Agricultural Society however wished to go a step further and create an agricultural college. Calcott (1966) argued that the motivation of the Maryland Agricultural Society's supporters was to "ennoble agriculture by the creation of a college . . . to elevate the ordinary farmer to prosperity and cultural refinement" (p. 137). Most of all was the desire of the planters/sponsors to "test the many brands of commercial fertilizers and new types of farm machinery coming into the market" (Calcott, 1966, p. 139).

From the time that Maryland State Agricultural Society was formally established in 1848, its membership, who provided support for an agricultural college, took nearly eleven years to finally accomplish their goal. In 1851 the Committee of the Maryland Agricultural Society members petitioned the state legislature for permission to issue some \$50,000.00 in stock to support the founding of the college. Governor Ligon supported the idea. Unfortunately, the supporters of the college were unorganized and it took them nearly five years before the petition was enacted into law in March of 1856. Support came slowly and consisted mostly of well-to-do planters from all over the South--as far away as South Carolina and Louisiana. What little opposition there was came from "some small farmers particularly on the Eastern Shore who objected to the aristocratic origin of the institution and feared they had nothing to gain but increased taxation" (Calcott, 1966, p. 140).

In January of 1858, the shareholders elected a board of trustees, who would find and purchase land, provide for buildings, and set the educational policy for the college. The President of the Board, Charles Calvert, a long time activist in the effort, sold 40 acres of his plantation to the college for \$21,400. On August 24, 1858, Calvert laid the cornerstone of the main building (Calcott, 1966). State lawmakers had to be lobbied, money for the school building and operation had to be acquired, curricula planned, and faculty hired (Calcott, 1966).

In the process of deciding just what the school would teach and how, members of the committee familiar with Benjamin Hallowell's reputation in his schools and scientific interests called upon him to give his views on where the college should be located and what its goals should be. The information and advice Hallowell gave must have highly impressed the committee and, it seems given the later facts, they must have taken his ideas as his wish to administer such a well-designed institution.

Seemingly, this was Hallowell's sole input into the up-front planning for the college, a fact that is seldom mentioned in writing about his connection to the college. Calcott (1966) wrote that at the opening day dedication ceremonies on October 6, 1859,

many of the audience must have commented during the ceremonies at the absence of the College President, listed in the catalogue as Benjamin Hallowell, and also at the inconspicuous part played by the three members of the faculty who were present. If the crowd had known why the president was absent, or why the professors had been shunted aside, they might have been even more disturbed (p. 145).

In fact Hallowell had no idea that he was even in the running for the presidency nor had he expressed such a desire. Hallowell (1884) remarked,

In the fall of 1859 I was unanimously elected President of this Agricultural College, then about to open, without having been consulted, and my name was placed at the head of the faculty list in printed circulars at the inauguration of the college when I probably should have received notice of it . . . (p. 163).

This may be a very interesting subject for further study.

Hallowell Accepts the Presidency

Hallowell decided to take the time to go and see the new college and come to some mutual understanding if he decided to accept the Presidency. The new school was located near Bladensburg, about twenty-five miles northeast from Alexandria where Hallowell was living at the time. It is difficult to understand how the board of trustees came to assume that he wanted the job. One possibility could be that his well-thought-out advice in planning the college could have led them to believe that he did indeed want the presidency, keeping in mind that none of the members of the board of trustees was an educator but rather farmers and businessmen themselves. A second possibility that Calcott (1966) puts forth is that "Hallowell came from a well known Montgomery County Quaker family . . . he had distinguished himself in Alexandria as principal of an Academy where Robert E. Lee had been his most famous pupil" (p. 145). A third possibility could be that they found that his recommendations reflected a design for an institution of higher learning that he considered ideal and assumed that he would naturally want to lead it (Calcott, 1966; Hallowell, 1884).

Nonetheless, Hallowell decided to accept and finally turned up in October of 1859 about six weeks after the college had opened. Apparently the existing faculty had done very little and Hallowell had to organize the college and determine the various programs of study. The strain of getting the college up and running quickly reminded him of why he had retired from his boarding school and his health gave way again. He resigned after only a little more than one month but in that time he had successfully demonstrated the useful application of scientific principles to real life problems. He had the classes work together to build an ice house and pond that gave them cool beverages in summer and a place to skate in winter. The students planted their own experimental strawberry garden. They could either eat or sell their harvest (Calcott, 1966; Hallowell, 1884).

When one looks at the haphazard way that Hallowell accepted the presidency and his short term in that office, one might easily ask: Did Hallowell indeed found that institution? The answer is a qualified yes. Calcott (1966) and Hallowell (1884) both speak of his meticulous contributions to the educational aspect of the college. Hallowell seems to have been the only educator consulted in the matter. He became involved with the college typically as part of a group, though perhaps with less than full intent. Obviously the board of trustees thought him most capable to lead it.

This effort, one of many attempts to establish a college in Maryland, was the one that took hold. Not long after Hallowell left, the trustees began to slowly turn it into what we know as the University of Maryland. Today Hallowell's bust is prominently displayed in the University Archives.

HVERFORD AND SWARTHMORE COLLEGES

Because of their belief in the Inner Light, the Quakers were slower than other Protestant groups in founding institutions of higher learning. They believed that the fact that by that Light they could interpret God's word as recorded in the Bible was all that was required. Other denominations had founded their colleges for the purpose of training ministers. Quaker practice required no trained minister or academic education to facilitate communication with God (Bresnahan, 1979).

In the period between the American Revolution and the Civil War the number of colleges grew rapidly from a few to nearly 500 by the time of the Civil War (Cremin, 1980). Bresnahan (1979) wrote that of these colleges:

most institutions of higher education in this country starting with Harvard and Yale, had some religious affiliation and were established to train ministers . . . by the first half of the nineteenth century almost all of the Protestant sects had several colleges . . . Quakers, while representing the tenth largest sect in the United States, did not have a formal college until Haverford in 1856 (Part II, p. 1).

This can be attributed to Quaker reliance on the Inner Light that required no formal training or leadership by a person (Bresnahan, 1979).

The great separation for Quakers, which occurred in 1827, was the impetus for the establishment of Haverford College. The two Quaker factions resulting from the separation were Orthodox Evangelicals and the Hicksites, traditionalist followers of Quaker preacher Elias Hicks. The Orthodox felt that Quakerism had become stagnant and wished to adopt many of the practices of Protestant groups that they believed brought growth and vitality to a church. Proselytizing was one example. The Hicksites, on the other hand, were defensive of the more traditional quietest behavior and wished to continue in the traditional ways (Barbour & Frost, 1988; Bresnahan, 1979; Mifflin, 1973).

Given the growth of sectarian colleges in the United States, the desire by more young adults to attend college, and the fact that there were no colleges that came under Quaker influence, the Orthodox or Evangelical Quakers of the Philadelphia Yearly Meeting became concerned with the need for a college--not to train ministers but prepare their children intellectually and spiritually in the Orthodox philosophy in life (Bresnahan, 1979; Mifflin, 1973).

Orthodox Haverford College

Benjamin Hallowell, a Hicksite, had very little to do with the founding of Haverford College. His only probable connection with Haverford was using it as a benchmark for the manner in which Swarthmore, founded in 1867, was to be operated, and his support of any sound furthering of Quaker education in general. It is informative however to understand the differences in philosophy and reason, between the Orthodox in founding Haverford and the Hicksite founding of Swarthmore.

Prior to its establishment by Orthodox Quakers as a college, Haverford had been operated as Haverford School with the support of Philadelphia Orthodox Quakers. The school opened in 1833 as a direct outgrowth of the Orthodox Separation of 1827 (Mifflin, 1973). Rufus Jones (1933) the eminent Quaker scholar held that the 'Orthodox saw the separation as the result of lethargy, ignorance and dullness of vision' (by the Hicksites) (p. 17).

As the Orthodox Quakers were primarily urban and being merchants were relatively wealthy they were also a minority in the Philadelphia area. This made them somewhat defensive about their evangelical beliefs. They saw higher education as a means of ensuring that their children were not only well educated but also indoctrinated in Orthodox beliefs and practices (Mifflin, 1973; Jones, 1933). In the meantime a group of twenty-six Orthodox Quakers founded the Haverford School to offer a liberal, guarded education. A guarded education meant that the school's focus included preserving and protecting Quaker (in this case Orthodox) principles. In addition the school was only open to Quaker boys and was taught by only by Quaker teachers (Mifflin, 1973; Jones, 1933).

In the meantime the group of 26 founders formulated their plans for the college, began to raise the necessary funds, and applied for a state charter which was granted in 1831. As funds were available the founders bought a farm in Haverford, Pennsylvania and began constructing the main building and library. The school opened on October 28, 1833. Jones (1833) notes that the curriculum, even though science was just beginning to come into its own, was "classical languages and literature and the discipline of mathematics (which) constituted the normal body of culture for an educated man" (p. 149).

The school initially became a college institution at the first level and a secondary or junior level. With the opening of the school no one qualified for first or college level studies. This, no doubt, justified the trustees' thought that Quaker intellectual growth was falling behind that of the Protestant denominations (Mifflin, 1973; Babbidge, 1953).

Hicksite Swarthmore

As Haverford was created for the guarded education for the minority Orthodox Quakers in the Philadelphia area to protect their beliefs and strengthen their membership, Swarthmore was founded in 1867 by the Hicksites for the similar reasons but without the guarded aspect. Why so

late-- 34 years after the Founding of Swarthmore? Because the majority of the Quakers in the Philadelphia area were Hicksites and these congregations did not have the same sense of threat or emergency to have a college to inculcate into their children their religious beliefs and practices. Also, the Hicksites being mostly rural and conservative did not in the early days after the separation see the necessity for higher education as they depended entirely on the guidance of the Inner Light (Barbour & Frost, 1988; Mifflin, 1973; Babbidge, 1953). Elias Hicks, an extreme quietest, held that anything other than the Inner Light including higher education was an external and trivial concern.

The Hicksites were the traditional quietest branch of the Quakers. They opposed the Orthodox notion that Quakers should evangelize in order to preserve their faith. They believed that by practicing Quakerism just as it had always been (since the founding by George Fox) they could best perpetuate Quakerism and its inward nature (Barbour & Frost, 1988; Ingle, 1986; Mifflin, 1973). The Hicksites were distrustful of what they saw as Orthodox attempts to control the Society of Friends. In addition, being mostly rural congregations they saw Orthodox college education as a means of teaching children Orthodox theology rather than developing them on their own through the Inner Light as the Hicksites did. Finally, being rural people they had less money than the urban Orthodox, making it hard for them to fund a college (Mifflin, 1973).

Founders

Nonetheless, a small group of Baltimore Yearly Meeting members came to the conclusion that higher education had considerable merit--primarily Martha Tyson, a Quaker school teacher, and Benjamin Hallowell, the prominent retired educator living in Sandy Spring, Maryland. Both wrote extensively and spoke on behalf of higher education for Hicksites (Mifflin, 1973; Hallowell, 1884; Hull, no date). Martha Tyson led the Baltimore Yearly Meeting of women to pressure their male counterparts to join the women in studying educational prospects. The women's main point was that Hicksite children who wanted a college education would be forced to get it at a non-Quaker school. Apparently that reasoning was telling because the men's Meeting agreed to consider the proposal. Together, Tyson and Hallowell pushed this proposal with Hallowell teaching and lecturing and Tyson lecturing and writing articles for the Friends Intelligencer, a Hicksite newspaper (Bresnahan, 1979; Mifflin, 1973; Babbidge, 1953). Eventually, after

numerous writings and lectures, a joint address was presented to Hicksite yearly Meeting in Baltimore, New York, and Philadelphia, urging the need to establish better schools where Hicksite Friends could be educated in a "guarded" atmosphere far different from Haverford's. The joint address, prepared by Hallowell and Tyson called for a co-educational institution that offered practical and scientific courses as well (Mifflin, 1973). All three Meetings at which the joint address was delivered gave their quick approval (Mifflin, 1973).

The onset of the Civil War delayed the opening of the school. Money was not plentiful for the rural Hicksites. Additionally, with many citizens off to war, Quakers took up security and similar duties in place of those who had gone to be soldiers. The effort took its first concrete steps in December of 1862 with the formation of the Friends Educational Association. The association subsequently published a proposed constitution for the new college early in 1863 (Mifflin, 1973). The Pennsylvania legislature approved the Act of Incorporation in May of 1864 and issued a charter for the school. The first board of managers proposed a liberal and extensive curriculum and, unlike Haverford, elected to allow non-Quaker students to enroll. They adhered to their religious principles by creating an atmosphere of good Quaker practice or example. The idea was for the faculty to lead by example rather than by dictating rules of behavior (Mifflin, 1973; Babbidge, 1953).

