

A STUDY OF THE PHILOSOPHY OF WILLIAM TORREY  
HARRIS AND HIS CONTRIBUTIONS  
TO INDUSTRIAL ARTS

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## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION. . . . .	1
Statement of the Problem	
Source of Data	
Delimitations of Problem	
Definitions	
Procedure	
II. THE LIFE OF WILLIAM TORREY HARRIS. . . . .	7
Life of Harris	
Works of Harris	
Time in Which He Worked	
III. THE PHILOSOPHY OF WILLIAM TORREY HARRIS. . . . .	33
Philosophers after Whom Harris Read	
Philosophy of Harris	
IV. THE CONTRIBUTIONS OF W. T. HARRIS TO INDUSTRIAL ARTS. . . . .	65
Psychology of Industrial Arts	
Contributions for and against Industrial Arts by W. T. Harris	
V. SUMMARY . . . . .	95
BIBLIOGRAPHY . . . . .	107

## CHAPTER I

### INTRODUCTION

A study of the history of education will reveal that changes have been few and slow. Even before the time of Christ, there were studies and curricula that seemed to meet the needs of the times. Following the Greek idea that education was a matter of memory or remembrance, there have been thinkers who questioned this narrow point of view. But for some 1500 years the Greek idea was in ascendancy.

In the time that followed a new philosophy was born in Rome. The Romans at one time possessed the greater part of Europe. Naturally each country added some new ideas. Finally there came a time when thinkers on matters of education and philosophy had initiative and courage enough to question the philosophy of the Greeks and to advance new theories.

It was in 1629-1644 that Rene Descartes advanced his theories, and Descartes was followed by Locke who advanced the thesis philosophy--the philosophy of the senses. John Locke maintained that man did not get his education through remembrance but through the senses--that is, the sense of sight, hearing, smell, taste and feeling.

Since any new philosophy must suffer at the beginning through the conservatism of the older thinkers and of the

philosophers, it has taken the efforts of such men as Comenius, Rousseau, Pestalozzi, Martin Luther, Spencer, Froebel and Hegel and a host of others to change the earlier concept of education. Near the end of the nineteenth century and the beginning of the twentieth century Herbart and Dewey made their respective contributions. They were able to put their ideas in practice. It was during this time that a young man began to speak his philosophy because the magazines and newspapers refused to publish his criticism of Spencer's theory. Because of this action, William Torrey Harris along with a friend, Henry Brockmyer, started a journal which they called The Journal of Speculative Philosophy with which Harris was affiliated until its end.

Harris gained fame through his philosophical thinking and thus brought his theory of education into the limelight. His ideals and thoughts were widely accepted since he fought for the advancement of both the pupils and their instructors.

It was a coincidence that the first Manual Training School was established in the city he brought to fame with his philosophy. Fighting through the Civil War and the adjusting period afterwards did not lessen his struggle to promote his ideas of education.

#### Statement of Problem

This study was made to determine the philosophical contribution to the field of education by Harris as set forth in his contribution to industrial arts.

Since America is a new country as compared with those of Europe whose educators have exerted influence on the field of education, many American educators went abroad to study firsthand the school systems of those countries. However, Harris first achieved fame in his own country and then went abroad to study and compare his theory of education with those that had been tried and proven.

#### Source of Data

The data used in this study were obtained from library books and abstracts from the United States Bureau of Education publications, United States Bulletins, Journals of Education, Proceedings of Educational Societies, Journals of Philosophy, Encyclopedia of Education, Official Reports, correspondence, addresses and essays.

#### Delimitations of Problem

This study is limited to the philosophical contributions of William Torrey Harris to the field of industrial arts, and his influence in establishing it in the curriculum of the American schools. The various systems of industrial arts will not be reviewed, but the intellectual value of industrial arts will be shown.

#### Definitions

The term "manual training" is generally applied to all forms of constructive handiwork when used as an agent in general education.

"Industrial arts" is a study of the acquisition of those skills and industrial experiences that will enable an individual to live more effectively.

"General education" refers to the type of education that is broad and flexible in nature, and enables the pupil to receive training in the practical arts as well as in the arts and sciences.

"Nurture" refers to education as provided in the family.

"Self activity" is defined as any activity in which the pupil engages freely with a maximum of self-direction and self-motivation and a minimum of teacher direction and external motivation.

"Art manual" is one of the earlier terms used to identify shop work involving design and hand construction in various media with the purpose of developing art appreciation and manual skills.

"Arts practical" refers to an area of study, placing emphasis on arts serving every day material needs.

"Educational philosophy" is any philosophy dealing with or applied to the process of public or private education and used as a basis for the general determination, interpretation, and evaluation of educational objectives, practices, outcomes, needs, and materials of study.

"Philosophy" is defined as the science that seeks to organize and systematize all fields of knowledge as a means of

understanding and interpreting the totality of reality; usually regarded as comprising logic, ethics, aesthetics, metaphysics, and epistemology; an integrated personal view, especially one that serves to guide the individual's conduct and thinking.

"Philosophical method" is the approach to truth or value that rests principally on deliberative or rational processes, utilizing the results of observational research in so far as possible, and concerned with such progress as (a) testing the consistency of findings (b) integrating a set of findings into larger patterns of thought, possibly those arriving at a new truth or producing new theories to be checked, (c) determining values or goods, such as the essential criteria of a "good life" (d) examining and formulating the basic postulates of research and science; and (e) establishing the characteristics of acceptable logic.

"Idealistic metaphysics" is taken to mean the theory which holds that the nature of reality is of the nature of mind "ultimate reality being accorded only to ideas, concepts and like universals" and which accepts the theological theory that the order of reality is due to purpose postulates the existence of finite mind and an infinite mind, the infinite mind being regarded as the ultimate explanation of all things.

"Aesthetic" pertains to the aesthetic or the beautiful; sensitive to beauty or fine arts.



### Procedure

This study is presented in five chapters. The first concerns the introduction to the problem, the statement of the problem, the sources of data, the definition of terms, the delimitations, the procedure, and related studies.

In Chapter II the philosophies of several educators who influenced the philosophy of William Torrey Harris is briefly discussed. In this biography of Harris, his writings are mentioned along with the conditions of the United States during his tenure as Superintendent of Schools in Saint Louis, Missouri, and as United States Commissioner of Education. The need of a new educational curriculum is indicated. All of this gives a background for the philosophy of Harris.

A discussion of the philosophy of Harris as set forth in the American educational system is the topic of Chapter III.

The influence of the philosophy of Harris on the teaching of industrial arts in America, the manner in which it was introduced into the school systems, the opposition from some educators as well as the recognition by others, and factors found in the industrial arts program today are pointed out in Chapter IV.

The final chapter is presented as a summary of the earlier chapters.

## CHAPTER II

### THE LIFE OF WILLIAM TORREY HARRIS

The influence of Harris in matters of education was great and far-reaching with respect to the work he accomplished in bringing about changes in the system of education of his day. Before presenting his contributions to the field of industrial arts, it is well to go back and learn something of the time in which he lived and worked. When Harris was born, rural America had emerged. He was born at North Killingly, Connecticut, on September 10, 1835, to Gelpy Torrey and William Harris. He was the first of nine children to be<sup>1</sup> born to his parents.

From his background Harris was destined to become famous. Both branches of his family had achieved success, not only in America, but in England as well.

His mother was a great reader and from her much of the intellectual acumen of the son was undoubtedly inherited. His first formal training was in a one-room school where older and younger children recited in the same room. As a general thing more time was spent with the older children which naturally made it difficult for the younger children.

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<sup>1</sup>  
M. E. Curti, The Social Ideals of American Educators, (New York, 1935), p. 310.

Noah Webster's Primer and First Reader were the sole texts for his first two or three terms in this little red school house.<sup>2</sup>

The boy William progressed rapidly in school and studied his lessons diligently but began to dislike school because of the way he and other children were taught. He never once committed the sin of truancy, even though he felt a sort of repression in the schoolroom, particularly after experiencing "a sense of freedom in the presence of untamed nature." In his walks to school he encountered many different kinds of trees, bushes, herbs, birds, insects, and small animals that inhabited the woods. He loved natural science.<sup>3</sup>

When Harris was nearly ten years of age his family moved to the city. He attended school in Killingly, Connecticut, for three or four terms before leaving to attend several different academies. He cared less for the city schools because teaching was done in a business-like fashion. Instruction was by the clock; punctuality was considered a necessary virtue. In particular, he disliked the "martinet" system intensely and in general had nothing good to say about the city schools as is indicated in the following quotation.

Much more pain was expended in causing pupils to mark time with precision than in marching forward

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<sup>2</sup> Kurt F. Leidecker, Yankee Teacher, The Life of William Torrey Harris (New York, 1946), p. 22.

<sup>3</sup> Ibid., p. 25.

toward any definite object. I came to detest city schools very bitterly, because I loved individual freedom and hated mere forms as such. <sup>4</sup>

After city schooling, Harris attended five different academies--a different academy each year--and one of these was the famous Philip Andover.<sup>5</sup> Some of these academies he enjoyed, others he just attended. One in particular he enjoyed because it employed Milton's Paradise Lost as a text in the study of syntax. While attending Woodstock Academy Harris read an essay on a weighty subject, The Faculties of the Mind, during the Students' Exhibition,<sup>6</sup> thus betraying his philosophic bent.

During his stay at Worcester he joined the Legamathenian Society, a debating club. Here he met Robert Bishop, who in particular came to have a decisive influence on Harris in that he possessed a copy of Andrews and Bayle's Phonographic Class Book (a book on shorthand). Harris borrowed this book and then purchased his own to begin his study of shorthand from the Class Book and Reader, and later he subscribed to the Universal Phonographer. He also became interested in optics, force pumps, and fire-engines.<sup>7</sup>

Harris's most pleasant stay was the Academy at Andover where he remained twenty-eight weeks because everybody was

<sup>4</sup>Ibid., p. 36.      <sup>5</sup>Curti, op. cit., p. 310.

<sup>6</sup>Leidecker, op. cit., p. 39.

<sup>7</sup>Charles M. Perry, The St. Louis Movement in Philosophy (Norman, Oklahoma, 1930), p. 59.

imbued with the desire to "discipline the mind."<sup>8</sup> Upon leaving this academy, Harris, his mother, and his grandmother set their minds on his going to Yale.<sup>9</sup>

Harris entered Yale in the fall of 1854, received his master's degree, with honors, in 1869, and was given the honorary degree of L. L. D. in 1895. Twenty-five years later he received an L. L. D. from the University of Missouri because of his work. He learned to "cram" at Yale and later acknowledged the usefulness of thus performing a large task within a short period of time, and he wrote the following:

. . . . . To be able to go over one's entire work for the term in two or three days of study, brought discipline a new power usually called the power to 'cram.' Of all my school disciplines I have found this one of the most useful. The ability to throw one's self upon a difficulty with several times one's ordinary working power is required again and again in practical life on meeting any considerable obstacles. 10

Harris won a prize in mathematics offered to freshmen. The other classes were no challenge to him in his freshman year. The second year spent at Yale College was infinitely more important for the mental development of William than the first had been. His talents unfolded and he endeavored to make come true, in his own case, what he later postulated about education in general.