After experiencing great difficulty in raising funds, the Board of Managers elected Swarthmore's first president, Edward Parrish in 1865. He was a long time supporter of a Hicksite college. His first and main responsibility was raising funds. The ultimate goal for the first year was \$100,000. He writes in his diary on New Year's Day of 1866, "I must raise \$100,000 in 1866 without if or but" (Parrish, 1866). He did not raise all of the money himself but organized local committees and himself solicited wealthy Philadelphia Hicksites to contribute to the effort. The result was that the \$100,000 was donated by the fall of 1866 (Bresnahan, 1979; Mifflin, 1973; Hull, no date; Magill, 1907).

The liberal entrance policies set by the board of managers caused Swarthmore's initial class of student enrollment to exceed the goals they had set. They expected 150 students to show up, nearly 200 enrolled. Applicants were accepted in the following priority; children of stockholders, other Friends, and then non-Quaker children. Students who were orphaned or could not pay tuition were placed in the preparatory department where they were taught by other students who were preparing to become teachers (Mifflin, 1973).

Unlike the Orthodox Haverford, Swarthmore was coeducational, believing in the right of both male and female to equal treatment--a long time Quaker tradition--and adopted this custom in their educational practice as well as in their Meetings. Edward Magill (1907), second president of Swarthmore and a former teacher in Hallowell's Alexandria school, wrote "very few colleges offered a college course of study to women; and in thus uniting them in the same educational home and in the same courses as men we stood almost, if not entirely, alone" (p. 206). In fact Frederick Tolles (1964) discovered that Swarthmore was the first coeducational college on the East coast. Oberlin College, another Quaker school, was the first ever, with University of the Desert (Utah) and Antioch College also preceding Swarthmore.

A further innovative policy was an increase in emphasis placed on scientific learning. Swarthmore had, and still has, a garden of classified plants for study, a natural history museum, and a chemical laboratory. Classes were taught in astronomy. Hallowell's sister, Anna, was a professor of history and literature (Tolles, 1964).

CONCLUSION

The magnitude of Hallowell's contributions to other major institutions of learning would probably rank in this order: the Alexandria Lyceum, because of his leading role and the many interesting lectures he delivered on a variety of subjects and the fact that it continues today; Swarthmore, followed by the University of Maryland for similar reasons. As for Haverford, he had no great involvement but it was similar and in a sense provided him with a general blueprint for the beginning of Swarthmore. In his will he bequeathed part of his library to Haverford; however, most of his library contents were given to the library at Swarthmore. Thus he remains connected in many ways to four very prominent institutions of higher learning. All these institutions continue today and all continue today as creditable institutions of higher learning.

The skepticism that Quakers held for other denominations was a major force causing them to be so far behind in founding institutions of higher learning. With traditional Quaker hard work and persistence, the Hicksites overcame the Orthodoxy of Haverford. The Orthodox and their small membership made them defensive and led them to guard their beliefs and practices alone. Swarthmore, The Hicksite institution flourished because of the greater number of Hicksites and their ability to form their own college while maintaining their own beliefs while sharing their institution with both sexes and all denominations.

Both colleges still demonstrate and thus preserve the Friends atmosphere. Swarthmore continues to place great emphasis on exploring science. By the early 1900s both had become less restrictive. By 1955, when the separation between the Hicksites and the Orthodox was reconciled, both schools came to a resolution of their differences. They united in the efforts to educate Friends and others to play intelligent and helpful roles in the world. Hallowell's major role in founding Swarthmore was likely to have influenced its liberal philosophy which remains characteristic of the institution today.

CHAPTER 5
ACTIVITY IN THE FIELD OF SCIENCE
INTRODUCTION

Benjamin Hallowell in early childhood developed an interest in science that would eventually place him in a pioneering position in the area of adult and continuing education and learning. Living on the farms of various relatives and undergoing many relocations, his naturally inquisitive mind allowed him to use his ample spare time to observe and reflect on nature. Over time he became something of an authority on science--to the degree that prominent learning institutions sought out this secondary school teacher out for his expertise. He was a popular lecturer on scientific subjects to the parents of his pupils and other adult citizens of his community--wherever it was.

Benjamin Hallowell was just 16 years old when the emphasis on useful or practical knowledge began to move toward the advancement of knowledge in general (Kett, 1994; Cremin, 1980). An American hunger for knowledge in general was rapidly growing. It was fueled by the availability of print materials and its increasingly easy distribution (Brown R., 1989; Oleson & Brown, 1976). It was in this period that Hallowell, with his great scientific avocation formed from early life on the farm, began to develop his scientific reputation beyond his vocation as a teacher.

This chapter contains an examination of Hallowell's activity in science and the related outcomes. What emerges is a description of how he acted as an information bridge between the urban North and the rural South as well as how many of these activities constituted adult education.

EARLY ENCOUNTERS WITH SCIENCE

For a young child frequently moving through a series of relatives' households following the death of his father, life must have been uncertain at best, and lonely. Hallowell seemed to constantly be somewhat outside the family group. Graff (1995) and Kett (1977) comment that his condition was not uncommon in early antebellum America. Hallowell (1884) recalls that he was considered physically weak and sickly, unable to carry his weight on an operating farm. This probably did little to boost his self-esteem. As a result he often found that he had a good deal of time to himself. Much of his free time he spent reading when he could, but also on long walks in

the woods and fields of his relatives' farms (Hallowell, 1884). Even in his autobiography, written at an advanced age some seventy years after childhood events, he recalls an interest in nature that flourished until it became a second vocation for him.

There were two constants in Hallowell's recall of these early events of his childhood: first, the love of his family and their insistence that he receive the best education possible; and second, portrayed in a number of vignettes, his quick mind at mathematics and appreciation of nature (Hallowell, 1884). The standard curriculum at Abington School, as was typical of grammar schools of the time, had little training in science (Madsen, 1979). But work around the farm gave Hallowell practical mathematical experience in calculating prices of farm commodities. His quickness and accuracy made his elders dependent upon him and, no doubt, boosted his self-confidence (Friends Intelligencer, 1900; Hallowell, 1884).

After an accident prohibited the young Hallowell from following an apprenticeship in the carpentry trade, his family sent him to John Gummere's School. Gummere was a well known and respected Quaker teacher and minister. There the amazing world of science (chemistry, physics, etc.) burst upon him. He recalls,

John Gummere was lecturing in his course on natural philosophy, illustrating his subject by experiments (the first Hallowell had ever seen) with a large air pump, electrical machine, magic lantern (slide projector), etc., etc., and his brother Samuel on chemistry, with the gases and the compound blow pipe (for separating oxygen and hydrogen) of which I had never heard, and I was perfectly delighted with the unfolding of what appeared to be a new life, in a new world of great beauty, and filled with a wonder and magnificence of which before I had no conception (Hallowell, 1884, pp. 38, 39).

Gummere's school provided a feast for Hallowell's scientifically inclined mind and would instill in him an interest in science that would last him all his life.

Three years of teaching would follow, first a year at Westfield, New Jersey followed by two years at Fair Hill School in Maryland. Hallowell does not mention it in his autobiography but it is not likely that science was part of the curriculum at either school. The curriculum at these schools seems to be reminiscent of Abington's. Hallowell wrote that he used his spare time at Fair Hill for self-study, typical of aspiring young men and women of the time (Kett, 1994). Given his

interests, his readings probably included scientific and mathematical texts. His self-study over the ensuing years undoubtedly led to his reputation as a scientist and would parallel the study of future friends and correspondents who were also self-taught. The renowned professor Joseph Henry of Princeton and later the first Secretary of the Smithsonian Institution is an example (Kett, 1994; Cremin, 1980).

What caused him to leave Fair Hill School we may never know. We do know that he appeared one day at John Gummere's door in Burlington seeking personal advice. Gummere, who was writing a book on astronomy at the time, asked Hallowell to stay and help him with his calculations (Hallowell, 1884). Hallowell was so pleased with his work at Gummere's that he turned down a position at a school at Ellicott City, Maryland. He notes "my situation at Burlington suited me exactly . . . I occupied John Gummere's private study for my calculating, where I abridged the solar tables for Delambres for the Tables of the Sun in his treatise on astronomy" and several others (Hallowell, 1884, p. 63). Later, in the second part of the book Hallowell found several new calculations that Gummere had performed incorrectly. By explaining himself to Gummere he proved himself correct, and Gummere, much to his pleasure, avoided publishing these errors in his book (Hallowell, 1884). This time of practicing his skills in higher mathematics and science would, no doubt, be of great help to Hallowell in future teaching and lecturing.

WESTTOWN SCHOOL

Shortly after Hallowell arrived at Westtown, his grandfather's estate was, after many years, finally settled. Each member of the family received \$50 in hand. Hallowell, the blooming scientist, spent every penny in support of the scientific fire that Gummere had kindled in him. By now he had many books on astronomy, hydrostatics, mechanics, optics, philosophy, chemistry, and the philosophical notes in Erasmus Darwin's *Botanic Garden*. Smith (1977) would later propose that Erasmus Darwin (Charles Darwin's father) was Hallowell's distant mentor--so much did he see of Darwin's influence on Hallowell.

His first lecture at Westtown was on optics, a subject he had never taught before. He prepared for and lectured using materials straight from two of the books he had obtained with his grandfather's money. The lecture was presented first to the boys and then to the girls. In spite of his nervousness, both faculty and students were well satisfied (Hallowell, 1884).

Every evening the faculty would meet socially in the superintendent's parlor and discuss questions on science, grammar, literature, and school matters very much in the manner of literary societies and similar self-improvement groups (Kett, 1994; Brown, R., 1989). Other self-improvements Hallowell related in his autobiography consisted of practicing complex mathematical computations. He repeatedly practiced the computations used in the classes he taught. This practice and the errors it revealed caused Hallowell to propose new and different texts to be used at the school. His suggestions were accepted. It appears that most of his lectures in science were delivered straight from the text and with no training other than self-directed learning taking place. The older he grew the more he read, visited, and corresponded with his peers around the country. These activities served to increase the depth and span of his knowledge--especially in science.

SCIENCE TO SUPPORT THE ALEXANDRIA SCHOOL

When Hallowell wrote of arriving to set up school in Alexandria, he devoted a great deal of time and attention to his scientific equipment. The list of some of his equipment he used included "an air pump--with its appendages, the mechanical powers, and hydrostatic apparatus . . . a large magic lantern with astronomical slides and a pneumatic trough or cistern, with gasometers for the compound blow pipe" (Hallowell 1884, p. 96). It would seem that he was as well equipped to teach science in his school as he had been in Westtown--possibly even better. The equipment would not only help teach his students but would also serve as a means of garnering community support for his school.

In the early days of his school when students were few, he had the idea of giving lectures for the general public especially on scientific subjects. Such lectures were an early, and important, form of adult education (Kett, 1995; Brown, R., 1989; Cremin, 1980). Hallowell reasoned that lecturing would advance his expertise, provide his school with an advantage in recruiting students, and provide extra income until his school was securely established. Hallowell (1884) described his first scientific lecture:

I wished, in my introductory lecture, to show the compound blow pipe . . . I had never had any practical experience in chemical manipulations. I had never seen gases made, except in small quantities, in the lecture rooms at Burlington (Gummere's school) and Westtown. There was no one from whom I could obtain any information or assistance and I had a very hard time of it (Hallowell, 1884, p. 102).

This seems a pretty big gamble considering the large crowd that showed up and that he was using this method to enhance his name and that of his school. Fortunately his self-confidence and previous study, along with the moral support of prominent local Quakers, encouraged him. The lecture and demonstration were well received and he continued to lecture for the remainder of his time in Alexandria. In 1835, he along with numerous other Alexandria citizens founded the Alexandria Lyceum Company described in Chapter 4. This now became a venue for many of his speeches and scientific demonstrations (Hallowell, 1884; Hallowell's Lecture on Physiology, 1840, November 17).

In 1831 he traveled north to see some of his acquaintances acquired through scientific correspondence. On this occasion, he met and struck up a lifelong friendship with Benjamin Silliman, the prominent science professor at Yale and publisher of the *American Journal of Science* to which Hallowell had contributed several articles. Professor Silliman showed him through Yale's laboratory and scientific displays. Parts of these displays would later be exhibited at the Smithsonian. He saw a huge electromagnet built by Joseph Henry of the Rensselaer Institute. Little could he know at the time that he would in future enter into what Joseph Ewan (1976) described as a "league of friendship" (p. 20) through scientific correspondence with Professor Henry. Another person Hallowell met on the trip following the death of his children was Nathaniel Bowditch (writer of the seminal work on celestial navigation).

In the years 1831 to 1835 Hallowell was primarily involved with expanding his school as well as increasing his scientific and mathematical correspondence with friends and publications around the eastern United States. He was often called upon by the community to use his scientific skills in their service. For example, he performed chemical analyses for Dr. Hoxton of Alexandria and for local farmers (Hallowell, 1849, December 13).

Columbian College and the Smithsonian Institution

Worn out by his constant labor, Hallowell in 1842 arranged for his two nephews, Caleb and James S. Hallowell, to assume the administration of the boarding school. Hallowell himself would go into semi-retirement on his Rockland Maryland, farm where he started farming on a regular basis in Spring 1843 (Hallowell, 1884). He seemed perfectly happy to enjoy the life of a farmer especially since, one might speculate, the income from his school, property holdings, and

loans he had made in Alexandria and the District of Columbia provided adequately for his family financially (Foreclosure Document, 1837; Tax Receipt, 1855, July 12). He did not appear to need the income from the farm to make a living.

In the fall of 1843 the faculty of Columbia College (now George Washington University) invited him to fill a vacant chair in chemistry with the medical department. He accepted and agreed to instruct three days a week at the school.

In antebellum America medicine was still a mixture of practice and theories and there were few standards for medical doctors. Chemistry, Hallowell's subject, had only become a field of study unto itself in the mid to late eighteenth century (Hudson, 1992). It was a new and most likely minimal part of the medical "profession" and not well regarded by medical schools or the medical community. It was not until after the Civil War that usefulness of chemistry truly manifested itself (Cassedy, 1991).

One can imagine the consternation of the students who showed up for Hallowell's class unprepared by their academies for rigorous college chemistry. Hallowell (1884) recalls

the students, regarding my chemistry as of less importance than Anatomy, Physiology, *Materia Medica*, etc., came to the college with comparatively little previous study thinking they could gain what knowledge they needed on the subject at the lectures, which was simply impossible (p. 136)

and their performance showed it. When the time came for the professor to examine each student in the professor's particular area of expertise only one of some fifty passed the chemistry exam. A quandary! According to Hallowell (1884),

I told my colleagues as there were, one hundred years ago, as good physicians probably as at present, without a knowledge of chemistry as a science, if the students were well prepared on the other branches of the profession, I would not let their deficiency in chemistry prevent them from graduating (p.136).

The faculty agreed. Upon signing his name to the diplomas, Hallowell handed his colleagues his resignation which he had already prepared. What does this say about medical training in the United States in the first half of the Nineteenth Century? What does it say about Hallowell's ability as a chemistry professor?

James Breeden (1975), in his biography of the Southern researcher and physician, Dr. Joseph Jones, said of the entrance requirement to the country's oldest and most respected medical school at the University of Pennsylvania that while "rigid entrance requirements were intoned by the faculty, in practice little more than the proven ability to read and write was required" (p.23). He further quoted the noted surgeon John Wyeth a decade later as saying "any White male who could read or write and had mastered the rudiments with English was eligible for medical school. Neither Latin nor Greek was required" (p. 23). Before graduation each student was required to perform three years of private study under a respectable practitioner. But, observed Breeden (1975) "like the admission standards this requirement was modified and sometimes waived entirely" (p. 23). If this was the case at the University of Pennsylvania, America's most prestigious medical school what must it have been like at schools such as Columbian College? There is no question as to Hallowell's proficiency. His expertise in math and science was well known even by the officials at West Point (Hallowell, 1884).

The example cited by Hallowell is evidence that progress was slow in the advancement of the scientific and related professions in America toward the rigorous professional standards we see today. As for Hallowell, he must have questioned how a medical student could fail to know a seemingly important part of the curriculum and still graduate. His mild response to the rest of the faculty as noted may simply be a manifestation of his characteristically mild Quaker temperament.

Smithsonian Institution

In the summer of 1838, thanks to the will of James Smithson of London, the United States was provided with the foundation for the Smithsonian Institution. Its purpose was the "increase and diffusion of knowledge among men" (Cremin, 1980). Many models were proposed to Congress but a modified model proposed by Congressman and former President John Quincy Adams was accepted on August 10, 1846. According to Cremin (1980) it would consist of a "museum of natural history . . . a chemistry laboratory, and a gallery of art . . . a library . . . and lecture rooms" (p. 287). The first Board of Regents seated in December of 1846 elected Professor Henry (then of Princeton) as Secretary (Chief Officer) of the institution (Cremin, 1980).

Joseph Henry, like Hallowell a self-taught scientist, is generally held to be one of the most remarkable and productive research scientists of the nineteenth century (Kett, 1994; Cremin, 1980; Reingold, 1976). Cremin (1980) notes that from the earliest days under Henry's leadership, the "Institution committed itself to serious scholarly research on a wide range of topics in the sciences and humanities" (p. 288).

Eight years after the founding of the Smithsonian, Professor Henry invited Hallowell to deliver a series of lectures on astronomy. One might wonder how Professor Henry came to know of Hallowell's work. It is probable that he may have read Hallowell's articles in Silliman's *American Journal of Science*. He might well have known of the observatory that Hallowell built in 1847 adjoining one of the rooms in his Alexandria school and that the quality of his observations were upheld by Professor Holden of the National Observatory (Hallowell, 1884). Finally, Henry, no doubt, was aware of Hallowell's close friendship with John Quincy Adams, evidenced by notes in Adam's diary recalling dinners and discussions with Hallowell (Smith, B., 1977). Remember the final design of the Smithsonian was very close to that originally proposed by Adams--perhaps reflecting Adam's influence. Any of the many combinations of Hallowell's friends and associates could have brought him to the attention of Professor Henry.

However this came about, Hallowell undertook the lectures at the Smithsonian. They seemed to go well and were, by his account, well attended, though he was not himself completely satisfied. What we do know is that there ensued a scientific and cordial correspondence between Hallowell and Henry that lasted into Hallowell's old age (Hallowell, 1884; Henry, 1859, 1870).

In a series of letters between Hallowell and Henry, dating from the 1850s, they discuss meteorological observations from Hallowell's house in Alexandria and reviews of other scientific papers and proposals. Professor Henry's (1870, April 8) letter to Hallowell discusses his acquaintance with the librarian of the American Philosophical Society and suggests Hallowell's membership therein. The series of letters dating from 1848 to 1870 suggest an ongoing correspondence. Part of a letter also deals with Hallowell's relatives and which of them Henry might know. Hallowell's reply invites Professor Henry to his farm to "rest and recreate" (Hallowell, 1870). This exchange seems to indicate that a fairly close friendship developed between these two men of science. In a reply to Henry, Hallowell declines the invitation to attend a

convention of the National Academy of Science due to his commitment to the cause of the Indians in his capacity with the Standing Committee on Indian Affairs of the Baltimore Yearly Meeting (Hallowell, 1870). Hallowell's involvement in Indian affairs will be discussed in Chapter 6.

ALEXANDRIA WATER WORKS

In the first half of the nineteenth century, several epidemics of cholera, yellow fever, as well as scarlet fever raged throughout Alexandria (Smith & Miller, 1994; Hallowell, 1884). As recounted in an earlier chapter, a scarlet fever epidemic in 1831 claimed the lives of three of the Hallowell family's four children. At that time the citizens of Alexandria used varied sources for fresh drinking water. These included streams that flowed into the city's public wells located at the intersections of most streets, water wells either on citizens' property or under their houses (a well room for protection from the elements), or from the Potomac River itself. There was at least one town pump on King street between Fairfax and Royal streets, that existed almost into the twentieth century (Sheppard, 1988; Town Pump, 1896).

Given the fact that many citizens dug their privies not far away from their water wells and/or did not build into their wells an adequate filtration system, the waste often contaminated the water supply. According to Shepherd (1988) this was a major and a steady cause of the spread of disease in the city.

For some years Hallowell had been visiting his sister, Mary Lippincott in Morristown, New Jersey. He spoke with a miller whose mill was used to supply water to Mount Holly, New Jersey. The natural action of the mill pumped enough water up into a reservoir to supply the town. Hallowell in his mind immediately saw Cameron Mills in Alexandria, operated by the flow of Cameron Run as a source of pumping power for Alexandria (Hallowell, 1884). After some campaigning among the citizens a meeting was convened in the Lyceum. By 1850 a group of Alexandria citizens decided that an adequate supply of clean water was needed for public health, fighting fires (another nemesis of Alexandria) and, due to an industrial boom to meet the needs of manufacturers who used stream power (Smith & Miller, 1994; Shepherd, 1988; Sharrer, 1977; Hallowell, 1884).

A group of prominent Alexandria citizens that included Robert Miller, George Fowle, J.B. Daingerfield, and others were persuaded by Hallowell's description of the water works near his sister's home in New Jersey. Hallowell and a local physician went to Cameron Run on the southern edge of the city to examine the lay of the land and quality of its water. (Hallowell 1884). Dr. Powell pronounced the water fit to be used. Hallowell suggested Cameron Mills, already operating, be used to pump part of the water supply to a reservoir to a fault above Cameron Run that would provide a supply of water for drinking and fighting fires. Again this was taken from the example near his sister's house in New Jersey (Shepherd 1988; Hallowell 1884).

The committee distributed a solicitation to offer shares in the proposed water works. Hallowell (1884) recounts that the shares were \$20 each and when the subscription paper was handed to some of the rich citizens the largest subscription among them was only ten shares! "I saw at once that with such a commitment among our moneyed men, the work would never be accomplished. On the paper being handed to me, I subscribed forty shares. The effect was electrical" (p. 197). Hallowell had shamed the wealthier citizens into contributing and inspired those with lesser means.

The water works committee petitioned the General Assembly of Virginia for a charter for the water works. It was granted on March 22, 1850 (Charter of Alexandria Water Works, 1850)

The first meeting of stockholders for the Water Works was held at the Lyceum Hall on March 10, 1851. Benjamin Hallowell, Robert Miller, George Fowle, Stephen Shim, William McVeigh, J. B. Daingerfield, and Thomas Coumick were elected as directors (Alexandria Water Company Record Book, 1851-1874).

A solicitation was let for proposals to furnish iron water pipes. Responses were to be sent to Benjamin Hallowell the newly elected president (Hallowell himself had nominated George Fowle) (Announces letting of a contract to lay water pipes, 1851, July 29). Three months later the contract was let and the Alexandria Gazette (July 29, 1851) announced that Mr. William McClane was to lay the pipes from the reservoir to the subscribers' houses or place of business.

By 1855 the water company was doing so well that Hallowell, as President, submitted a motion to declare a 3 percent dividend. The motion was passed and the water company was firmly established (Annual Report, 1855). An inscription to be used for a monument at the water works was among the papers found after the death of Robert Miller, who served as president of the water company from 1851 to 1856. The inscription read,

To Benjamin Hallowell, First President of the Alexandria Water Company, whose foresight devised, whose influence and energy completed the simple but effective scheme of supplying Alexandria with pure water, this monument is erected by his grateful friends and fellow citizens (Hallowell, 1884, p. 203).

AGRICULTURAL EXPERIMENTATION AND OBSERVATIONS

By the time Hallowell had purchased his farm and begun to turn his attention to farming, interest in agricultural societies had for the most part moved from the domain of large land owners to that of the workaday farmer (Kett, 1994). Much of the prominence in his later years grew from his expertise in scientific areas. He would in his lifetime lecture on biology, physics, mathematics, astronomy, meteorology, to name a few. Perhaps his favorite disciplines were in the field of chemistry and agricultural subjects. He used his knowledge to help the citizen and farmer improve the quality of their everyday lives. There were many paths to expertise in science in antebellum America.

Today Hallowell the scientist is but vaguely remembered outside the circles in which he lectured. But his circle of correspondence was rather large and the institutions his leadership helped to build, as described in Chapter 4, benefited greatly from his scientific knowledge as well as his educational work.