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<sup>8</sup>Leidecker, op. cit., p. 44.

<sup>9</sup>Ibid., p. 47.

The great object of all education is to fit the individual to combine with his fellow-men. His intellectual training should enable him to master the arts of intercommunication and give him the conventional view of the world. 11

During his second year at Yale he joined a debate club and began to develop the theme of his philosophical and psychological bent. He kept a scrapbook of all the writings on which he debated while at Yale. Upon returning to Yale for his third year Harris was very unhappy and said that Yale had taught him all it could so he left with an honorable discharge on January 15, 1857. Upon leaving Yale he had this to say,

About the middle of the junior year I withdrew my connections with the college full of dissatisfaction with its course of study and impatient for the three 'moderns'--modern science, modern literature, and modern history. 12

After leaving Yale, Harris wanted to marry his sweetheart, Sara T. Bugbee, but would not until he could afford a home for her. In midsummer of 1857, Harris left for the West to start the career which would bring him international fame.

Upon arriving in Saint Louis in 1858,<sup>13</sup> Harris began to look for a profitable business, but failed to find one.

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<sup>11</sup> Ibid., p. 55.

<sup>12</sup> Twining, "How I Was Educated," The Forum, I (August, 1886), 556.

<sup>13</sup> John Ross Kinzer, "A Study of the Educational Philosophy of William T. Harris," unpublished doctoral thesis, School of Education, George Peabody College for Teachers, Nashville, Tenn., 1940, p. 56.

He tried to start a shorthand school and service, but to no avail. His only means of income were reporting and tutoring. His spirit began to dampen since he felt that he could not become a success in business.

After his lack of success in the business field, he finally took the advice of his father and applied for a position as a teacher in the Saint Louis Public School System. His application for a teaching position was acted upon promptly because his former teachers recommended him highly. On April 22, 1858,<sup>14</sup> Harris signed his first school contract and began his teaching career to which he remained faithful until his death.

During these trying times in Saint Louis, Harris always carried a book with him to read. Whenever an opportunity arose to purchase others from his small savings he would do so and on one of these occasions he purchased Hegel's Philosophy and Logic. Upon finishing Hegel's book, he began the study of philosophy in earnest. This interest was stimulated by the friendship of Henry G. Brockmeyer, a stove molder, who was a student of German idealism, particularly of the writings of Kant and Hegel. Harris and Brockmeyer then became co-founders of the philosophical group known as the "Saint Louis Movement." In 1867 Harris

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<sup>14</sup>  
Leidecker, op. cit., p. 152.

founded the Journal of Speculative Philosophy, the first philosophical periodical in the English language; and he remained its editor until the last number was printed in 1892. Harris also joined the Saint Louis Literary and Philosophical Society.<sup>15</sup>

During the time that Harris was away his thoughts were on the sweetheart back home. During the Christmas holidays of 1858, he returned to Killingly and married Sarah Tully Bugbee and took her back with him to Saint Louis. His happiness now prompted him to begin his teaching career in earnest and his wife encouraged him in moments of depression and it was through her faith in him that he took a principal's examination and was appointed on September 13, 1859, as principal of one of the larger schools at a salary of \$1100 for the term of 1859-1860. He ran his school efficiently and well and expected his staff to progress with him in becoming better teachers. Before the end of the first year of principalship, Ira Devall, superintendent, had this to say,

Too much praise cannot be bestowed upon Mr. Harris, the principal. We believe him equalled by few, and surpassed by none of the younger men of this city, or of other cities, in high culture and extensive learning. He is a worker, too. He has the spirit of a working man, and we all know how quickly children catch the life and imitate the example of such a teacher. 16

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15  
Ibid., p. 140.

16  
Ibid., p. 164.



As a result of showing such great interest in his work, Harris was appointed Assistant Superintendent of Schools on April 8, 1867, to assist Superintendent Ira Duval whose health was failing.<sup>17</sup>

Upon assuming the temporary command of leadership, Harris began to revise the curriculum by putting his ideas of what should constitute an American education to work. These were his ideas of an American education.<sup>18</sup>

. . . . . not what the teacher does for the pupil, but what he gets the pupil to do for himself, is of value. The textbook he thus regarded superior to oral instruction attaining this end, because he looked upon it as not only containing the carefully digested result of research freed from the idiosyncrasies of the author, but as a thing to which a pupil may return again and again.

Ira Duval's health had not improved and in 1867, when he resigned, Harris was appointed to the position of Superintendent of Schools of Saint Louis. Harris, while serving as assistant superintendent, had instilled some of his ideas among the teachers. These ideas began to pay dividends upon his being appointed superintendent. Harris' idea of teacher self-improvement and methods of instruction began to take hold and because of this Harris fought for a higher salary for teachers. With the self-improvement of teachers and new ideas and methods of instruction, Harris now could devote more of his time to administration. He knew little about politics and until he learned the art, Harris was

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<sup>17</sup>  
Ibid., p. 176.

<sup>18</sup>  
Ibid., p. 183.

unable to spar with the school board and have his ideas incorporated in the schools. The new superintendent built up the faith of those members of the school board who opposed him and eventually the school board listened to him and gave in to his ideas.

Saint Louis began to get recognition for its school system under Harris and through his hard work and ideals it came to be considered by many as the best and greatest school system in America and brought foreign educators to study Harris' method and system of education. The following quotation will substantiate the above statement:

In consequence, the course of instruction in the St. Louis public school differed 'materially from that pursued in most cities of the Union.' But it also 'won the admiration of educators all over the United States on account of its philosophic breadth, thoroughness, and the perfect system maintained through the whole.

The St. Louis schools under Harris' administration came into the international spotlight at famous expositions. After the Paris Exposition of 1855 and 1867, and the London one of 1862, educational subjects began to attract the attention of the public. To the Vienna Exposition of 1873, Harris sent a statistical chart covering the St. Louis school system, also architectural drawings of model school houses and a set of the Annual Reports of the Board during his Superintendency. 19

Harris also went to the Centennial Exposition of Philadelphia in 1876, where he was a very prominent figure. Fame and recognition, even more than that of the other expositions,

came to Harris at the Paris Universal Exposition of 1878.

By now, Harris had given twenty-three years of faithful service to the Saint Louis school system. The tenure began as a teacher, then followed a combined service of assistant superintendent and superintendent of schools for thirteen and one-half years. Hard work in promoting the educational ideals which he had instilled into the Saint Louis school system caused Harris's health to break and brought about his resignation and regret to the people of Saint Louis. On May 12, 1880, Harris, not yet forty-five years of age, inducted Edward H. Long into the office of superintendent.<sup>20</sup>

After resigning his position as school superintendent Harris did not leave the educational world. Truly, his health was broken, but this did not stop him, for now he had more time to lecture and promote his theory. Harris promised to finish his lecture series at Washington University in Saint Louis before returning to the East. When this series of lectures ended Harris had made arrangements to sail for Europe. On August 14, 1880, Harris took his first trip abroad. With him he carried many letters of introduction which he did not need, for his fame had spread before him through the International Congress and the Journal of Speculative Philosophy. His first stop abroad was at the Belgian

Education Congress at Brussels. Harris observed that discussions at the Congress were often heated and marked by oratory. He took particular note of the prominence of women in the primary department; the discussion of culture versus vocational studies; the general application of Froebel's methods of education higher than the kindergarten; and the emphasis on the scientific over against literary courses.<sup>21</sup>

From Belgium Harris then went to England without visiting any of the other countries on the continent. In England he drew comparisons of the school board meetings with those he knew so well in Saint Louis and noted that the caste system prevailed. He visited the following societies: Froebel's Society for the Promotion of the Kindergarten System; the Kindergarten Training College; the High School at Birmingham, established in 1552 by King Edward VI; Common and Lower and Middle School; and the Bath Row Girls' School. At Liverpool he visited the Protestant Section of the Industrial School for truants and the South Corporation Certified Day Industrial School at Manchester. Harris visited Edinburgh and Glasgow College, and was impressed very greatly with the Scotch system of schools. Harris took little time for sight-seeing and genealogical explorations of which he was so fond. John Fiske and Thomas Davidson, two fellow travelers, said

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Charles M. Perry, op. cit., p. 65.

this of Harris while on this trip abroad," . . . confined himself strictly to collecting data on the school systems. . . the published intention of his trip."<sup>22</sup>

Upon his return from abroad Harris definitely made up his mind to return to Concord, Massachusetts. The Concord Summer School of Philosophy had been organized and Harris was to be a lecturer. For the next nine years Harris stayed with the school in order to be near the best philosophers of that time, notably, Emerson, Spencer, Alcott, Snider, Walt Whitman, and others. At first the school prospered since many wealthy people supported it and attended the lectures. Upon the death of Alcott the school seemed to collapse. The summer of 1888 was devoted to Alcott's philosophy. In these late years Sanborn noticed the lack of attendance and the school's failure to draw speakers. Sanborn graciously announced the school's closing so as to appear that it would give Harris an opportunity to visit Europe more at leisure than he had formerly done.<sup>23</sup>

During his so-called "retirement" Harris was offered many positions in the field of education. Indiana State University, Missouri State University, Nebraska State University, Western Reserve University, and the University of Texas, at one time or other offered him a position as president. During these

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<sup>22</sup>Leidecker, op. cit., p. 394.

<sup>23</sup>Perry, op. cit., p. 68.

retirement years Harris served as Superintendent of Schools at Concord, lectured at Boston University, and was appointed to the Board of Overseers of Harvard College. In addition he traveled extensively and spoke to teachers' organizations when asked. When Harris retired he had a study built in his Concord home for all his books and a warm place to receive his guests. He was never too busy to receive anyone who wished to see him. He never monopolized a conversation. His cordiality was genuine. His cheerfulness and kindness attracted all to him, be they scholars or children. The latter were very fond of him.<sup>24</sup>

Harris was a modest and frugal man who kept careful account of his personal expenditures and of every enterprise in which he was interested or with which he had contact, but he spent money lavishly on books.

In the late fall of 1888, Harris received his first hint of being asked to take the office of United States Commissioner of Education. Because of his political affiliations Harris had no hope of being chosen for this position and sailed with his family for Europe to spend three months sightseeing. Upon arriving in Paris, France, Harris received a cablegram apprising him of his appointment as United States Commissioner of Education, effective September 3, 1889.<sup>25</sup> On his return from Europe,

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<sup>24</sup> Leidecker, op. cit., p. 446.