Three events served as a catalyst for the popularization of agricultural societies: the continued growth of fairs; the establishment of a popular agricultural press; and the expansion of the transportation system that fostered the distribution of the agricultural printed materials.

In 1810, Elkana Watson, primarily a businessman, after a brief experiment at farming, put forth the idea of a series of agricultural (Berkshire) fairs as part of the activity of agricultural societies. The fairs visually demonstrated innovations in farm machinery, crop planting and fertilization as well as farm crafts and products. The idea was to help make the agricultural societies attractive to the small town farmers and thus gain their participation (Kett, 1994; Cremin, 1980; Hindle, 1976).

Stubblefield and Keane (1994) note that from these kinds of efforts "in the 1830s a popular agricultural press gathered support in the Northeast" (p. 65). That press, coupled with the expanding transportation systems, plus other printed information became much more readily

available to common farmers. They saw its benefits and began to participate in agricultural societies. According to Stubblefield and Keane (1994) as the written material increased so did participation in the number of agricultural societies so that by 1858, the time of Hallowell's retirement, there were nearly 1,000 societies in existence.

Local societies gave Hallowell another opportunity to play a role in fostering adult education as well as satisfying the growing American pursuit of knowledge. The research shows that Hallowell was a respected and invited speaker at the Montgomery County, Maryland, Loudoun County, Virginia, and Maryland State Agricultural Societies (Hallowell, B., 1853; Address of Hallowell, B., 1852; Hallowell, B. 1884). It is likely that he spoke at other agricultural gatherings for which no record has been found. As Hallowell moved again into retirement he was able to focus on his own agricultural practice.

In the summer of 1842 after 18 years of arduous labor in Alexandria, Hallowell, now financially secure, moved to his farm at Rockland in Montgomery County, Maryland to become a farmer. After settling his nephews into the management of the Alexandria school in the spring of 1843, Hallowell began full-time farming for profit and for the advancement of agricultural science by arranging the fields, putting up fences, planting trees, shrubbery, etc. (Hallowell 1884). His first experiment in making money on the farm was the planting, fertilizing, and commercial use of a poorly thought-of animal feed grass called "timothy." His neighbors considered his effort a bad gamble but in two years that field produced more than enough to pay expenses (Hallowell, 1884).

He seemed off to a good start in farming, but events conspired against him: the call during his "retirement" to lecture on chemistry at Columbian College, a personally dissatisfying experience; then a call from Philadelphia Friends to set up a Friends' high school; and finally by 1846 his nephews no longer wished to operate the Alexandria school. He had no option but to return to Alexandria and assume the running of the school with the limited help of his son Henry and nephew Francis Miller. It would be nearly twelve years before he could permanently retire. In the summer of 1858, he finally sold the school to William Kemper of Charlottesville. His next year saw him divide his time between Alexandria and his Maryland farm. In the summer of 1859 he and his wife Margaret decided to maintain only one home and, selling the Alexandria property, and moved to his Maryland farm.

He kept a detailed log of his agricultural undertakings and results in his Farm Day Book (1843-1868). This along with his autobiography gives a vivid description of his practical farm activities. Hallowell's (1843-1868) Farm Day Books describe the variety of crops he planted, the size and yield of his crops, and written directions for a variety of jobs around the farm. Presumably the directions for a number of jobs were not only aids to Hallowell's memory but also used to ensure that the various workers he hired were properly instructed in their tasks should he not be there personally.

The following excerpts from his 1843-1868 Day Book present a sampling of his activities and the breadth of work accomplished on his farm.

Peach Orchard Plan Plant 3 months 1845 @ Spring House - 13 Varieties

Apple Orchard 19 Varieties

Instructions on how to cut up a hog and salt bacon

List of 1843 Products Hay 15T, oat 11 and 32T, wheat 41, potatoes 40 bushel, corn 70 bushel . . .

List of Farming Operations

First Month 1863

- #3 . . . to see George Brook's threshing machine in operation.
- #13 Learned how to solder and made a tin cup.
- #19 Contracted with Gallaher to do the quarrying and mason work.
- #31 Made a handle for a pick.

Fourth month 1863.

- #20 Experiment with planter (he gives thorough details about rotating crops and using bone dust for fertilizer in garden).
- #25 Planted early bush and horse beans, into cabbages early cabbage (talks about planting seeds in sod in a warm room for earlier plants).

Seventh Month

- #3 Lammy (hired hand) went to Washington for lumber.
- #31 I can observe no benefit from the plaster (in soil) any place where I put it nor in the subsoil. The bone dust in the oats is more than paid for in the oats and the clover looks remarkably well. It does no good for the wheat but the color in the wheat and the oats is much better.

As can be seen the majority of entries are common everyday farm work. The experiments seem to be mentioned mainly as learning exercises.

As he worked his farm, being the meticulous person he was, he made constant observations of events on the farm. He continued to be asked to speak frequently at agricultural societies. He was still earning, and he was still sharing with those who wished to continue their education. In an address at Leesburg before the Loudoun County Agricultural Society on October 10, 1852 Hallowell argued that "American agriculture is distinguished by two prominent features--it's productiveness of crops and its destruction of soil" (Address of Benjamin Hallowell, 1853). The unique feature of a rural economy is neither "science or study but an "ephemeral act" (Address of Benjamin Hallowell, 1853). He concluded this address by expressing the opinion that the cause of agriculture should/must be raised to a science (Hallowell, 1853).

CONCLUSION

In the middle half of the nineteenth century a number of specialties in scientific study were beginning to emerge as a profession. Hallowell's endeavors contributed to the transition of some of the sciences, especially chemistry and natural philosophy, which formed a base for a number of the developing professions, and at the same time promoted his school and other community activities.

There were three major venues in which Hallowell used science for his own promotion and amusement and at the same time provided a service to his community: during the Alexandria years when he maintained his school; at local colleges and the Smithsonian; and finally, after retirement, in agriculture with his farm and agricultural societies.

John Greene (1976) proposed that learned societies could be divided into three general categories: societies for promoting knowledge, societies to promote professionalism, and societies for the improvement of artist's work. But Hallowell's inquisitive mind and universal interests defy easy categorization. His activities in science and technical matters seem to have crossed into all three classes at one time or another.

It is clear that Hallowell was not only a user of science during his working life but well into his two retirements. He was also an active disseminator of scientific information. As science applied to agriculture Hallowell was an ardent researcher. The fact that he continued his

observations and shared the results unselfishly until shortly before his death demonstrates his real love for the subject. His self-taught training in chemistry seems, in his retirement, to have been turned toward farm applications such as mixing various fertilizers and experiments. As he grew older, his active participation in the scientific community tended more and more toward correspondence that continued with the league of friendship--evidenced by the text of his letters. What can be consistently seen is the whole range of his interests and his unrestrained willingness to share his findings with others no matter what their level. Hallowell's method of working within groups to accomplish a goal by building consensus is reflective of adult education processes. His guidance is reflected in his statement that whatever needed doing was "simply the best thing to do." His community respect was surely enhanced by his Quaker manner and his attitude of "touching the right spring." The regard with which he was held by leading scientists of his time, such as Joseph Henry and Benjamin Silliman, give evidence of his reputation and contributions to his community--at all levels wherever he was.

CHAPTER 6
HALLOWELL AND REFORM
INTRODUCTION

The period between the War of 1812 and the Civil War was one of intense reform activity in the United States. Many of the same events that spawned prosperity and a more literate populace created an environment conducive to a wave of turmoil in which American reform and social activism flourished (Walters, 1978; Cunliffe, 1959). Just as the multifaceted Benjamin Hallowell made solid contributions to advances in the educational and scientific domains, so did he engage prominently in activities that were reformist in character. Ronald Walters (1977) wrote that "reform started when a few men and women declare that something is evil and they know the cure for it" (p. xvi). There is general agreement that the heart reform lay in New England with its active evangelical Protestant influence--reform's moral driving force (Mintz, 1995; Walters, 1977; Commanger, 1960). New England with her mills and factories was the center of free market economics that caused many worried citizens to ask what limits would be placed on its accompanying acquisitiveness and exploitation. Mintz (1995) argues that "antebellum reforms played a critical role in establishing minimum standards of human dignity and decency, imposing limits on exploration, and creating modern institutions to rescue and rehabilitate victims of social change" (p.xviii).

Quakers were prominent players in reform especially abolition, the women's rights movement, and care of the Indians (Barbour & Frost, 1988). As a Hicksite (non-evangelical) Quaker, Hallowell the reformer, did not seek to impose his religious beliefs on others. Rather, he sought to bring others to his way of thinking in a quintessential Quaker way by example and gentle reasoning. His efforts are evident in three areas:

First, his efforts in securing for slaves their legal rights was particularly applicable in the case of term or indentured slaves. Hallowell was instrumental in helping to found the Alexandria Benevolent Society, that operated between 1827 and 1831, to help slaves obtain their immediate freedom under certain circumstances.

Secondly, his contributions to the field of women's advancement were not as focused or intense as they were for slaves or Indians. But Hallowell's efforts, both in his school and other institutions and through affiliation with other institutions, provided opportunities for women to advance themselves. This was squarely in a period when women were beginning to acquire the skills that would eventually lead to their liberation from a subservient role to one of equality beyond society's stereotype. He himself was the son of a struggling widowed mother. This might well have influenced his apparent openness to the idea that females should and could benefit from education equal to that of men.

Finally, in later years, he devoted ten years of his life to helping the American Indians "better" themselves. He worked primarily through the Baltimore Yearly Meetings' Standing Committee on Indian Affairs. This was a Quaker organization that--in cooperation with similar committees from the Philadelphia, New York, and Genesee Yearly Meetings--provided services to the Indians before and after the formation of the Bureau of Indian Affairs (Hallowell, 1884; Standing Committee Minutes, 1861-1871). (In this chapter, I use the term Black and Indian. Black refers to Afro-Americans, Indian refers to Native American. I do so because both terms would be recognized both in present day and in the language of Hallowell's time.)

HALLOWELL AND THE BENEVOLENT SOCIETY

In the late 1820s and 1830s Alexandria found itself in an economic slump. The prosperous flour and grain trade had evaporated and the city was reduced to depending upon fish packing and shipping as its leading enterprise. The second and far less honorable industry that began flourishing in Alexandria was the slave trade. Of the total population of Alexandria, 31 percent were Black. Over one-half of the Black population were slaves--owned by the local citizenry. --and constituted 17 percent of the city's total population. Fourteen percent of this population were free (Hurst, 1991). According to Smith and Miller (1994), Alexandria, from the late 1820s to the Civil War, was "the chief slave-dealing firm (in Virginia) and perhaps anywhere along the border between the free and slave states" (p. 54).

In a city the size of Alexandria, with one-third of its population Black and one of the largest slave trading businesses in America, it would be difficult for a citizen not to be aware of injustices towards Blacks. This is especially true for a Quaker whose faith had, from the earliest days, disapproved of the owning of other humans (Edgerton, 1993; Barbour & Frost, 1988; Jackson, 1971).

There is little evidence that Benjamin Hallowell thought much on the subject of slavery or Blacks in general until the school year 1819-1820 when he taught at Fair Hill School in Maryland. One day the superintendent of the school, Samuel Thomas, well respected by Hallowell, struck up a conversation with Hallowell on the issue of owning slaves, using himself as the example. He told Hallowell of how, slowly driven by the spirit, one by one he freed his slaves until at last he could sleep comfortably. Later in that school year, Hallowell read Clarkson's *History of the Abolition of the Slave Trade* (Hallowell, 1884). Thus we know that in his early twenties he was at least minimally informed on the issue of ending slavery. Association with Alexandria's Benevolent Society and his reporting of the conversation about Thomas's manumission of slaves--some 65 years afterward--in his autobiography make it clear that Thomas' story had stuck with him (Hallowell, 1884).

It was not until after Hallowell had married and established his school in Alexandria that the Benevolent Society was formed with Hallowell appointed secretary. In 1828 a number of Alexandria Quakers, Benjamin Hallowell and his friend Samuel Janney among them, formed the society "in conjunction"--as Janney (1882) wrote in his diary--"with other members of our religious society and a few Methodists. I took an active part in forming and conducting an association which was called a Benevolent Society" (p. 28).

Abolitionists in the early nineteenth century had as their goal the breakdown of the barriers that separated members of society from one another, and that prohibited each from reaching their fullest potential. To abolitionists this meant that the greatest and the most visible barrier, slavery, had to be destroyed (Walters, 1997). This extreme position, often the most visible one when considering slavery in antebellum times, was not that of Alexandria's Benevolent Society, however. Despite the fact that abolition was the preference of many of the members, the society's purpose was to obtain the legal rights for slaves and those Blacks who had fallen into the slave system even though freeborn or indentured and having paid their debt or been freed. For example, a free Black or indentured servant who had completed his or her indenture could be sold into slavery by unscrupulous local officials, and once the de facto slave was in the system they might never be free again. Too often, when this happened the legally free Black was shipped south from Alexandria without a chance to gain his or her legally deserved freedom and was never seen again (Smith & Miller, 1994; Berlin, 1974; Jackson, 1971).

In Hallowell's (1884) words, the object of the association (Benevolent Society) was to render assistance to such persons as were slaves and worked to be free at a certain time, in which case, hired out of the state or from the District of Columbia, as they at once entitled to their freedom on that fact being established (Hallowell, 1884).

That is to say, if a slave from Virginia, for example, was hired into a free state such as Pennsylvania, that slave could petition for his or her freedom (Lane C. and Freeman, 1992; Berlin, 1975). Hallowell (1884) notes that "if they (slaves) were hired out of the state or the District of Columbia they were at once entitled to their freedom" (p. 109).

Slave holding states like Virginia in 1806 had passed laws that declared that once freed in their "home" state a freed slave had twelve months to leave that state. If they did not, they could again be enslaved and sold. Some states, on the other hand, like Virginia later, passed legislation allowing a slave to petition local courts for permanent residence (Berlin, 1974). Assuming that the slave owner or indenture holder did not inform the slave of this right the slaves might well find themselves in permanent servitude. Hallowell's friend, Samuel Janney was among a large number of people who believed that freed slaves should be sent to Liberia, thus being free from the whole environment of slavery (Tindall & Shi, 1994; Janney, 1882).

In 1828 the activities of the Benevolent Society were relatively conservative compared to more radical abolitionists. Hallowell (1884) remarked on this in his writing and Janney's (1882) memoir confirmed this perspective. Janney was a prolific writer of articles for the *Alexandria Gazette*. The 1828 membership, including Francis Scott Key, in conjunction with a similar association in Washington, circulated a petition to free the slaves in the District (Hallowell, 1884; Janney, 1882; Memorial, 1828, March 24). Nearly 2,000 citizens, including many prominent clergy and judges, signed a petition to free the slaves in the District. It was presented to Congress with no effect. Janney (1882) said of the slave trade then existing in the District of Columbia, "the seat of the national government is scarcely less than disgraceful in its character and even more demoralizing in its injustice" (p. 30). He points out that the hodgepodge of laws over the issue of slavery and the terms of manumission contributed unjustly to people who ought legally to be free but were often sold into complete slavery.

In spite of the myriad of laws and inaction of the Congress on their petition, the Alexandria Benevolent Society was able to produce some positive results. Hallowell (1884) and Janney (1882) recounted that a number of people were thus liberated--in some cases whole families. The Society, the first Hallowell had belonged to other than that of Friends, continued regular meetings and were active on behalf of slaves and Blacks until August of 1831 when the violent Southampton Rebellion--better known as Nat Turner's rebellion--took place--the latest of several rebellions in Virginia (Cogerton, 1993; Ballagh, 1968). This event caused the members of the Society to suspend the meetings, supposedly temporarily, but they were never resumed (Hallowell, 1884; Janney, 1882).

For Hallowell, it is likely that his experience with the Benevolent Society further awakened in him the Quaker revulsion against holding others in servitude. As he grows older, we find records of his signing for slaves to be freed (Alexandria Record of Manumissions, 1800-1860). When he was asked to assume the presidency of Maryland Agricultural College one condition that he made clear was that there were to be no slaves or slave labor connected with the school--Maryland was then a slave state. The Board of Trustees agreed.

A BRIDGE FOR WOMEN'S EDUCATION

In the early decades of the nineteenth century, American women were unable to lay claim to the fundamental rights and freedoms that White men enjoyed. To most men, and many women, God had made men superior to women; thus women were a part of the lower level of society whose place was in the home tending the needs of the husband, children, and family. On the whole, women had little say in and were not fit to participate in the affairs of men (Papachristou, 1976). John Marshall, in a letter to James Garnett (1824, November 29) comments on Garnett's lectures on women's education. Marshall speaks in favor of women's education though in support of her motherly duties

if the agency of the mother in forming the character of her children is, fitted in truth as considerable as I think it is, . . . if she does so much towards making her son what she would wish him to be, and her daughter resemble herself--how essential it is that she should be fitted for the beneficial performance of these duties (p. 3).

The Reverend Powers (1826), in an address delivered on the anniversary of the Newark, New Jersey Institute for Young Ladies, reinforced an attitude of subjugation to his nearly all female audience by saying "nature has designed her to please and console, rather than instruct and govern, whatever is sentimental and touching is particularly worthy of her regard and will . . . add luster to her native charms" (p. 3). Mrs. Townsend Stith (1831) published a pamphlet that concedes "few women indeed leave (school) at all energized into the rank of thinking reflective beings . . . sigh with regret that their minds have not received full justice" (p. 8). These reflect, from both genders, the state of women in the first half of the nineteenth century.

Judith Papachristou (1976) wrote that "by the 1820s and 1830s, especially in New York, Pennsylvania and New England, an exciting and contagious spirit of reform was in the air" (p. 3). Women were becoming active albeit in causes like abolition, education, and temperance as they affected others rather than themselves. In 1840, at the World Anti-slavery convention there was much furor over the issue of whether women should be allowed to participate and especially speak at such a gathering or even participate (Hoffert, 1995). Lucretia Mott and Elizabeth Cady Stanton, two of the early founders of the women's movement, were there and much angered about being barred from the convention. This action served as the spark that caused them to start the women's movement in earnest (Hoffert, 1995; Papachristou, 1976; Gurko, 1974).

In the meantime, in Alexandria, Virginia, a quiet educator and scientist began a self-transformation that would subtly move him and the institutions he founded to build small, perhaps unintentional, bridges to help women enfranchise themselves.

One means of women's education, female seminaries, were being conducted in the Alexandria area by at least three women. One of these was conducted by Mrs. Porter who "congratulates herself upon the prospect of success in establishing a school for the instruction of young ladies in the highest branches of education, and obviating the necessity of parents sending their children to the northern cities for the completion of their education" (Mrs. Porters Seminary, 1828, August 19, p. 1).

The purpose of this education was to give females "the elementary principles of learning and virtue, which are to guide her temporal and eternal happiness . . . the mind must be disciplined, the memory improved, the moral sense purified and quickened, and intellectual energy

awakened and cultivated" (Mrs. Porter's Seminary, 1828, August 19, p. 1). Many of the subjects--United States history, geography, natural and moral philosophy, reading, writing, rhetoric to mention a few--were parallel to those presented in Hallowell's school with the exception of higher mathematics, surveying, mechanical engineering, and some science (Mrs. Porter's Seminary, 1828, August 16, 19). In the same year female seminaries and boarding schools were opened by a Mrs. Hagarty and Mrs. Waugh. The program of instruction again was similar at those schools with the occasional mention of such womanly skills as ornamental needlework prominently mentioned in the advertisements (Alexandria Phenix Gazette, 1828).

It is important at this point to note a number of factors that we may surmise shaped Benjamin Hallowell's educational thinking regarding women and the day to day conduct of his school. Basic education for women and men in many ways was similar as noted. Women could receive separate but fairly equal educational opportunities if the attitudes of the family so permitted. Generally, but not always, the instructor was a male, but it was not uncommon for women to open and conduct schools for women.

Hallowell was experienced in the conduct of the Quaker meetings for worship in which the men sat on one side of the meeting house and the women on the other. This may have influenced Hallowell's idea of women and men being educated in separate classes. Meetings for business were held separately as noted in Chapter 2 (Barbour & Frost, 1988; Trueblood, 1966; Tolles, 1960). Education in general, like society, had a long history of preference toward males. Thus the separation of males and females was natural to him.

Early in his autobiography one senses his unease about teaching women himself. He comments that he must teach young women in his spare time because he was so far into debt at the time.

In the fall of 1828, I began private lessons to the daughters of Craven Thompson and Robert I. Taylor at their respective homes, having definite hours assigned to me between my own school hours, like their music and French teachers. This was humbling to me, but I was in debt and I was desirous of doing anything that was honorable to get out of debt and make a living. Then after tea in the evenings I had a class of girls consisting of Sarah Smith, Rebecca Stabler, Rosalie Taylor and some others . . . on the 17th of the ninth

month, 1830, I commenced giving private lessons to Angela Lewis, daughter of Lawrence Lewis who was a nephew of General Washington, and it was said, resembled him a great deal in appearance. Angela's mother always attended her lesson recital and in addition to the money earned profited by her influence, which she afterwards exerted in my favor .. which was of greater value to me than the amount I received in hand (Hallowell, 1883, pp. 107-108).

We must not hasten to the conclusion that his comments necessarily speak against teaching women, out of a prejudice against women although his attitude reflects and was certainly influenced by the custom of the time. It is equally likely that he is "humbled" by simply having to take on extra employment. Most likely, his words reflect a combination of the two. We should note that his wife Margaret was, by popular request, conducting a school for young ladies in the upper rooms of his school house (Hallowell, 1884). In addition the Society of Friends made it a common practice for women to be formally appointed to the oversight committee for Quaker schools (Barbour & Frost, 1980).

Thus we see Hallowell as influenced both by contemporary culture outside of the Quaker faith and the established practices within the faith. As we shall see later, he does not support coeducational schooling at this point in his Alexandria experience.

By Hallowell's account and that of the Introductory Lecture, of November 17, 1840, the weekly meetings of the Alexandria Lyceum were well attended by both males and females. Everyone took part in the debates and while women were not specifically mentioned, one must hypothesize that many of the young women he and his wife taught while in Alexandria in the last ten years were energetically involved in the resulting debates. Reference is specifically made to women in attendance with their husbands and that they "lend a pleasant aspect to the proceedings" (Introductory Lecture, 1840, November 19). Other cultural events such as individual and choral singing in which women are specifically mentioned, took place in the forum that the Lyceum provided (Hurst, 1991; Hallowell, 1884).

While engaged in establishing the Philadelphia school project and through his lectures he met Lucretia Mott and her husband James. She was a well-known abolitionist and women's rights advocate. Hallowell indicated that he enjoyed the opportunities to meet and talk with them (Pugh,

1982, pp. 2-3). We may well speculate that exposure to her views and those of others around her influenced his thinking and attitudes regarding the education of women.

Back to Alexandria

Shortly after reassuming control of his school in 1846, he used three vacation months in a manner that may have helped reshape his thinking about women and their education. He visited and studied in Bridgewater, New Jersey and Earlham college, near Richmond, Indiana. In these two settings he remarked on their coeducational method of instructing. By his account these observations have

not only removed my opposition, but brought me in its favor, by convincing me that the coeducation of the sexes would secure two objects that which I have found the most difficult attainment with boys and young men when education alone, - the avoidance of rough, turbulent, boisterous conduct and a careful preparation of their exercise for recitation... This system embraces principles that are in harmony with man's nature and must work favorably (Hallowell, 1884, pp. 188-189).

There is, however, as yet no evidence that he conducted coeducational classes at his school. Swarthmore College in whose founding Hallowell was a primary player did offer coeducational classes. This was a unique characteristic distinguishing Swarthmore from its neighbor Haverford College which allowed only male students.

His legacy lived on in his children and especially in his daughter Carolyn Hallowell Miller (wife of Francis Miller). By 1883 she was a strong woman's activist and spoke at the request of Susan B. Anthony before a woman's suffrage meeting in Washington. In her speech she witnesses the involvement of women in activities that no doubt took place in the Lyceum of her father's time. "She saw modest women, young and old . . . come forward in public places and with easy nonchalance take part in concerts, in entertainments, in ballets, in private theatricals" (Female Suffrage, 1883).

Benjamin Hallowell was not an ardent champion of women's rights or a leader in the education of women. Hallowell was simply a good man who by living a gentle and kind life demonstrated a love of others. Still five indicators uncovered in the literature suggest that he may have been a "bridge" or stepping stone by which women became more involved in education in

general and in various forms of what we now see as adult education. These are (a) the concern demonstrated for minorities and those less enfranchised through his involvement in the Benevolent Society and work with the Indians, (b) accounts of his meeting and discussion with a principal women's rights activist of the time, Lucretia Mott, (c) his examination of coeducational methods at other institutions and his change of point of view regarding this practice, (d) the testimony of his daughter when relating her impressions of the public involvement of women in the Lyceum and other facets of the cultural life of Alexandria with which her father was so closely connected, while growing up, and (e) the general high opinion of him (Memorial of Sandy Springs Monthly Meeting, 1877).