<sup>25</sup> Ibid., p. 462.

Harris was sworn into office on September 12, 1889, as the fourth United States Commissioner of Education.

During his career in Washington as the United States Commissioner of Education, Harris brought credit to the office. His office became an office of information rather than one that dictated duties. Every educator of distinction sought his advice. He advocated bigger and better schools rather than the "little red school." He spoke on the development of the high school as a substitute for college education; advocated the teaching of cookery; and also felt a need for the Y.W. C. A. in education. He never exercised dictatorial power or overstepped the boundaries of his office. The teaching of grammar, history, arithmetic, language, and science the new commissioner strongly advocated; however, he felt that the Bible did not belong in the classroom. Furthermore, he was in favor of the kindergarten and had this to say of the kindergarten in the District of Columbia.

. . . . . reach the spoiled child of the rich who is wont to rule and dominate by virtue of his education under nurses and governesses, and 'gather in the children of the slum at a sufficiently early age to cure them.'

Thus, more than a problem of pedagogy, the kindergarten to him became an unqualified good in society, for without it

the children of the rich produce "as much injury to the community as the criminals of the slums." He never tired in crusading for the kindergarten and wrote much in its defense and spoke often in its behalf.

As United States Commissioner of Education, Harris was in position to bring his educational theory to light and have it winnowed and tested.<sup>27</sup> Thus, he demonstrated his ability to realize educational ideals born of critical observation and reflection.<sup>28</sup> During these years, through the medium of his reports, lectures and multitudinous articles in magazines, his educational influence became greater than ever before. None of his contemporaries approached him in range of educational interest.<sup>29</sup> Concerning him Thwing wrote

For seventeen years he served in the office of United States Commissioner of Education in which individual initiative, personal power and prestige contributed great weight to the illustration and the suggestion of new methods of education. His reports were concerned with immediate problems, processes, undertakings and movements, yet the discussions which he made of current educational problems were supported by the strength of great and lasting principles and illuminated by the light which his prolonged and noble experience offered.<sup>30</sup>

<sup>27</sup> Encyclopedia of Modern Education, p. 360.

<sup>28</sup> Cyclopedia of Education, p. 200.

<sup>29</sup> Dictionary of American Biography, p. 329.

<sup>30</sup> Thwing, op. cit., pp. 309-13.



During his years as Commissioner of Education, Harris served on many committees. A number of these committees accepted the philosophy of Harris and his ideals. He was chairman of a sub-committee of the "Committee of Twelve"<sup>31</sup> which considered the problems of instruction and discipline in the rural schools. He also served as chairman of a sub-committee of the "Committee of Fifteen"<sup>32</sup> upon the correlation of studies which was submitted to the National Education Association in 1895, and constituted an epoch-making contribution to educational literature.

After seventeen years of service as Commissioner of Education, Harris tendered his resignation, and because of his distinguished service in the cause of education he became the recipient of an allowance from the Carnegie Foundation for the Advancement of Teaching as the first man to whom such recognition for meritorious service was given-- the highest retiring allowance which its rules will allow, an annual income of three thousand dollars.<sup>33</sup>

In tribute to the efforts of Harris toward a better educational system many great educators felt a sincere loss upon his resignation as Commissioner of Education and wrote

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<sup>31</sup>W. T. Harris, Report of the Sub-Committee on Instruction and Discipline in Rural Schools, Report of the Commissioner of Education (1896-97), I, 873-85.

<sup>32</sup>W. T. Harris, "Report of the Sub-Committee on Correlation of Studies," National Education Association Proceedings, 1895, pp. 287-33.

<sup>33</sup>Perry, op. cit., p. 97.

great praise about him. An article in The Nation, July 1906, stresses the prestige which Harris brought to the office.

The office of Commissioner of Education has never before commanded so great a man as Dr. Harris. Before his coming the place was rather obscure and unimportant. Probably one thought that the bureau might be raised to prominence and power. The salary until lately was ridiculously small and even now it is considerably less than is paid a number of state and city superintendents of schools. The government has never treated the office with deserved respect. . . . When President Harrison appointed him Commissioner of Education they were generally satisfied. He was a man whose expert judgment commanded the respect of the world. At once the bureau began to attract attention. <sup>34</sup>

Continuous hard work as Commissioner of Education had brought about a decline in Harris' health. He laid plans for an increase in his literary activity and now began to classify his works according to their content, particularly in art, philosophy, and education. The retired commissioner caught up on his reading and re-read the books which meant much to him. In 1908 Harris commenced reading Hegel's Philosophy of History for the seventeenth time. <sup>35</sup>

Until his last moments the retired educator continued to be active in school activities. Like Dr. Eliot, Harris lived to see the great work which he had done recognized as

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<sup>34</sup> Ossian Lang, "The Commissionership of Education," The Nation, LXXVIII (July, 1906), 9.

<sup>35</sup> James M. Greenwood, "William Torrey Harris," National Education Association Proceedings, 1910, pp. 92-

part of the noblest service, of and to, the generation in which he had lived and which he so nobly served.<sup>36</sup> On November 5, 1907, Harris passed away in Providence, Rhode Island.<sup>37</sup>

On Putman Heights, Windham County, Connecticut, in the cemetery where he is buried, is an epitaph on the monument dedicated to the memory of William Torrey Harris taken from the twelfth chapter of the Prophet Daniel, modern translation: "The teacher shall shine as the brightness of the firmament; and they that turn many to righteousness, as the stars, forever and ever."<sup>38</sup>

#### Some of the Works of Harris

To record the work of such a man as Harris would be tremendous, therefore, only some of his accomplishments are discussed. These accomplishments begin with his career in Saint Louis, then follow the series of lectures at Concord School of Philosophy, then his long service as United States Commissioner of Education, and finally comes a list of some of the more important works which were written after his retirement. Many were extraordinary, whether viewed from the standpoint of quantity, or the quality or the range of the subject treated. The bibliography of his writings contained

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<sup>36</sup> Thwing, op. cit., p. 313.

<sup>37</sup> Leidecker, op. cit., p. 583.

<sup>38</sup> Perry, op. cit., p. 60.

479 separate titles which covered almost all the important works that have been discussed in the educational world during the last half century.<sup>39</sup>

The first era of Harris' career found him as a teacher, and then as assistant superintendent. During this time he began his writing. His first thought was that the course of study had to be completely renovated.<sup>40</sup> The success in changing the curriculum was so great that he received international fame. The curriculum bore much philosophy and insight. It also contained his five windows of the soul which are as follows: (1) mathematics (2) geography and biology (3) art and literature (4) grammar and technical and scientific study<sup>41</sup> of language leading to logic and psychology, and (5) history.<sup>41</sup> Harris put into the curriculum such things as music and vocal studies. He had this to say about music, "Let me make the song of a people and I care not who makes the law."<sup>42</sup> Natural science was put into the curriculum in 1871 by the school board and was taught by Harris himself. Harris broke traditions in many other fields of education, but one of the greatest was the advocacy of co-education. "Boys and girls should be together because each should learn to live together early in life and not wait till they are grown."<sup>43</sup>

<sup>39</sup>Cyclopedia of Education, III, 219-20.

<sup>40</sup>Kurt Leidecker, Yankee Teacher (New York, 1946), p. 309.

<sup>41</sup>Thwing, Guides, Philosophers, and Friends (New York, 1927), p. 154.

<sup>42</sup>Leidecker, op. cit., p. 473.

<sup>43</sup>Ibid., p. 309.

Another of Harris' contributions to society was his advocacy of the continuous educational program after formal education stopped. Anxious to extend to adults the methods and points of view of higher learning, Harris warmly supported this movement for university extension. The origin of extension work took place in England.

Since demagogism increased in proportion to the neglect of the lower stratum of society by the highest, Harris contended that enlightened selfishness dictated the support of extension work in this country. In view of the damagocic and sensational appeal of the popular newspaper, it was all the more necessary to equip the masses with the ability to resist such appeal. Just as the earlier educators had advocated the free common schools to preserve the established order, Harris championed university extension.<sup>44</sup>

Harris joined the Saint Louis Society of Useful Knowledge in 1879, whose support came from the conviction that cooperation may be made to yield large results in the accumulation and diffusion of knowledge. This was the original Home Study Extension Course in Saint Louis. The teachers under this program visited the pupils to help them, no matter how far apart they were.<sup>45</sup>

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<sup>44</sup>W. T. Harris, "The Place of University Extension in America," N. E. A. Proceedings, 1890, pp. 242-253.

<sup>45</sup>Leidecker, op. cit., p. 315.

The People's Dime Sunday Lectures which were given by men who were authorities in their fields were also started by Harris. He championed this cause to aid in the establishment of the Saint Louis Museum of Arts and Sciences.

Moreover, Harris believed in equality and continually advocated the education of women. He never missed an opportunity to lecture on woman suffrage and co-education. He spoke often on the basic factors of woman's participation in politics, industry, and education. His great desire for learning encouraged him to persuade the school board to establish a library, but he did not succeed in this project. Nevertheless, through his friendship with men in public office and business, the first public school library was established in 1865.<sup>46</sup> Harris was also a lecturer at Washington University and his advice was often sought during his time as Superintendent of Schools in Saint Louis.

Upon leaving Saint Louis and returning to the East and the Summer School of Philosophy, Harris wrote many articles. He never refused an opportunity to speak before a group of teachers or educators when asked. While connected with the School of Philosophy in Concord he held different school administrative offices. Harris became well-known for his philosophy. "His addresses were notable for their beauty

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of feeling and finish of expression."<sup>47</sup> Harris' fame spread more and more during this era of study and teaching. The lecture series at Boston University helped him greatly in being appointed to the position of United States Commissioner of Education.

#### United States Commissioner of Education Era

His influence may be felt even though a man differs in his political views. Harris knew that his party affiliation would probably stop his appointment as United States Commissioner of Education by President Harrison, but to his surprise Harrison appointed him the fourth United States Commissioner of Education. The salary was very low and he was allowed only a small space for an office. These conditions did not hinder Harris, for he began to work and bring the office recognition. He gave his opinion frankly to anyone who sought it, either friend or foe. This new position did not cause Harris to slacken his pace, but to increase it. His activities now became numerous and his appointment to various committees increased. He started many new programs while Commissioner, one of which was the Reindeer Project. This project was instigated to keep the Eskimos from starving to death because of the white man's greed for wealth from killing seals and the catching of fish

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<sup>47</sup>

Encyclopedia of Modern Education, p. 360.

near the Eskimo's homeland. The result of all this greed caused the Eskimo to migrate and become a burden to his country. Because of the Reindeer Project, the Commissioner of Education, with the help of Alaskan missionaries, was able to teach natives how to take care of themselves through means other than hunting and fishing. He advocated a separate bureau for land grant colleges which he had promoted; supported the founding of the Farmer's Education Association; recommended reading of newspapers and spoke of its values in a series of four lectures in Knoxville, Tennessee, on "The Newspaper as an Educator and Its Relation to the School."<sup>48</sup>

Harris helped to formulate the policies of the National Education Association. During his leadership as Commissioner of Education Harris continued to lecture on education. He also spoke to philosophical gatherings when time permitted. This continued to bring his name before more people. He travelled widely during his years in office and thus paved the way for better education throughout the world.