It would seem that by his very life, he encouraged everyone around him to better themselves, including women. Thus, he seems a bridge, no matter how small or unintentional, for women to come forth and to participate in schooling and community adult education activities exemplified by those at the Lyceum.

HALLOWELL AND THE INDIANS

In an antique collection in Aberdeen, Scotland there exists a painting by Edward Hicks called the "Peaceable Kingdom" that depicts William Penn and the Indians. It testifies to the honesty of Penn and the Quakers in keeping the treaty he made in the early 1680s. In the same collection is a couch with a scene that depicts William Penn, an Indian Chief, and a Quaker bearing the quotation "the only treaty that was not ratified by an oath and never broken" (Washburn, 1964, p. 334). The painting and the scene on the couch both symbolize the honest dealings that the Quaker settlers practiced under Penn's guidance with the Pennsylvania Indians. William Penn recognized that the land granted to him by the crown in real terms belonged to the Delaware Indians and other tribes. He therefore made provision to buy the land from them (Dunn & Dunn, 1981; Endy, 1973). As Josephy (1991) observes, "it was the Delawares' (Indians) good fortune temporarily to have their country settled upon by William Penn and his Quakers for the latter showed more concern for Indian rights than most settlers elsewhere" (p. 306). Thus began a tradition of concern for Indian humanity which Hallowell would, in his time, embrace and vigorously promote.

The plight of the Indians in America would steadily worsen in the interim before Hallowell was appointed, upon the death of Philip E. Thomas in 1861, Secretary of the Standing Committee on Indian Concerns of the Baltimore Yearly Meeting (Minutes of the Standing Committee, 1861). Ronald Walters (1997) speaks of the outsiders in American culture. Counting Indian leaders among them, he argued that "Indians never were a major concern of pre-Civil War reform...Missionary societies sent agents to proselytize red, as well as White, heathens in the west...missionaries sought to teach Indians to be like White men" (pp. 197, 198). The prime concern of the government and most citizens was to dispossess the Indians of their lands and if necessary exterminate them (Nabokov, 1991; Vogel, 1972). The farce of treaties with the Indians was ended with the Indian Appropriation Act that stipulated that "no Indian nation or tribe within the territory of the United States shall be recognized as an independent power with whom the United States may contract by treaty" (Nabokov, 1991).

When Manifest Destiny, the precept that held that White Americans were to rule the American continent, was a prevailing belief, any possibility of friendly Indian coexistence with most Whites in America died (Nabokov, 1991). Disenfranchisement of the Indians began in a significant way with Jeffersonian dreams of empire. Josephy (1975) wrote that Jefferson envisioned the "settlement and exploitation (of the continent) by American people, who would grow prosperous by looking westward. . . his vision included extinguishing the Indians' title to their lands, by fair means if possible, by foul means if necessary, and their removal west of the Mississippi where they could be isolated from the hostile Whites until they became civilized husbandmen " (p. 138). Even this seemingly draconian approach-- forcing the Indians westward-- worsened, moving from the act of taking their lands to the extreme position that it was preferably to simply kill the Indians and use them as fertilizer (Nabokov, 1991; Josephy, 1975; Vogel, 1972).

Baltimore's Standing Committee had been formed as early as 1795. For seven years, 1804 to 1811, they supported a mission settlement among the Shawnee in Ohio and Indiana (Nabokov, 1991). This seemingly good work was suspended by the Baltimore Committee due to unrest among the Indians in 1811 (Baltimore Indian Committee, 1811). The Committee's work languished for want of a cause until the late 1830s when a united effort involving the Committees of Baltimore, New York, Genesee, and Philadelphia united to protect the Seneca Indians from the

efforts of the Ogden Land Company to acquire their tribal lands. This care and attention continued into the 1860s and was the primary issue being worked when Hallowell was appointed Secretary (Standing Committee Minutes, 1861, October 28).

Hallowell took up the duties of Secretary with some trepidation. He wrote, "Having but recently become a member of this committee, and being but little acquainted with the nature and extent of the duties I might be expected to perform, it was with very great reluctance that I accepted this appointment; but now having done so, it is very much my wish and determination that none of the interests of these Indians shall suffer from any attention to them which it is in my power to give" (Hallowell, 1862).

The Seneca Reservation were in the western part of New York state. Tuscarora and Tonowanda were near Lake Ontario in the west corner of New York state. Catharaugus was on the shore of Lake Erie. Oil Spring and Allegheny were on the New York/Pennsylvania border (Snow, 1994; Wright, 1865; Standing Committee Minutes, 1861, February 28).

In addition to the normal oversight and advice rendered in administering the everyday operation of the Iroquois/Seneca nation, the Committee and Hallowell advised the tribal chiefs on issues dealing with New York State's efforts to force them to become citizens. Through convoluted means the state was on one hand helping to provide education and health services to the Seneca as an independent nation under the U.S. Constitution and at the same time attempting to tax the Indian lands. The Quakers were actively involved in advising the Seneca on all parts of the law involved in this issue (Snow, 1994). At the same time the Committee operated schools on all the reservations and ran an orphanage at Catharaugus for Seneca children (Wright, 1865, January 31). They were also assisting in opposing movement of the Seneca to reservations in Kansas, a prospect that many Seneca strongly opposed (Snow, 1994).

In addition to acting as agent for the Seneca Nation, Hallowell through the committee made appointments of Quaker operating officials such as census takers--important because the Seneca allotment or annuity from the federal government was based on the population--official interpreters and other functionaries (Halftown, 1862, May 1). Matters were further complicated by an ongoing battle within the Seneca Nation over the form of government they would have. The alternatives were an elected chief or traditionally appointed chiefs. A major difficulty was that

many of the families that had served as sources of traditional leaders had died out or relocated to Canada. The Federal government and the Quaker administrators including Hallowell favored the elected government and made it clear in their correspondence. The choice however, lay with the Indians and during the time of Hallowell's Secretariat the issue was never resolved (Snow, 1995).

The October 1867 report of the Standing Committee on the Indian Concerns to the Baltimore Yearly Meeting summarized the "advances" made on the part of the Seneca.

The Seneca people for the past year have enjoyed a degree of good health, which perhaps but a few communities in any county have been favored with. Peace, quietness and brotherly love have been manifested among all classes of the people...I cannot recall the time to mind, when such unity and harmony existed among the Senecas as at present (Standing Committee Minutes, 1867, October 31).

The same report quotes the Commissioner of Indian Affairs:

For the most part these people (the Seneca) are industrious and intelligent in the care of their farms...they are not surpassed by the Whites...the success which crowns their efforts as may be seen at the Annual Agricultural Fairs which have been initiated among them (Standing Committee Minutes, 1867, October 31).

The Commissioner's statement corroborated the Committee's view that civilization of the Indian could be achieved. It also serves as a point of departure for the next mission to be undertaken by the Committee.

Attention by now had shifted to the plight of the Indians west of the Mississippi where the U.S. Army was conducting a campaign of extermination. Massacres of Indians illustrate the severity of the problem. The Sand Creek Massacre of a peaceable band of Cheyenne Indians on November 29, 1864 is perhaps one of the most notorious. The resulting outrage spurred Congress to form a committee to investigate the event. The findings were clear. A group of some 700 militia and regular army did in fact, and with no good cause, cruelly massacre hundreds of Indian men, women, and children. The act was so heinous that all involved were recommended to be removed from office and punished (Nabokov. 1991).

In 1867 the Standing Committee first officially expressed concern about the condition of Indians west of the Mississippi (Standing Committee Minutes, 1867). After visits by Hallowell and other Committee members, and extensive correspondence and coordination by Hallowell, the Meeting presented a memorial from the Baltimore, Philadelphia, New York, and Genesee Yearly Meetings to the Commissioner on Indian Affairs expressing their willingness to work with the western tribes. On February 15, 1869, newly elected U.S. President Grant, influenced by concerned missionaries, proclaimed his "peace policy" in which the Indians would be trained in the White man's ways as opposed to the ill treatment they had previously experienced. On that date Eli Parker, a Seneca medicine man, brevet brigadier general, and aide de camp to President-elect Grant, sent a letter to Hallowell as Secretary of the Standing Committee on Grant's behalf requesting the names of Quakers who could serve as agents for the western Indians.

General Parker wrote,

Sir, General Grant, the President elect, desirous of inaugurating some policy to protect the Indians in their first rights, and enforce integrity in the administration of their affairs, as well as improve the general condition and appreciating fully the friendship and interest your Society has ever maintained in their behalf, directs me to request that you will send him a list of names, members of your Society, whom your Society will endorse as suitable person for Indian agents (Parker 1869, February 15).

Similar letters were sent to the secretaries of the Standing Committee of Philadelphia, New York, and Genesee Yearly meetings. A convention of delegates from each of the committees met in Baltimore's Lombard Street meetinghouse to begin to comply with Grant's request (Hallowell, 1884). A circular was issued setting out the guidelines desired in an agent. It may have been influenced by a letter received by Hallowell from H. B. Whipple, Episcopal Bishop of Minnesota who had successful experiences working with the Chippewa. Bishop Whipple recommended to Hallowell that each Indian have rights to his own property--to give him dignity--and that each Indian youth be taught the use of tools. He further describes characteristics similar to those included in the Standing Committee's recruitment circular that follows:

1st. a powerful heart, and a firm trust in the power of God. . . ; 2nd. industry, economy, firmness, mildness, and practical kindness and love; 3d. a knowledge of farming and gardening, ability to superintend the construction of buildings, and to see that schools are properly conducted; 4th. tact in managing or influencing persons, so as gradually to induce the Indians of his agency voluntarily to join in the various employments of farming and gardening and in mechanical operations (Hallowell, 1884, p. 264).

To what extent the committee's work was influenced by the Episcopal cleric is uncertain, but as Bishop Whipple points out "the whole matter is one of simple common sense" (Whipple, 1869, April 16).

As a result the President and Secretary of the Interior assigned to the Committees of the four yearly Meetings responsibility for the Northern Superintendency which consisted of Nebraska and included six agencies of Indians--the Pawnees, Santee, Sioux, Winnebago, Omaha and Otoes. Samuel Janney, a close friend and associate of Hallowell, was appointed as overall superintendent for this superintendency and served successfully until September 1871 (Janney, 1882).

Another issue in which they exerted their influence was the transfer of a bill in Congress of the Indian Bureau back to the control of the War Department who would prefer to exterminate all Indians (Vogel, 1972). The Standing Committee had been officially opposed to this action for about three years (Standing Committee Minutes, 1867, 1868, 1869). In 1870 a bloody massacre of peaceful Piegan Indians was carried out by Army troops under the command of General Philip Sheridan. This outrageous massacre drew the public outrage that caused this bill to be defeated much to the joy of the Quakers (Vogel, 1972).

In the Baltimore Standing Committee's report of October 30, 1870 their efforts with the Indians seemed to be succeeding. A special mention is made of Hallowell's efforts and alludes to his declining health that lessened his activity with the Committee around this time.

In 1871 Hallowell resigned the Secretariat to be replaced by Samuel Townsend. He had contributed ten years of his life to the welfare of the Indians and had, by the White man's standard at least, helped to civilize his charges. This was by far the most humane of alternatives available to the Indians at the time.

CONCLUSION

The intent in this chapter was not to paint Benjamin Hallowell as an ardent champion of Blacks, women's rights, or Indian causes though he was an active leader and contributor in each of these fields. As Secretary of the Benevolent Society, Hallowell worked to inform the public of the rights of slaves through newspaper articles and petitions for their freedom. In addition the Society was successful in freeing a number of slaves--even complete families--as Hallowell and Samuel Janney not in the autobiographies. This was as best as can be discovered Hallowell's first serious effort at any social activism.

The case for his influence in helping women improve their lives is perhaps the weakest one concerning his reform activities. Little direct evidence exists regarding any focused and intentional activity towards this end, Nonetheless, a careful study of his writings and activity over time suggests a clear change in his attitude toward educating women, He evolved from being humbled to have to give private lessons to daughters of Alexandria citizens in 1824 to advocate of coeducational classes in the founding of Swarthmore College in 1867. His daughter Caroline's feminist activities in the 1880 further suggest some influence possible from her father.