Upon resigning his post as Commissioner of Education, Harris moved back to Providence, Rhode Island. No matter when he spoke his first thought was on America and the education of the people. During this time he published his



thirty-seventh volume, Psychologic Foundation of Education, an attempt to show the genesis of the higher faculties of the mind.

Harris' last service was connected with the editorship of Webster's New International Dictionary. He was editor-in-chief for two decades and was the inventor of the now famous "divided page edition published in 1910, which made possible the publication of 400,000 words in one volume."<sup>49</sup>

Below are listed a few of his writings, books and honors. He received the honorary title of Officier de l'Academie at the Paris Exposition of 1878; represented the United States Bureau of Education at the International Congress of Education, Brussels, 1880; and received a second honor from the French Government in 1889; chief editor of Appleton's School Readers; edited the Department of Philosophy in Johnson's Encyclopedia and wrote many articles.

Some of his books included the following: Hegel's Logic; The Spiritual Sense of Dante's Divine Commedia; Introduction to the Study of Philosophy; Psychologic Foundation of Education, and others.<sup>50</sup> He also wrote articles on "Sex in Education;" "Culture and Discipline versus Information and

<sup>49</sup>Perry, op. cit., p. 55.

<sup>50</sup>Thwing, Guides, Philosopher, and Friends, p. 144.

Dexterity;" "Value of Culture in Education;" "Tendencies of Educational Systems;" "The American School System", and many others.

#### Time in Which Harris Worked

Harris' career covered three different periods in the history of our country. While he was superintendent of schools in Saint Louis the Civil War was raging and many of the schools were destroyed, were occupied by the armed forces, and were frequently overrun by marauding and guerrilla bands. This condition was aggravated further by the failure of the board of education to pay teachers which caused many of the better instructors to leave the profession.

While still superintendent of the Saint Louis schools, another crisis followed which grew out of the war. A depression occurred and Harris once more was forced to use every means at his disposal to keep the schools open.

The third era of his career covered the span of years from 1880 to his death. During his association with the Concord School of Philosophy, a period of nine years, he wrote many articles on education. Upon taking the oath of office as fourth United States Commissioner of Education a political upheaval was taking place, followed by the Spanish-American War, and then the annexation of the Philippine Islands and Puerto Rico.

In the following chapter an attempt is made to identify Harris' educational philosophy, or his beliefs and teachings, and to determine whether or not these are original or merely ideas of such philosophers as Hegel, Rousseau, Kant, Pestalozzi, Herbart, Froebel, and Saint Thomas Aquinas.

## CHAPTER III

### THE PHILOSOPHY OF WILLIAM TORREY HARRIS

To understand one's philosophy it is often necessary to read the philosophy of one's predecessors. William Torrey Harris was no exception and it is the aim of this chapter to discover if his ideas are original or a mixture of a great many ideas of past philosophers. One of the greatest philosophers of all time, Aristotle, in his educational thinking professed that the existing practices are perplexing and no one knows on what principle we should proceed--should the useful in life, or should virtue, or should the higher knowledge be the aim of our training. The customary branches of education in Aristotle's time are four in number: (1) reading and writing (2) gymnastic exercises (3) music, to which sometimes is added (4) drawing. Of these, reading and writing and drawing were regarded as useful for the purpose of life in a variety of ways, and gymnastic exercises were thought to infuse courage.<sup>1</sup>

However, centuries passed after the death of Aristotle, before Saint Thomas Aquinas began his teaching and lecturing. Aquinas used the philosophy of Aristotle based on physical

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<sup>1</sup>  
W. D. Ross, Aristotle Selections (New York, 1927), pp. 317-318.

and metaphysical doctrine. Aquinas had a keen interest in politics, mysticism, metaphysics, and theology. He was the ideal scholar, persuading instead of denouncing his opponents, critical within reason, sober in judgment and proving all things while holding fast to that which is good, and was the producer of the most astounding synthesis of past philosophical thoughts.<sup>2</sup>

Saint Thomas Aquinas' methods could not be characterized by one word unless it can be called eclectic. It is analytic and synthetic. He chose the best that could be found in those who preceded him, carefully sifting the chaff from the wheat, approving what was true, rejecting the false. No writer surpassed him in the faculty of expressing in a few well chosen words the truth gathered from a multitude of varying and conflicting opinions.

In philosophy, he says, arguments from authority are of second importance; philosophy does not consist of knowing what men have said, but in knowing the truth.<sup>3</sup>

The next great educational philosopher who had indirect influence on Harris' thinking was Martin Luther who advocated that religion and the church should not dominate education. Luther looked upon the family as an educational institution, that is, the primary unit, even ahead of the

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<sup>2</sup> Encyclopedia Britannica, II, 166.

<sup>3</sup> Catholic Encyclopedia, XIV, 668.

school. He strove for a wider dissemination of the opportunities for education and condemned the education given by monastic and ecclesiastical schools, and from an oration he spoke as follows on his educational philosophy of education:

Were there neither soul, heaven, nor hell it would be still necessary to have school for the sake of affairs here below, as the history of the Greeks and the Romans plainly teaches. The world has need of educated men and women, to the end that men may govern the country properly, and that the women may properly bring up their children, care for their domestics and direct the affairs of their household. <sup>4</sup>

In Luther's view, education became something broader than the school. His curriculum included Latin, Greek, logic, and mathematics as demanded by the times, history, science, and music, which became a component part of the education of all. Gymnastics and physical education were given a place in the school. Moreover, Luther saw clearly the fundamental importance of universal education and thus he could bring schooling to all people, "noble and common, rich and poor, it was to include both boys and girls--a remarkable advance;" and he insisted that it was the state's place to have obligatory attendance. From an address delivered by Luther the following quotation is taken:

. . . My opinion is that we must send the boys to school one or two hours a day, and have them

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Paul Monroe, A Brief Course in the History of Education (New York, 1910), p. 196.

learn a trade at home for the rest of the time.  
It is desirable that these two occupations march  
side by side. . . . 5

Just as Luther had indirect bearing on Harris, the philosophy and teachings of John Comenius exerted an influence upon the works of Harris. The educational thinking of Comenius is summarized as follows: "The purpose of education was to assist man in attaining eternal happiness with God." This happiness was to be obtained through moral control over one's self and consequently of all things. Knowledge, virtue, and piety, in this order of their acquisition, were the aims of education. With his interpretation of knowledge being so radical it affected vitally every phase of education--content, organization, method, and textbooks.

Consequently with this theory of knowledge, books should be organized in a systematic method so that each chapter and each paragraph leads up to the next, and thus, embodies his universal principle of methods. The aim of Comenius' theory was to give an accurate anatomy of the universe, dissecting the veins and limbs of all things in such a way that there shall be nothing that is not seen and that each part shall appear in its proper place and without confusion.

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<sup>5</sup> M. W. Keating, Comenius (New York, 1931), pp. 41-46.

<sup>6</sup> Ibid., pp. 94-96.

Harris also studied the writings of Rousseau who revolted against the glaring social inequalities of his age. A portion of Rousseau's philosophy "was to develop a new faith in man, to work out a new ideal life, to infuse a new spirit into society, and to re-establish a basis for religion in man's nature." Rousseau had the ability to embody great ideas but lacked the ability to put them into action, and was the first to preach that man had a right to education as a right of birth. Rousseau's book, Emile, describes the education of man and thus his philosophy can be derived from it. Rousseau believed that education is a "natural process" and that education should prepare the individual to live in a society wherein each should contribute by his own labor to his own support, should be bound by sympathy to all his fellowmen and by benevolence to all that need his aid.<sup>7</sup>

Rousseau advocated a "return to nature" because he was disgusted with civilization. In Emile he points out that the corruption of human life and human society is due to artificial restraints imposed on the individual by educated and social groups. His educational theory, therefore, starts with the supposition that if these civilizations are removed and the original nature of man is given free play, a life of natural innocence and perfection will result.<sup>8</sup>

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<sup>7</sup>Thomas Davidson, Rousseau and Education According to Nature (New York, 1900), pp. 211-224, 237.

<sup>8</sup>John Angus MacVannel, The Educational Theories of Herbart and Froebel (New York, 1905), p. 50.



In Rousseau's philosophy there lies a flaw that belittled a fact which Pestalozzi was later to prove with clearness, that all regeneration of mankind depends on the increase of love. A person who is to grow into a balanced and congenial personality must feel the nearness of family relationship in the early years of his life.<sup>9</sup>

Moreover, the philosophy of Kant which Harris studied while at Yale, shows that his ideas of education are reflected in the following thoughts. Kant believed in asking the questions, "What is experience?" "What does it involve, and how do we get knowledge by means of it?" He believed that it comes through sense and understanding, both of which are essential. His educational philosophies are stated briefly as follows:

1. Everything is derived from experience.
2. Personal experience is not a stream of isolated sensations, but an organic unity.
3. The individual is no mere knowing machine in a world lacking intelligence.
4. The distinction between the self and the object of experience, which relates objects to the self, is clear.
5. In his ethical interpretation of experience, Kant discovered the law for man's correct action not in anything foreign or external to him, but in man's innermost nature. 10

Kant, who was followed by Pestalozzi, took the philosophy that education should raise human beings into an

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<sup>9</sup>Robert Ulich, History of Educational Thought (New York, 1945), p. 50.

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Monroe, op. cit., pp. 24-28.

intelligent, social and moral life. The individual, left to himself or deprived of education, can never become human. In the interest of its own preservation and advancement, society must transform natural man into social man. Education then must be thought of fundamentally as a national responsibility, and that the theory of education must proceed according to nature.

To continue the readings of Harris, one must return to Pestalozzi who took some of Rousseau's theory and put it to work, using the philosophy that education is the harmonious development of all the powers of the individual. His beliefs were that the only way the world would change was that education is to become the chief means to social elevation. During his education it is brought out what Rousseau had demanded in a theoretical way for one individual, in his book Emile, Pestalozzi demanded for every child, no matter how poor and humble his surroundings or how limited his capacities. Pestalozzi also advocated the "return to nature" on ideas in the education of children. His sole aim in life was to transfer the home to the school and develop teachers instead of masters. He endeavored to analyze knowledge in any particular line into its simplest elements.

The conception of education as a fundamental source of social elevation... recognized the rational organization of elementary education as a matter of primary importance. Recognition of the central and fundamental influence of home life, and the necessity of correlation and cooperation and various educational factors of the community in the education of the individual. . . the mother

is the child's first and best teacher. . . . demand that instruction be based on the immediate experience of the individual; that sense-perception be made the basis of all human learning. . . . love is the essential form of all human learning. . . . restore to credit the process of the method of sense-perception. . . . simplification of instruction. . . . means of making clear all knowledge and language. <sup>11</sup>

Froebel, one of the "nature" philosophers also, took his philosophy from Kant. He combined the theory of all those whom he studied, and developed his philosophy on the education of the child beginning with spontaneous activity. "The Froebelian tendency laid chief emphasis upon the importance of the child, upon natural interest as the initial point of all instruction, upon play, constructive work and study of nature as the chief means of instruction."<sup>12</sup> Froebel gave to all manual and industrial arts and to all forms of constructive work the place which they are coming to occupy in modern schooling on definite educational grounds.

Moreover, Froebel considered education to be a process of creative self-development, and regarded it as an unfolding of the inner self by means of spontaneous self-activity on the part of the child. The child must learn by doing, by experience, and by creating. Froebel left these permanent ideas of educational theory to succeeding generations, which consists namely "in leading man, as a thinking

<sup>11</sup>MacVannel, op. cit., pp. 63-65.

<sup>12</sup>Monroe, op. cit., p. 349.

intelligent being, growing into self-consciousness, to a pure and unsullied conscious and free representation of the inner law of divine unity, and in teaching him ways and means thereto." <sup>13</sup>

Nevertheless, during the life of Pestalozzi there lived another philosopher who idolized Kant and his theory of idealism. Herbart stressed the point that education is based on ethics and psychology. The aim of education is to instill morality or virtue; its means is educational instruction. He also states that "inner freedom is the complete harmony of willing and moral insight." "Good will," the most important characteristic of Herbart's conception of morality," is the steady resolution of a man to consider himself as an individual under the law which is universally binding." Herbart claimed that ideas spring from two main sources--experience and social intercourse. Therefore, one may summarize Herbart's contributions to educational theory into the following categories: (1) he contended that both nature and mind are characterized by the environment of an intellectual and moral world. (2) He believed that the perfection of the individual is not attained by one who lives in accordance with the idea of "return to nature," nor (3) by him who cares but to pass into the silent life," but (4) by

one who sees treasured up in the various relationships of concrete social life--family, community, state, church (5) the spiritual experience of the human race, and who is consequently living a shared life along the beaten highways of this common world.<sup>14</sup>

It is only fitting that the philosophy of Harris should be reviewed to show the similarity of his philosophy and that of his predecessors. Harris followed the doctrine of the "self-alienated spirit." The self-alienated spirit is one who has emancipated himself by education and culture from the original self. The word "self-alienated" seems to have been coined by Harris. The transcending of the original nature is the process of education. The original animal nature of man is transformed into spiritual nature by the mastery of the tools of intercommunication and thought, and by the knowledge of the culture of the society of which the self is a part. The true self is a spirit, a mind, a soul. Self-alienation is possible because of self-activity. "Self-activity is a metaphysical principle, self-active will, that reveals itself as effort and work as contrasted with activity that is mere caprice."<sup>15</sup>

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<sup>14</sup> MacVannel, op. cit., pp. 46-47.

<sup>15</sup> Kinzer, op. cit., p. 24.

"The philosophical view," he insists, is always the practical one, for it alone sees the bearing of all the conditioning circumstances. It is only when man acts in full view of all the circumstances that he acts practical.<sup>16</sup>

Nevertheless, the philosophy that Harris began to profess came to him through a young stove molder of German parentage who studied Hegel. Whether the population of Saint Louis, which was largely of German extraction, had anything to do with his concentration on Hegel is not known. It is known that Henry C. Brockmeyer, the stove molder who was a student of German idealism, particularly of the works of Hegel and Kant, had much to do with Harris' study of Hegel and his writings.

The Hegelian philosophy which Harris made the basis of all his social and educational thinking, possessed the virtue of being thoroughly optimistic and idealistic in character. It infused the world with a divine purpose and endowed the individual with a noble and immortal destiny. At the same time, it justified the existing order by declaring that whatever is, is an inevitable stage in the unfolding of objective reason or the world spirit, and is, therefore, right.<sup>17</sup>

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W. T. Harris, "The Philosophical Aspects of History," Papers of the American Historical Association, V (1889), 247.

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Merle E. Curti, Social Ideas of American Education (Dallas, Texas, 1935), pp. 313-313.

However, Harris conformed to his belief that social order is not to be received from human authority, but by free choice. An individual's true spiritual self, which is constantly in conflict with his natural or physical self, can be realized only by adjusting himself to the divinely appointed environment and institutions that are in actual existence.

According to Harris, sociology is the basis of educational philosophy, and the evaluation of society is the key to education in all its parts. Education has its influence with all that enters into the civilization of time in which one lives. The period into which a child is born will influence the type of study he will more than likely have in school, but through the customs and habits of his parents he will learn before he enters formal education.

Throughout the existence of man one finds that past centuries have tried to improve mankind. The past has left something to be studied and to which much may be added. The East gave the idea of subjection and obedience to authority while the West gave the idea of the importance of the individual. The European countries of the Anglo-Saxon descent contributed self-government, while still giving to each individual freedom from authority. The American colonies proceeded to carry out this idea to a greater extent by having

local self-government in practice in public education and  
 also in industry.<sup>19</sup>

The child learns through the successes and blunders of others by availing himself of the experiences of the human race. His inheritance becomes the combined contributions of civilization. Through this means, society conserves its institutions and civilization and makes possible a progress to higher levels.

Nevertheless, we find that the individual as a member of a family, a city, a nation, or a church has many selves; and as a member of these large wholes, or institutions, he may participate, to a degree, in the fruits of civilization. An educational system is to be tried by the degree in which it fits individuals to take part in the institution of civilization. Society furnishes the ideals for education and education must fit the individual to take part in society. Accordingly, one of the basic conceptions of Harris' philosophy is that the ideals of education are determined by society and not by the ability of individual "education." Harris said it "cannot be determined except from the high ground of the spirit of civilization." Throughout his life Harris made this belief the determining factor in formulating



the course of study and the function of the public school system.<sup>20</sup>

Although many educators derive their philosophy from a variety of sources, Harris derived his from the principles that have controlled nations and religions. The most important factors of the schools, according to Harris, are to initiate the pupil into technicalities of intercommunication with his fellowman and to familiarize him with the ideas that underlie his civilization and which he must use as tools of thought if he would observe and understand the phases of human life around him; for these phases of human life--all that relate to human institutions--all that relate to the science of society, and the moral structure of civilization are invisible to the human being who has not the aid of elementary ideas with which to see them.<sup>21</sup>

The will of man and the will of society are in constant conflict. The individual is enclosed by the many social institutions that he cannot escape from and must either harmonize with them or be crushed by them. Consequently education must "alienate" the individual from his natural self and lead him to accept social customs in order to help him to realize his true self, thus the nature of individuals will be lifted and strengthened. This is the theory of

<sup>20</sup>

W. T. Harris, Psychologic Foundation of Education, (New York, 1898), p. viii.

<sup>21</sup>Ibid., p. 265.

self-alienation and is the process by which the individual is introduced to the customs of the past generations and is adjusted to the environment.

According to Harris, every man has two selves--a natural or physical self and a spiritual self. In the beginning the physical or natural self of man is more prominent, but just as man conquers material nature by the organization of human society according to ideals of justice, education conquers man's animal nature by the spiritual nature. "Education is the process of the adoption of the social order in place of one's mere animal caprice." It is "the replacing of the freedom of the movement for the freedom of eternity."<sup>22</sup>

Education becomes a process of changing, according to the theory of self-alienation. Harris, therefore, placed more emphasis upon the value of effort and work, and less emphasis upon the value of material interest and play in education. In this theory, absorbing the knowledge of content, unknown to the child, must be obtained only by effort and work. The child, through this theory, must determine what interests are good and which are bad, not as he is, but as he is to be in the eyes of society in which is to live. "Interest must be acknowledged as subordinate to the higher

question of choice of a course of study that will correlate the child with the civilization into which he is born."<sup>23</sup>

Harris had a definite idea about formal study. He believed that it was necessary for a person to study reading, writing, and arithmetic as a basis or as a means of acquiring the content side. These topics are often dull and uninteresting and the pupil must put forth more energy, work, and will power to master them. Methods need to be developed to create more interest in these subjects, but devices only create a temporary effect. Through self-alienation the pupils must familiarize themselves with them. "No formal labor on a great objective field is ever lost wholly" Harris says because "at the very least it has the merit of familiarizing the pupil with the content of some one extensive province that borders on his life."<sup>24</sup>

Harris' idea of formal discipline is given in the following statement. "There should be no merely formal drill in school for its own sake; there should be, always, a substantial content to be gained."<sup>25</sup> He advocated the study of Latin and Greek, not as a formal training, but because of his belief that these two languages and countries represent the beginning of civilization and that an understanding of

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<sup>23</sup>W. T. Harris, "Education at the Close of the Century," N. E. A. Proceedings (1900), pp. 199-205.

<sup>24</sup>W. T. Harris, "Report of the Sub-Committee on the Correlation of Studies in Elementary Grades," N. E. A. Proceedings (1895), p. 293.

<sup>25</sup>Ibid., p. 298.

the form and content of society cannot be obtained without a knowledge of these languages.

Will-power of a high order, Harris relates, involves choice between the least of two alternatives. Choice involves the ability to form or make ideals, to vision the possibilities or potentialities beyond the present. Will power, to an extent, is creative. When the will comes to realize self-determination and reaches a higher stage of self-consciousness, it is then guided by motives. The real combining or directing power of man lies in this ability of the will to see clearly all the possibilities in a given situation and thus create a situation that is different from the given one. <sup>26</sup>

The theory of self-alienation from a workable point of view lays its stress on effort or task and in its failure to recognize the interest and activities of the child, it might have undue harm. In the extreme case, this principle would formulate a course of study without considering the development of the child; or, discipline would be relentless without consideration of individual differences. Nevertheless, Harris pointed out the importance of the value of contents in the subject of a course of study. His human theories of school discipline as well as his opposition to corporal punishment became evident. He said that his ideas on punishment were modified because of his love for and reverence of childhood.