Ten years of successful work as Secretary of the Standing Committee in Indian Concerns and the volume of correspondence contained in the Minutes of the Committee are ample evidence of his activity by itself. Add to this the respectful correspondence of his peers, Indian officials, and the solicitation of his help by President, provide respectable evidence that his efforts on their behalf was certainly significant.

Hallowell was simply as a good man who, by living a gentle and kind life, demonstrated a love of others. Four indicators uncovered in the literature suggest that he was a reformer of some merit for several groups. First, the practice of his Quaker faith that traditionally took up the cause of each group. Second, his willingness to act in leadership positions that espoused the causes of Blacks, women, and Indians buttressed by the fact that in each case it was a prolonged and arduous effort. Third the fact that he treated all equally in everyday life. Thought the work was difficult, these causes came easily to Hallowell simply because his Inner Light told him it was the right thing to do. It would seem that by his very life, he encouraged everyone around him to better themselves and actively encouraged them to do so.

Thus, he served as a bridge, no matter how small or unintentional, for all to come forth and to participate in schooling, community, and adult education activities. He was not the strident voice for any one of these groups--he was however a gentle and persistent voice for all.

CHAPTER 7

SUMMARY AND CONCLUSIONS

This historical study of the life of Benjamin Hallowell is for the purpose of investigating and interpreting Hallowell's life as one typical of the growing middle-class in antebellum America who contributed to the nation's growth. The focus was primarily on how he provided leadership to his community, region and country in the fields of education, science, and reform during the most productive years of his life--from 1824 until his death in 1877. In addition the study was designed to determine how Hallowell used meetings, lectures, and committees as vehicles to foster adult education activities. The study provides information on the ways that Hallowell acted as an information "bridge" between the industrial North and the rural South at a time when information was becoming the major key to social, political, and scientific development of the nation.

SUMMARY

Hallowell's most productive time spans fifty years from 1824 to 1874. During this time the United States evolved from a developing country into a mature robust and thriving nation. The role of the elite, governing and nation building, passed into the hands of the common man--the middle class.

Many argue that this was due to the explosion of information made possible by the increased availability of print material and improved facilities to distribute it ever wider. The postal system and transportation improvements in roads, canals, and railroads fostered the distribution of information which in turn provided more opportunities for the citizenry to improve themselves intellectually and financially.

Studies of the middle class citizen exist but do not abound. Studies of Hallowell are sparse even though, by what accounts do exist, he was a dynamic educator and a very influential person in the mid-states region of the eastern seaboard. This for a man who played a significant role in the founding of still-existing institutions of learning, such as the Alexandria Lyceum, the University of Maryland, and Swarthmore College. This for a man whose scientific knowledge was such that he was invited to lecture at the Lyceum, local agricultural societies, the Smithsonian Institution, and Columbia College (now George Washington University).

This study adds to the body of knowledge of the middle class and their contribution to the shaping of a nation's social development. It also contributes to the study of the middle class population as it progressed before and after the Civil War--and Benjamin Hallowell's role in that transformation.

Historical research, a methodical, critical gathering and interpretation of information from past records and the environment in which Hallowell lived and functioned, was the method of study. It allowed for an examination of the work of those who have gone before and, according to Barzun and Graf (1992) gives discipline and context to present and future practice.

Secondary material gave a picture of his environment and provided second party interpretation of the time in which he lived. Primary material, in the form of letters, newspapers, diaries, articles, and other documents, provided on the spot and particular information about his daily activities. In each case it was necessary to read all information critically from as many sources as possible to determine a reasonable degree of accuracy. These materials illuminated the period in which Hallowell lived and provided substance for reflection on the present practice.

The study was approached in five topical areas: the schools he founded, the institutions of higher learning he helped to found, his activity in the field of science, and his reform activities. Events within each topical area of Hallowell's endeavor are arranged chronologically. This final chapter summarizes his activities, particularly in the field of adult education, in light of the research and suggests topics for further research and study.

CONCLUSION

Examination and analysis of the evidence gathered in this study resulted in the following conclusions drawn in relation to the original research questions:

Question 1. What were the early Quaker and family experiences and influences that shaped Hallowell's life? Clearly the earliest influences were those of his mother and grandfather. It is difficult from available evidence to discover the influence of his father since he died when Hallowell was so young. His mother, however, taught him to do household chores thus reinforcing, not only the Quaker work ethic, but the concept that everyone in the family had to contribute to the overall welfare of the household community--a reflection of the Quaker community. His mother's dogged persistence insured that eventually Hallowell gained a healthy

respect for learning. Her insistence that he attend school is evidence of that. His grandfather taught him to read even before he started school. Exhaustive, critical, and purposeful reading would, in the future, be the primary means of knowledge acquisition for Hallowell, especially in his avocational field of interest, science. Hallowell's formal education took place entirely in the Quaker Meeting school (Abington) or boarding schools operated by Quakers (John Gummere's School) so that the Quaker influence was consistent in his early education and development. Once his formal schooling was completed, his preparation for conducting his own school took place at Westfield, Fair Hill, and Westtown schools--all Quaker. Additional job opportunities at Ellicott City and Woodbury, New Jersey, both Quaker schools, reflect the value and closeness of the Quaker network reflected in the hierarchical nature of the Meeting and organization and the constant communication and visits between Meetings. There is little doubt that Hallowell's qualifications and reputation were spread by the family and teachers--especially the prominent John Gummere of Burlington. Hallowell's family--mother, grandfather, siblings, cousins--and Quaker acquaintances as well as the commonality of Quaker precept of looking out for their fellow Quakers served Hallowell well in his early days and indeed throughout his life. The Quaker ethic of honesty, hard work, equality, simplicity, and peace are reflected throughout Hallowell's life and were plainly major influences in his success.

Question 2. How did he prepare himself for teaching? At first Hallowell had little if any thought of making his living as a teacher. Raised on farms belonging to his relatives, Hallowell was an unlikely candidate to serve any kind of farm apprenticeship though he was perhaps most familiar with this means of making a living because his mother owned no land and his relatives had a full complement of children to support. Typical of young men of this time, at the age of 15 he was, after some soul searching on the part of his mother, apprenticed to his cousin Nathan Loukins as a cabinet maker and carpenter. A severe accident limited his physical ability and forced him into preparing himself as a teacher. Having spent nearly nine years at the Abington School he spent one more year before attending John Gummere's boarding school in Burlington, New Jersey. There he had his first exposure to scientific experiments and was captivated. Hallowell left Gummere's school after one year and spent some weeks with his Uncle Comly and brother James when, eventually no doubt sparked by the Quaker network, he was offered the first of three

schools where he would in effect practice teaching before founding his own school. After a year he applied for a position at Fair Hill School in Montgomery County, Maryland and was accepted. He spent two years there and read voraciously between his teaching duties. This is another example of how Hallowell prepared himself throughout his life, as an ardent reader. Leaving Fair Hill he spent a brief time with his old teacher, John Gummere, performing and checking mathematical calculations for a book Gummere was writing. Gummere advised him of an opening at Westtown School in Pennsylvania where Gummere himself had taught. Hallowell was accepted. The next three years he described as some of his best. They provided opportunities for him to test himself. He proposed numerous innovations at Westtown--all of which were accepted. He changed text books, reorganized his classes, provided access to his personal library for students, and set up a planetarium for the study of astronomy. He participated in faculty discussion groups nearly every evening in which school issues as well as current events were discussed--a particular example of adult education activity. Westtown would be the stepping stone to his Alexandria school.

As he built his school he continued to read. Often he was his only resource when preparing for scientific demonstrations, all of which seem to have been carried out successfully. It was in this preparatory period when he more fully began to participate in adult education activities of self-reading and group discussions. These activities would carry over to the building of his own boarding school.

Question 3. How did Hallowell continue his own education throughout his life? The earliest learned and longest serving skill that Hallowell used to continue his education was reading taught to him at about five years of age. As he aged he used self-directed reading to inquire into science, reform, and education. He was an avid reader--if his considerable library is to be used as an indicator. In addition, he subscribed to national journals such as Benjamin Silliman's *American Journal of Science*, to which he was also a contributor. In the field of mathematics, Hallowell constantly drilled himself in all sorts of mathematical calculations. Often it seems to be a pleasant diversion for him. Given his love of mathematics it is not difficult to understand why his school was acclaimed in correspondence by his scientific and educational peers. This correspondence was another way in which he educated himself. The evidence shows that his correspondence with notable scientists, such as Professor Joseph Henry, continued until close to his death. In the correspondence there were discussions and critiques of findings by other notable scientists along with personal pleasantries.

During school vacations or breaks in operating the school, Hallowell often visited northern colleges and professors to see what they were working on and to exchange ideas. This is where, in 1831 he met Benjamin Silliman of Yale and became familiar with the work of Joseph Henry both prominent in science and the discussion of scientific knowledge. In his later years he toured Bridgewater's Normal school in Massachusetts and Earlham College in Indiana where he observed teaching preparation and coeducational classes that favorably impressed him. On all his trips he made use of Quaker connections and pointed out that he made sure to visit each Meeting wherever he went. In all cases and given his inquisitive mind, the conversations with nationally known scientists and reformers like the Motts must have been very illuminating.

He continued scientific experimentation particularly in agriculture and the concomitant exchange of information. His weather and astronomical observations continued nearly until his death. His life was one of continuous learning in both formal setting such as committees, agricultural societies and classrooms and informal conversations, correspondence and self-educating readings.

Question 4. How did Hallowell found or partner in founding learning institutions?

Benjamin Hallowell played a major role in the founding of five learning institutions. His Alexandria boarding school founded in 1824 was the first and his means of livelihood as well as a vehicle for establishing his reputation both as an educator and scientist/mathematician. This endeavor was undertaken principally by Hallowell with his wife as a significant partner in its success. The primary means of marketing his school in the early years were his public lectures on science first offered in his school. He was active in the Lyceum from the time of its establishment, by Hallowell and six other citizens, until the time of his first retirement in 1842. These lectures were later delivered in the Lyceum, local colleges, agricultural societies, and the Smithsonian Institution. His audience, made up of middle and upper class citizens, ranged from anyone who could afford a ticket to the Lyceum, to college students, and members of regional agricultural societies. It is likely that, as was customary of the time, his lectures were rehearsals for articles he had written for later publication. The popularity and acceptance of his lectures and writings by the public spread his reputation and was a significant factor in his being asked to participate in educational and scientific institutions such as Columbia College, Maryland Agricultural College, and the Smithsonian Institutions.

When called upon by the Quaker community of Philadelphia in 1845 to establish the Philadelphia High School he soon resorted to a similar scheme of public lectures to garner support for the school from the Philadelphia Quaker community to whom he was practically unknown. Again this lecture series quickly proved successful, earning him the community support he sought and at the same time continuing to disseminate information.

Hallowell was one of the founders of the Alexandria Lyceum in 1834. The Lyceum was a forum for the spread of knowledge on a myriad of topics--the only forbidden ones were religion and politics. The Lyceum also hosted plays as well as choral and musical recitals--a potpourri of adult educational activities.

His participation in the founding of Maryland Agricultural College was a similar endeavor. A group of prosperous farmers from the Maryland Agricultural Society met to form the college. Since Hallowell was known as something of an authority, by virtue of his lectures to the Montgomery and Loudoun County Agricultural Societies and his educational background, he was asked to put forth his suggestions to establish the institution. His recommendations were accepted virtually verbatim. Hallowell's work with the college committee was such that he was elected, unbeknownst to himself, as the college's first president.

Along with Martha Tyson and a small committee from the Baltimore Yearly Meeting, Hallowell began lobbying for a Quaker College in the eastern United States. Begun in 1850, this was a long labor of love that spanned many years of meetings, letter writing and lectures in support of a Hicksite supported school. They saw a need to educate conservative Hicksite youth and inculcate Hicksite traditions. The advocacy of Hallowell and Tyson reached out to the Yearly Meetings of Philadelphia, Baltimore, and New York. Their tireless efforts paid off with the establishment of Swarthmore College in 1867.

The success Hallowell experienced with his most significant institutions, the boarding school, the Lyceum, Maryland Agricultural College, and Swarthmore College, was accomplished through cooperative efforts of small groups who in turn helped him to promote the particular project to others.