Since all nations are not ruled in the same manner, one will not find the same type of education existing in every country. Harris' sociological and philosophical status demanded that all children be educated to the full extent of their ability. He maintained that no one should be denied an education because of his social standing, sex, or mentality, and that everyone should be educated toward the ideal of self-control and culture. The most important phase of education which Harris deduced from the American ideal of democracy and freedom, was his defense of the non-denominational character of the school. Roberts stated that Harris "had to fight the hardest for it and endured some of the most underhanded attacks."<sup>27</sup> One can see from the preceding statement and from his addresses that Harris lived and strived to educate all children on the same basis. Harris' lectures advocated a rich course of study. He opposed separate courses of study in elementary schools, high schools, and colleges. He professed education should start at the bottom and work to the top in a correlated manner. Harris thoroughly objected to trade and vocational subjects for youth because they would not be enlightened in the way of life; he gave limited approval to industrial arts. He also advocated the education of girls as well as boys and was in favor of the passage of a compulsory education bill.

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<sup>27</sup>J. S. Roberts, op. cit., pp. 61-64.

Accordingly, Harris, like some of his predecessors, claimed that the most important factors of mankind were the family, the school, the state and the church. All of these social institutions are a part of the educational system of man. Each plays an important phase in the education of the individual through the performance and response of the mind in living with these diversified forms and activities.

Each of the cardinal institutions exercises on the members of society its peculiar education. The first stage of education is the process called "nurture." It is from birth to the age of five or six. The parents and other relatives of the child impress on him his first lessons in human life consisting of obedience and courtesy, personal habits relative to taking food, some degree of self-control, cleanliness of clothing and person, consideration for others and above all the use of his mother tongue. He learns mostly through imitating other members of the family. As the child leaves the family circle, he continues to learn by imitation and Harris considers imitation one of the greatest means of education. Play, class recitation, social life, both in the family and social institutions, the acquiring of languages, are all based on imitation and this leads to self-activity.<sup>28</sup>

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<sup>28</sup>W. T. Harris, Psychologic Foundation of Education (New York, 1898), pp. 264-306.

In acquiring a language, the child has the opportunity to avail himself of the wisdom of society--a growth into a larger social self. The child has now acquired the most powerful instrument that exists, self-education. He begins to think for himself and have ideas, and having seen the possibilities of ideals, the child begins to have will power. "Thus in the process of learning language, the child is unfolding genuine will power. . . . recognition of the self as causative or creative of new form, is self-consciousness, the recognition of one's own individuality."<sup>29</sup>

In the past families had their own system of education until civilization started the school and molded it in with all forces of society. Harris thought that school was less important in the educational process than the family, the church, the civil community, and the state. The school was established for the preservation of the values of the past and the adjusting of the individual to society.<sup>30</sup>

The function of education is to adjust the individual to society in order that he might find his true self--this self shall be founded on sociology, "the science of a combination of men into social wholes." Education includes not only the school but the family, the church, the community, and the

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<sup>29</sup>  
Ibid., p. 306.

<sup>30</sup>  
W. T. Harris, "How the School Strengthens the Individuality of the Pupils," A. E. A. Proceedings (1902), pp. 113-125.

state. "Place the child's hands in the hands of the great social whole and thus he is led toward his fruition."<sup>31</sup>

However, Harris professed that vocations educate also to a certain extent; when people limit themselves to a vocation they put a barrier in their path for they become skilled in a certain sphere of activity. He learns the value of division of labor and the value of another's thinking and activities. Accordingly, the free state receives the benefit of the individual's ability to produce, thus bringing comfort and enjoyment to mankind. The individual recognizes his responsibility to a higher self. He must yield ready obedience to the state and be willing to sacrifice his wealth and possessions, even his life. In this manner the state educates the citizen into a higher realization of human selfhood or personality than he had learned in the family and civil society. The fifth form of education consisting of art, religion, and science which Harris considered essential to the life of the individual. It is through religion that man discovers himself and realizes the character of his will and its acts. "Theology expounds the fundamental ideas which underlie the whole life of man."<sup>32</sup>

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W. T. Harris, "The Teacher as a Social Factor,"  
N. E. A. Proceedings (1896), p. 1906.

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W. T. Harris, Psychologic Foundation of Education  
 (New York, 1898), pp. 267-269.



Harris believed that the religion confessed by a people is all important in determining the degree of development of each and every other form of education, whether the state, the school, society, or of the family "nurture."

In the absence of religion in any nation, the individuals living under these conditions do not advance in society, therefore, religion is part of one's education which brings him into harmony and cooperation with his fellowman in totality. As the basis of civilization, religion was a social process by which the intellect, will, and heart of the individual was strengthened. Religion objects to bigamy and teaches that monogamy marriage was the only salvation for keeping the family individual; it provided assistance for the unfortunates of society, and above all, it inculcated respect for private property and for law and order. <sup>33</sup>

Harris felt that religion was an indispensable institution for promoting the proper relationship between the individual and the universal, the temporal, and the eternal. In view of the importance which he attached to religion, the religious tone of his idealistic philosophy and his deep study of the Greek Church Fathers on religion, his attitude toward the teaching of religion is an interesting one. He pointed out that the church and state should not be together at any time, thus each institution was more efficient.

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<sup>33</sup>W. T. Harris, "Social Culture in the Form of Education and Religion," Education Review, XXIX (January, 1905), 18-37.

Religion is spiritual and is taught in a far different manner from subjects in school. The mind toward religious truth is different from that of the student toward the intellectual. The basis of religious education is authority. Secular education is based on demonstration and verification. Religion is allegorical and symbolical, to be apprehended not merely by the intellect but by the imagination and the heart. Biblical instruction in public schools, Harris said, "would degenerate into mere deism bereft of living." Providence or else the secular school would be changed into a parochial school and the efficiency of secular instruction would be destroyed. The opinion that he formed from religion being taught in schools supported by tax revenue would result in the equivalent of a new religion being formed and expected to follow. Harris' sociological views caused his objections to parochial schools and he professed that all children should be taught by the public schools. Nevertheless, in contrast to his belief in matters of parochial schools, Harris did not object to boarding schools and spoke of them as being in the nature of a home and a school.<sup>34</sup>

The psychological view of education, as thought of, makes the child the starting point and interprets the meaning of the entire education process in terms of the development of

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<sup>34</sup> W. T. Harris, "The Separation of the Church from the School supported by Public Taxes," N. E. A. Proceedings (1903), pp. 351-60.

his innate powers and capacities. Education is based on the mental ability of the child and it should proceed from this basis to the subject matter and method of instruction by which the abilities may be developed to their fullest extent. From this viewpoint of the psychological aspect of education, "It is correct to say that there was very little scientific psychology in Dr. Harris' educational view."<sup>35</sup> He spoke many times on the topic of psychological foundation of education, of the courses of study, of art, literature, and history, yet his treatment is mainly philosophical.

Inasmuch as Harris' psychology ran parallel to his philosophy, it was a combination of what he terms the old and the new psychology. The old, mainly rationalistic, emphasized the philosophical ideas of self-activity, and sought to give a rational and consistent account of one's life. The new psychology, in his opinion, was concerned chiefly with the conditions that must be understood before man can be made to realize his ideals with the bodily conditions that "limit or enthrall the soul."<sup>36</sup>

Another of Harris' views of educational psychology is expressed by Merle E. Curti in Social Ideals of American Education. Curti stated that the Hegelian philosophy which Harris

<sup>35</sup> Roberts, op. cit., p. 82.

<sup>36</sup> W. T. Harris, "The Old Psychology Versus the New," Report of the Commissioner of Education, I (1893-1894) 433-37.

made the basis of all his social and educational thinking possessed the virtue of being thoroughly optimistic and idealistic in character. It infused the world with a divine power and endowed the individual with a noble and immortal destiny. At the same time it justified the existing order and authority by declaring that whatever is, is an inevitable stage, in unfolding of objective reason or the world spirit, and is therefore right.<sup>37</sup>

Harris, after mentioning "the new psychology" feared it would change the religious beliefs and convictions of many individuals, but he admitted that its best objectives were that it could aid in determining the best length of time for the recitation of subject matter before it caused fatigue.<sup>38</sup>

However, when Harris was thinking of education he did not let his psychological mind rule the ideas of education that ran in his mind or his type of teaching. The role of psychology in his system was to organize before hand the systematic procedure in which the subject was to be taught and what method of presentation would best adjust it to the pupils' ability. In all cases, psychological conditions were subordinated to sociological conditions. Harris stated that one's knowledge of psychology could arrange the length

<sup>37</sup> Curti, op. cit., pp. 312-313.

<sup>38</sup> W. T. Harris, "The Old Psychology Versus the New," Report of the Commissioner of Education, I (1893-94), 433-437.

and perplexity of subject matter to the ability of the students, rate the pupils in class according to their mentality, and design a course of study suitable to the intellectual ability of the students. Education, given in this manner by the teacher, removes the dull daily routine from class work, thereby lifting the students to a higher level of progress that eventually influences not only the present welfare of the students, but also the ensuing growth of civilization. <sup>39</sup>

Harris' conception of the object of education as a means of bringing up the child "most expeditiously into a correct understanding of his relation to the race," gave great importance to the course of study, for the course of study is the means by which the pupil may be brought into relation with civilization. The requirement of the civilization into which the child is born determines what he shall study. Elementary education must give to each child the tool by which he may participate in the culture of the race. <sup>40</sup>

According to Harris, reading, writing, arithmetic--the so-called three r's--grammar, geography, and United States history, furnish him the necessary discipline that enables him to take up the rudiments of human experience; they give him a mastery over the technical elements which enter the practical theories of human life.

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<sup>39</sup>Roberts, op. cit., p. 93.

<sup>40</sup>W. T. Harris, Psychologic Foundation of Education (New York, 1898), p. viii.

"There are five windows of the soul," Harris said, "which open out upon the five great divisions of the life of man." Two of these, arithmetic and geography, relate to man's comprehension and conquest over nature. Three others, which reveal the will power--social, civil, and religious, of the nation; grammar, which helps the child to comprehend his own spiritual self by giving him a view of the inner working of the mind of the race as they appear in the vocabulary, grammatical law, or syntax; and literature, which is "the completest expression of the sentiments, opinions, and convictions of the people--of their ideals, longings, aspirations."

Harris continues by saying that the student in the school falls naturally into these five co-ordinate groups; first, mathematics and physics; second, biology, and third, the study of literary works of art; fourth, grammar and the technical and scientific study of language, leading to such branches as logic and psychology; fifth, history of the sociological, political, and social institutions. Each of these groups should be represented in the curriculum of the school at all times by some topic suited to the age and previous training of the child.

Since the sole thought of transmitting to the individual the accumulated experience of the race was the object of

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education, Harris was led to believe that modern education was to learn how to master the textbook because the sum total of all past experiences of nations is consolidated and recorded in the textbook. Harris said, "The central object of the school is to teach youth to master the printed page, and how to enter the fruition of the moral and intellectual treasures of civilization which are contained in the text."<sup>42</sup>

The purpose of the class room discussion was not the idea of hearing a lesson or of testing, but Harris claimed it was a means of developing, elaborating, and criticizing the text. The reading, explanation, and verification of the textbook is done through class narration. The most important method of instruction is a scholarly reading of the textbook, along with the annexation of a spirited debate. In this way the principle of participation in a social institution takes place and the pupil has the opportunity to absorb more in this manner of education than solely the lecture of the teacher. He realizes too the value of language and the wide scope of general statement.<sup>43</sup>

According to Harris, work and play in the light of his theories of society and his doctrine of self-alienation are as follows: In work, man gives up his particular, special likes and dislikes, and relinquishes himself to some

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W. T. Harris, "How the Superintendent May Correct Defective Class Work," N. E. A. Proceedings (1906), p. 342.

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W. T. Harris, "Classification and Instruction in Rural Schools," N. E. A. Proceedings (1897), pp. 121-122.

particular demand of society. In play, he gives full run to the individual whim or caprice. Play is the first education that the child gets to prepare him for his human destiny and if the child were left to arrest his development and linger contented over one plaything, the result would be lamentable. Through play he becomes conscious of his social self and there dawns the higher ideal of a self that is realized in institutions, over against the special self of the particular individual. However, it is a sign of feeble-mindedness or arrested growth if the child remains contented with the same objects for a definite period of time. Therefore, only through play, work and effort can a child master the obligations of civilization.<sup>44</sup>

Biology and physiology are of recent growth as science; and part of the time that Harris wrote there was great skepticism and opposition to the facts that supported the biological theory of the brain. The opinion was that the theory lowered the state of the mind, casting out the principles of God and human freedom, and led to atheism and agnosticism. Moreover, physiology and biology had little, if any importance upon Harris' theories of education. He acknowledged, however, the importance of some topics, for he said, "if he (the child) is alone the efficient cause of the free will, at least these conditions of habitat, race, and



stock furnished the material that he is to quarry and build into the temple of his life--a Parthenon, a Pantheon, or only a mud hut or a snow house.<sup>45</sup>

Since the facts point out that much of the knowledge has to be acquired since Harris' era, the strongest weakness of the application of biological studies to education was that they could not furnish ideals or aims for education; and that an extension of their method of study to the area of sociology and philosophy would result in atheism and materialism.<sup>46</sup> Harris' summation of the value and boundaries of biological studies is the following: "It can bake no bread, but it cannot give us knowledge of God, freedom, and immortality. We need bread and use it for the procurement of higher things."<sup>47</sup>

Due to Harris' desire that only academic subjects be taught, he pressed for an increasing place in the curriculum for more of these academic subjects to be taught. He often compromised, but pointed out the value of cultural and disciplinary subjects. Inasmuch as he did not encourage the idea of health and physiology, and did not strive to improve the classroom by ventilation and lighting, he claimed that

<sup>45</sup> Ibid., p. 146.

<sup>46</sup> Roberts, op. cit., p. 110.

<sup>47</sup> W. T. Harris, "Rational Psychology for the Teacher," N. E. A. Proceedings (1889), p. 547.

the school was giving the community a good service, as it was, whether it was located in an ill-aired log school house, in slum tenements rented for schools, or a one-room shanty type of school.<sup>48</sup> However, in stressing the biological and physiological aspect of education, Harris seemed to put stress on the physical side of man while the duty of education was to subordinate the physical to the true or spiritual self. The chief objection stated by Harris against physical training was "to put will into muscles." Nevertheless, this could be overdone. Harris disliked it because it gave every pupil an opportunity to relax by involving momentary surrender to caprice. Every student needs to play to repose; he needs to stretch his cramped muscles and send the blood in torrents through his limbs. The pupil in caprice causes his lungs to absorb clean air deep into their cavities by deep inhalation caused by exercise. "Serious limitations and defects in Harris' educational views are found as a result of his lack of knowledge of the true psychological and biological nature of the child."<sup>49</sup>

These limitations and defects relate principally to the lack of information on the mentality and traits of children; to a failure to realize the individuality of children; their

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<sup>48</sup> Curti, op. cit., p. 316.

<sup>49</sup> W. T. Harris, "The Effect of Exercise on the Vital Organs," N. E. A. Proceedings (1898), p. 931.

different habits at different intervals, their likes and dislikes with the overall nature of their activities; the intimate relations of mental activities with physical and social activities; the necessity of expression as an integral part of mental ability; the necessity of sense material for the formation of concepts; and the improvement of basing all educational theories, even those relating to the moral conduct, upon a direct study of children's activities.<sup>50</sup>

Moreover, the belief that Harris professed in his philosophy carried his name to great heights. Even though he denounced certain aspects of education or advocated them for certain races or nationalities, he remained a great educator. One of the subjects of education that Harris did not wholeheartedly endorse was industrial arts which is discussed in the next chapter. An attempt is made to point out his contributions to the field of industrial arts either directly or indirectly by his influence.

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<sup>50</sup>  
Roberts, op. cit., pp. 85-88.

## CHAPTER IV

### THE CONTRIBUTIONS OF WILLIAM TORNEY HARRIS TO INDUSTRIAL ARTS

Although the philosophy of education professed by Harris has been reviewed, it appears that a small summary of his psychology of industrial arts should be included. Only two articles were found dealing with his psychology of industrial arts, therefore, all footnotes will be taken from these two sources. Also, it would be only proper to give a very minute history of industrial arts before the analysis of the psychology of industrial arts.

The first industrial arts school was begun in Saint Louis, a city to which Harris brought fame through his work as superintendent of schools. C. M. Woodward, a friend of Harris' and a great educator, received his inspiration from the Philadelphia Exposition, where he witnessed the display of the Russian version of industrial arts. The greatest force that drove Woodward to start his school was a speech given by John D. Runkle, President of the Massachusetts Institute of Technology.<sup>1</sup>

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<sup>1</sup> Ellwood P. Cubberly, Public Education in the United States (Boston, 1920), p. 463.

Woodward began his first class in 1880 but it was not until 1889 that Harris took his stand on industrial arts when he spoke before the Department of Superintendents at the National Educational Association meeting in Washington, D. C., on March 7, 1889. His topic was "The Psychology of Manual Training." A concise summary of the document on the psychology of industrial arts will follow.

Harris took the position of a judge on the important educational question of industrial arts by saying, "I shall avoid the position of advocate or polemic so far as I am able."<sup>2</sup> Harris, therefore, stated that the two opposite trends of opinion were conservatism, and the other tending toward new experiments with a view to progress and improvement. One class holds on to the heritage of the past and strives to conserve its power. This group sees its defects and blames these on administration, but the progressive discovers the inadequacy in the old system and proceeds to remedy it by undertaking radical changes, bravely confident of his success.

Inasmuch as the teaching profession is for the most part engaged in doing its daily task in the work of repressing inhibition, holding back pupils from doing wrong, or improper things, effort is likely to swallow up the teacher and cause

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<sup>2</sup>  
W. T. Harris, "The Psychology of Manual Training," Education, IX (May, 1889), 571-582.

neglect of that other side of training, the side of spontaneous and original activity. "Mere positive will power without the negative or inhibitory will power developed to extremes, produces only a mechanical civilization--a dead mechanical state of social existence."<sup>3</sup> Thus any government that secures the greatest degree of individual development for its people and does not lose sight of the individual whole is a progressive nation. However, if the nation follows the policy of laissez-faire to its fullest extent for self-activity the nation would soon collapse because of lack of central administration. Therefore, if self-activity is to achieve its high level of success it must secure the best central administration and strictly limit the self-activity of the individual for the good of the whole. Thus, our educational program must be such that the school "secures the greatest individual self-activity of the pupil while it builds up in his character perfect obedience to law, divine and human, and a sacred regard for truth."<sup>4</sup>

To succeed one must progress forward even though advancement is not in a direct path. Experiments must be made even though failures are tremendous; progress comes about through the failure of experiments. It is through the discussion of trial and error that accomplishment is achieved. Experiments are so costly that caution must be exercised.

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<sup>3</sup> Ibid., p. 572.

<sup>4</sup> Ibid., p. 573.

Many of the educators were advocating industrial arts; some were awaiting the outcome of the experiments by others; and some looked upon the experiment as unnecessary. Eminently able men were advocating the adoption of industrial arts into elementary education.

The psychology of industrial arts is concerned chiefly with the mental efforts of such training and a comparison of its results with those of other branches of the course of study pursued in school....The effect of industrial arts is not to hasten the child's exit from school to assume the responsibility of self-support. <sup>5</sup>

In the beginning this was the concept of industrial arts, but "gradually it came to be recognized that industrial arts has a more elevated purpose and one indeed more useful in the deeper meaning of the term."<sup>6</sup> It came to be considered as an educative process, for the complete moral, physical, and intellectual development of the child, as

...the combination of industrial arts and the teaching of purely theoretical subjects ensures the integral cultivation of all the faculties and all the aptitudes which make up the complete man.

.... Put the whole boy to school. State in a plain, forcible way the meaning of the phrase 'integral cultivation of all the faculties' and all the aptitudes which make up the complete man. <sup>7</sup>

However, it is of first importance that in the light of psychology the definition that Pestalozzi used to define education is "the full and harmonious development of all our faculties." Readily one sees that it makes no discrimination

<sup>5</sup> Ibid., pp. 573-574.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid., p. 575.

among the faculties themselves, each has a right to cultivation, in harmony so as to produce a balance in a human being. But in the light of psychology we find glaring errors in this definition. The distinction between the higher and lower faculties, between our faculties that are a means to ends above them, and those faculties which are ends in themselves; that the body and soul are on the same plane as bodily comforts, and makes no distinction between man as an individual and man as a social whole. It fancies man, the individual, to be something complete in himself and without relation to society. This leads the thoughts of the educator away from the essential ideas of education, which is stated as follows:

Education is the preparation of the individual for reciprocal union with society, the preparation of the individual so that he can help his fellow man and in turn receive and appropriate his help. 8

The definition of education which looks toward the harmonious development of all our faculties does not rule out industrial arts from education, but to the contrary. It fits many for some useful occupation which they may fill as their special vocation. Neither does it prove that industrial arts is not of general educative character.

According to Otto Salomon, the director of the famous Manual Training Normal School at Naas, Sweden, industrial arts secures the following educational results:



Skill in the use of tools; love of labor industry and persistence; self-reliance; exactness; attentiveness; sharpens the eye and sense of form; good bodily training.