Question 5. In what ways was Hallowell active in education, science, and reform?

Hallowell's vocation was education. His Alexandria school was the first means of spreading his reputation. It provided what was by 1831 recognized as a quality secondary education with the distinctive feature of specialization in mathematics and science. Every activity that he would participate in was distinguished by its educational nature. This coupled with his informative lectures in science, was the vehicle that propelled him toward college and Smithsonian lectures and consulting in the foundation of Maryland Agricultural College. This activity later added to the successful establishment of Swarthmore College in 1867. The only educational institution he was associated with that does not actively exist today, in one form or another, is his own boarding school. The longevity and durability of the Lyceum, Maryland Agricultural College (now the University of Maryland), and Swarthmore College attest to the contribution of Hallowell and his importance.

There were three major venues in which Hallowell used science for his own promotion and amusement. In each he not only helped his own career but provided service to others.

First, in the Alexandria years he used scientific lectures and demonstrations to draw attention to his boarding school. Then he used his knowledge to perform chemical analyses to assist local doctors and veterinarians in their diagnosis of human and animal illnesses.

Secondly, his lectures at Columbia College and the Smithsonian Institution seem to be as much for self reward as they are to spread knowledge. Even to as mild a person as Hallowell is characterized to be, it must have been gratifying to be asked to teach and lecture at these prestigious institutions. The motivation of promoting his school is clearly not nearly so important at the time of these events in the 1840s and 1850s. By then his school was an unqualified success and he was attempting to retire from its demands.

Finally, in the founding of Swarthmore College he spent nearly seventeen years in this labor of love to establish a Hicksite supported college for young men and women--both Quaker and non-Quaker.

In the field of reform his activity in the Benevolent Society was moderately successful and possibly could have been more so if events could have allowed it to continue its work for a longer period of time. Apparently none of the groups were willing to brave what may have been a hostile

environment in the upper south as the Civil War approached and abolitionist activity increased and often grew violent. There were however some successes in getting some families and individuals freed.

His efforts from 1861 to 1871 with the Standing Committee on Indian Concerns lasted longer and attained more concrete results. Reports of the committee's success with the Seneca and later with the Pawnees, Santee, Sioux, Winnebago, Omaha and Otoes. In each instance the Committee reports indicated that they saw evidence of success in civilizing the Indians.

Question 6. What were the outcomes of Hallowell's activity in education, science, and reform? Hallowell the educator can lay claim to providing an excellent education to a large number of young men and women. His schools, in Alexandria and Philadelphia prepared a number of young men for West Point--Robert E. Lee among them. His preparation in mathematics and science was so thorough that the board of admission of West Point itself referred prospective students to Hallowell. He was a great proponent of practical knowledge and insisted that his students be able to apply what they learned in the classroom had on the job whenever possible. He was a tireless advocate for government funded public education although the fruits of his advocacy would not be seen in Virginia until after the Civil War. He founded and operated the Lyceum as a forum where adult learning-- in the form of lectures, debates, and discussions--took place and still is used as such today. He upheld a philosophy of education that required training the muscles as well as the intellect and provided for vigorous physical activity in the secondary schools as well as the Maryland Agricultural College. His plans and designs for the Agricultural College were accepted by its Board of Directors verbatim. The institution continues today as the University of Maryland.

His lengthy relationship with Martha Tyson resulted in the founding of the coeducational Swarthmore College that continues today in its liberal education for Quakers and non-Quakers alike just as it did at its founding. Three of the four institutions he helped found are still active today.

Hallowell the scientist was more a diffuser of the uses of scientific knowledge than he was a researcher. He lectured at the Lyceum, local colleges, and the Smithsonian Institution. Most likely the only area where he conducted any significant form of research was in the emerging field of agriculture and the majority of that came at the end of his life.

Hallowell the reformer participated successfully in the Benevolent Society of Alexandria during its brief (1827-1831) existence. The Society mounted a campaign of correspondence in local newspapers that raised public awareness of the plight of the slaves in general. The Society's Memorial (today called a petition) to free the District of Columbia's slaves garnered over 2,000 signatures including many ministers and judges. Still it was ineffectual. One suspects that in 1828 the issue was not one of great importance to the residents of the District. Most likely the most important outcome for the Benevolent Society was the act of obtaining the freedom of several individual Blacks and in a few cases, whole families.

In the case of the Indians, the Standing Committee on Indian Concerns successfully assisted the civilization of the Seneca in New York and later the Pawnee, Santee, Sioux, Winnebago, Omaha and Otoes of the Northwest Dependency. In order to accomplish this, Hallowell generated a tremendous amount of official correspondence to the Bureau of Indian Affairs in Washington, to Congressmen, to the Officials of the Indian tribes, and to the other Yearly Meetings in New York, Philadelphia, and Genesee. He made periodic tours to personally inspect conditions on the reservations. He did all this to provide education and training, health care, legal assistance, and general guidance to the Committees on Indian Concerns. This might not have been the happiest of outcomes for the Indians but it was a much better solution than slaughter by the U.S. Army or relegation to poor reservations overseen by far less compassionate agents than the Quakers.

Question 7. How were the meetings, lectures, committees, and associations he participated in settings in which adult education operated? From the earliest days of his preparation as a teacher, Hallowell recounts his experience with Samuel Thomas, the headmaster at Fair Hill School in which Hallowell was awakened to the moral issue of slavery. Later at Westtown he spoke of the faculty meeting called the "Circle" that took place in the evening at the superintendent's house. In these sessions questions on school subjects such as science and grammar as well as current news would be posed and discussed. This is clearly an example of adult education at work. The topics he noted, were varied and covered a wide range of subjects.

During the Alexandria years his public lectures, first held to attract students to his school by impressing their parents, led eventually to lectures delivered in the Lyceum and were often followed by a debate. What better way could a lecture be used as adult education? The projects that he undertook in Alexandria--the Lyceum and Water Works--evolved from a small committee of citizens, Hallowell being one, who came together to promote an idea. There is little doubt that these committees, like those of the Benevolent Society and the Indian Concerns, exchanged information and ideas and were a setting where learning took place. The Water Works Committee is an excellent example. The concept came from Hallowell's visits to his sister in New Jersey where he saw a pump driven by a mill that raised water to a reservoir which in turn supplied the small town of Mount Holly with an abundant supply of fresh water. Questioning the owner of the mill, Hallowell returned with the plan for Alexandria and shared it with the other committee members. The idea was accepted and the water works was built much to the benefit of the citizens of Alexandria who had clean water for their homes and business.

Hallowell's scientific correspondence with experts in the North constituted a committee of correspondents that in addition to lecture and information traded at agricultural societies surely enlightened the members at both ends of this network of correspondence.

Similar learning must have taken place in the Standing Committee on Indian Affairs where the members had to become familiar with the customs of several Indian tribes and the operating procedures of the state and federal governments where the Indians lived. There was a steady stream of advice from committee members, agents, and superintendents that had to be considered and decided upon. These clearly were exercises in critical thinking and learning--the foundation of adult education. Nearly all of Hallowell's work was accomplished through some form of small group that was required to use and share information on both formal and informal environments.

Question 8. How did Hallowell act as an information "bridge" between the North and the South? In the early days of his Alexandria period Hallowell, at a minimum, corresponded with relatives in Montgomery County and Pennsylvania if for no other reason than to repay loans--especially to his uncle Comly. As early as 1831, after the death of three of his four children, he used his summer vacation to make a northern tour during which he visited Cambridge College and toured their planetarium and geologic exhibits. He visited Dr. Nathaniel Bowditch, a famed

mathematician, who later wrote the seminal work on celestial navigation. He then went to New Haven to meet with Professor Benjamin Silliman publisher of the *American Journal of Science*. Hallowell subscribed and contributed articles to his publication. Silliman took him on a tour of the College and its scientific displays. An immediate friendship ensued.

In the period 1831 to 1835, Hallowell increased his scientific and mathematical correspondence with friends and publications like the *National Intelligencer* in the eastern United States. This reflects the league of friendship described by Joseph Ewan (1976) as a means of sharing scientific information. One of those with whom he corresponded was Professor Henry Joseph, first at Princeton and later the first secretary of the Smithsonian Institution.

Hallowell's work with the Alexandria Water Works was the result of observations and ideas garnered while visiting his sister in New Jersey where he saw mill power being used not only to grind flour but to pump water into an elevated reservoir that supplied clean water through pipes to the small town of New Holly.

Even in his retirement he maintained a degree of scientific correspondence. This was somewhat diminished by the responsibility of serving as secretary to the Standing Committee on Indian Concerns of the Baltimore yearly Meeting.

Hallowell maintained a constant communication with prominent scientists in the North and contributed articles and responses to their journals to which he subscribed for his own knowledge, self-improvement, and shared the information within his community. All this clearly established his reputation, from his early days in Alexandria, as information bridge between the North and the South.

Question 9. How did Hallowell's middle class life, typical of the time, contribute to and mirror the nation's change by educating himself and his community? Benjamin Hallowell, the middle class Quaker teacher, scientist and reformer, did not stand out in national prominence. He was rather representative of the emerging middle class citizen who was driving the progress of the country. He was a regionally prominent citizen with an area of influence primarily in the middle Atlantic states of Virginia, Maryland, and Pennsylvania. In spite of an earned reputation in education, science, and reform, he was, more than anything, a gatherer and disseminator of information and thus a facilitator of learning--for young people by vacation, for adults by avocation.

The institutions he was responsible for founding and supporting were the very ones that were growing in the middle of the nineteenth century and contributing to the educational betterment of his fellow citizens. These same institutions, like the Lyceum, the Smithsonian Institution, Colleges in Maryland, the District, and Pennsylvania, made knowledge more readily available to the population.

He was one of those citizens, members of learned societies, who pressed forward interest in the exploration of science before many of its branches became professions. Science was made available in many areas--for the general public to the farming community.

His involvement in social reform for Quakers, women, and Indians was not violent as was frequent at the time. Rather he was an advocate in a constructive involvement that helped groups better themselves.

In all of his endeavors he worked through groups, educating them in the process of bringing them to consensus. Group lectures was the vehicle by which enduring institutions like Maryland Agricultural College, Swarthmore College, and the Lyceum were formed and the causes of the disenfranchised were championed.

Hallowell, the middle class mover and shaker, was representative of the dynamic citizens who so easily sought, and freely shared knowledge and information. This sharing, with all citizens, is what drove the nation's change into a successful democracy.

Benjamin Hallowell was, like his contemporaries Benjamin Silliman and Samuel Janney, representative of the middle class citizen who immersed himself in his faith, work and community. They had wide interests, quite rare in today's world of individual and narrow specialization. It was love of learning and a love of sharing that learning that provided his livelihood. A genuine concern for others is evidenced in his work with the Benevolent Society on behalf of Blacks. The Standing Committee on Indian Concerns demonstrated his commitment to the plight of the American Indian. He brought to every group that he worked with a voice of persuasive reasoning that allowed him to communicate the goals of the group as simply the best thing to do.

The burning energy that he showed in pursuit of his goals grew from his Quaker faith. His reputation for honesty, hard work, integrity, and fairness is communicated in writing by many of those who knew him--students, fellow scientists, and reformers--and is reflected in the memorials

in newspapers from the District to New York after his death. Hallowell was truly representative of the middle class citizen who would, through adult education, form the country as we know it today.

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Education

1996	Certificate of Advance Graduate Studies, Virginia Polytechnic Institute and State University
1973	M.S. in Counseling and Guidance Old Dominion University
1965	B.S. in Physical Education Old Dominion University

Experience

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1984 Naval Sea Systems Command
Shipyards Instructional Design Center
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Director Program Development Division

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1981 Naval Education and Training Program
Development Center Detachment
Great Lakes Naval Training Center Illinois
Education Specialist, Project Team Leader, Gunners
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Education Specialist, Project Team Leader, 76P,
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Supervisory Education Services Officer, EEO
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1975 U.S. Military Community Wurzburg Germany
Education Counselor

1967 Oscar Smith High School, Chesapeake, Virginia
Teacher, Coach

1967 City of Chesapeake
Juvenile Probation Officer

1959-1990 U.S. Navy, Active and Reserve
Operations Specialist, Chief Petty Officer

Membership

U.S. Naval Institute
National Rifle Association
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Honors

- 1997 Sustained Superior Performance Award
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Publications

- 1987 Quality Improvement Process (QIP)
Shipyards Instructional Design Center Atlantic,
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