In another connection Salomon gives as educational results of industrial arts the following:

Acquisition of general dexterity of the hand; instilling taste for work and respect for rough, honest, bodily labor; training in habits of order, neatness, exactness, cleanliness; accustom to attention, industry, and perseverance; promoting the development of the physical powers; training the eye and sense of form. 9

When one learns to use tools and begins to make articles of wood and iron, educational process takes place the same as when boys play games such as baseball, marbles, et cetera. Industrial arts helps to develop the physical powers, dexterity of hands and accuracy of eyes, perseverance, and attention. Harris in this comparison points out that tool work does not do much for the child, yet if the child learns to do something, he will rejoice over new power gained.

Nevertheless, at a certain stage of man's development, education may come from trivial objects and become exceedingly important at another stage of development. Therefore, the stages of development are very important. An educational act when first learned may later become a habit.

Many of the lessons a child encounters at school may have been learned before he started to school. The child has had training in dexterity of the hands, accuracy of the

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<sup>9</sup>  
Ibid., p. 577.

eye, the sense of form, cleanliness, neatness, and industry, which have been taught by the mother. Since the child has received this education, how does it differ from reading, writing, arithmetic, geography, and grammar? The difference comes from his ability to withdraw his attention from the external world of senses and give attention to other principles. He can look from the particular to the general and comprehend an indefinite series of effects. Without this ability, man would be bound down to present facts without due appreciation. But with this knowledge man is able to see in the present facts its past history. Moreover, he is able to recognize in present situations possible future conditions.

False psychology teaches that all knowledge is derived from sense-perception. However, sense perception is secured through thought. Thought puts together this fact and that fact, this present one and that past one, and unites them by the idea of causality. Self-activity comes through thinking, thus man's power of thought rises from thing to cause, and from cause to cause, always getting nearer the underlying reality which causes all these sense-data.<sup>10</sup>

One thing must be kept in mind when comparing academic subjects with those of industrial arts. If both are educative, each requires a special application of knowledge of a special kind. From the industrial arts standpoint, when a

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Ibid., pp. 578-581.

project is completed some pleasurable feeling accrues from the consciousness of what one has accomplished by his labor. In the study of mathematics and geometry there is a higher feeling of self in the perception of the power of intellect. Therefore, the accurate comparison of the educational values of academic subjects with those of industrial subjects cannot be made for each serves its purpose of self-expression and accomplishment. "Compare the feeling of selfhood that is gained by the soul in the use of tools of thought with that gained by any form of manual labor."<sup>11</sup>

Inasmuch as industrial arts does teach some things, it does not teach everything that man needs to know to survive in society today. Man depends on society and society depends on man. "Society is the miraculous instrumentality by which each individual aids every other, and in turn is aided by all."<sup>12</sup> Each human can educate himself if he learns to read and write. Thereby, he may learn the experiences of the race through the countless ages of its existence.

Hence the comparison of learning to read with that of the carpenter's trade must be considered in a different manner. The scope of learning in industrial arts is limited and brief because industrial arts does not profess to produce a

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<sup>11</sup>Ibid., pp. 581-582.

<sup>12</sup>W. T. Harris, "The Psychology of Manual Training," IX Education (June, 1889), 656-664.

skill. Whereby in the education of learning to read, the person is destined to use this knowledge of reading daily as a key to unlock the treasures of human learning. The school offers the means of permanent and continuous self education. Education that educates the child in the art of self-education is that which sums up the aggregate experience of mankind. The course of study involves the mastery of letters or the means of intercommunication with the race, the means too, of preserving the harvest of observation and reflection, and it teaches one to think for one's self the meaning of what has been read.

Industrial arts should not teach pupils that roughhand labor is in itself as honorable as the elaborative toil of thought which gives rational direction to the hand. The most worthy function of industrial arts is its training of the elaborate faculties of the mind--its studies on the rational of the construction and use of tools--its study of mathematics and science. This points out the road of permanent usefulness for such schools. They may fit master workmen for the several trades and occupations and thereby furnish overseers who not only can direct, but can also teach.<sup>13</sup>

Inasmuch as industrial arts is a broad field, one subject deserves special attention and that is drawing. Aesthetic training through drawing properly taught gives an

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Ibid., pp. 657-682.

educative effect of a far-reaching characteristic in that all industry respects good design. In drawing, two important functions take place (1) one must mean the cultivation of the hand and eye by the use of the pencil, and (2) instruction in the ideals of tasteful and decorative form which should be taught in parallel lessons in connection with the practical use of the pencil. When the pupil has accomplished these factors and has been trained to recognize the beautiful and graceful form and arrangement and to criticise all defects in the particular field, the pupil has acquired a knowledge useful in every occupation, and all walks of life, either "subaltern or direct." "Culture in taste, such as drawing gives, fits all laborers for a more lucrative station and helps our industries by giving our commerce a firm hold on the market of the world."<sup>14</sup>

Whether industrial arts schools shall develop into industrial schools for the training of apprentices to the several trades, or on the other hand become incorporated into the school system as a general discipline, depends, of course, upon the answers which educational psychology finally gives to the question. <sup>15</sup>

As the psychology of industrial arts, according to Harris, has been cited it is only proper to give the ideas of other leaders in this field. Following this discussion, arguments for and against industrial arts, as stated by Harris, are given.

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<sup>14</sup> Ibid., p. 663.

<sup>15</sup> Ibid., pp. 663-664.

The first authority, during Harris' life, who advocated general education with quite an emphasis on industrial arts was Henry R. Russell. He was attempting to put these important subjects into the curriculum as an educational subject and not as a specific training subject to achieve skill.

It is assumed here that no one's education can be complete without industrial arts, and that it should therefore form a part of the general education of every child; and in order that this may be the case, it must form part of the regular course of instruction in schools of all grades. Perhaps no educational theory has ever been more general and heartily accepted by any people than that industrial arts should be introduced in some way into the educational fields of American schools.

It must not be forgotten that the great object of industrial arts is not simply to secure 'the skillful hand' but the better, through this means to insure the 'cultured brain.' The attempt to give clear expression to our ideas makes those ideas clearer to our minds, and fixes them more securely there.

We have various languages; we can express ourselves by signs, verbally in oral and written language, by drawing, and by construction. Each has its value, and there are cases in which each is superior to any of the others, and indeed to all of them; and for that reason none should be neglected; and the more ways one has of expressing his thoughts, the clearer those thoughts will doubtless be; and if in gaining this power of getting clearer impressions and of giving better expression he also gains the power of making better provision for himself and those depending upon him than he otherwise would do, so much the better for all. No particular handicraft should be introduced into our schools any more than should technical studies be so introduced; but the head, hand, and heart should all be trained simultaneously, so that growth may be on all sides, and that strength in all parts may result. Training the hand so that it can perform promptly and skillfully what is definitely required is training the mind, and training it, too, by one of the most direct means of doing it. To neglect, therefore, to train the child's hand is to close one of the most important avenues to his mind. To train it right is to endow its possessor with a new sense, to arm him with a new weapon, to confer upon him a new language to endue him with a new power, to open up to him varied sources of pleasure, and indeed, to introduce him into a new world. If it is our purpose

to train up men and women to think and act wisely and well, we should seek those means which will so develop them that they can put out their strength with intelligent skill in any direction they may wish or that any emergency may demand. 16

Another opinion has been expressed by J. Liberty Tadd.

His ideas are as follows:

Industrial arts is not a mere method of using certain tools. It is, as has been pointed out, a mode of thought expression that must recognize the potential and creative capacities before anything else, and provide for freedom of expression. This can only be well done during the nascent period of growth in structure, and during development of complexity in the organism, by physical co-ordination, and by making sense impressions organic--first hand--by ministering to it at the right period things in line with the instincts, heredity, and environment, and no teacher should dare to deal with the subject who is not familiar with these three immense powers.

Industrial arts is that training of the hand that enables it to obey the mind as a mode of thought expression. It is the union of thought and action made vitally and mutually dependent one on the other. Thought being nascent action, and the mechanism of thought being motor, it is simply a method of evolving right action, righteousness in the true sense, action from right motive. . . . 17

That which furnished opportunity for self-expression is educative. Industrial arts is an opportunity for self-expression in material forms. Many boys find satisfaction in working with wood, metal, and clay rather than in reading books, and the training of the hand thus achieved is also a training of the brain and of the mind. The hand, indeed, is

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<sup>16</sup>Henry R. Russell, "Manual Training: How Its Benefits May Be Secured," Education, VIII (June, 1888), 657-658.

<sup>17</sup>J. Liberty Tadd, "Manual Training Method in Philadelphia Public Schools," N. E. A. Proceedings (1894), p. 888.

the mind's greatest executive. Industrial arts stands for a specialized form of that sensory and motor training which underlines and conditions the finest fruit of mental culture. Among its immediate results may be noted a coordination of mind and hand, an extra ability in the material execution of ideas; a removal of awkwardness; the formation of mental and moral habits of accuracy, precision, and honesty; and a realization of the dignity of labor. The basis of civilization is and must ever remain the material of this world, and it is an educational fact of no small significance or value that we must be in sympathetic touch with the working world.

In the curriculum, industrial arts furnishes needed changes from mental to physical employment, and counterbalances the emphasis laid upon intellectual development, proceeds in method from the simple through the complex to the unit, and makes education more practical. It is a part of the new educational endeavor, to make the body a more ready and more delicate servant of the mind and to make all arts artistic, in accord with the new movement in industry of beautifying the common. Its mission is not to supplant, but to change the older mental disciplines. The best educational results will be obtained when the attention of the pupil is bent on the character of his work, rather than on the proceeds from its sales.

. . . . Today the purpose of industrial arts is, on the other hand, primarily educational, rather than utilitarian. . . . Actually today industrial



arts has its place mainly in the secondary schools in the educational system. . . .but for the best educational results, its real place is in the grammar grades, from the years seven to fourteen while the development of the brain is most rapidly progressing. 18

Often one is not in a position to defend his opinion because of a lack of knowledge or a lack of sufficient reading in his field of study. As a gesture to the reader, a third opinion is included in the defense of industrial arts in the curriculum.

Industrial arts training has a most valuable effect as a developer of moral character. It was Mr. Froude who said that learning the three R's unaccompanied by any industrial arts was sure to bring about the fourth 'R' of rascality. 19

Inasmuch as three schools of thought have been cited, a definition of industrial arts is inserted. The aim of industrial arts is to provide an opportunity for boys and girls to work with different materials of industry. It educates the eyes, hands, and perceptive power. Struck, a pioneer in the field of industrial arts, gives the following definition of the subject:

[ Industrial arts education aims to give exploratory, tryout, and guidance training. It seeks to make persons intelligent consumers, and aims to give an appreciative understanding of what the world is doing industrially. 20 ]

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<sup>18</sup>Herman Harrel Horne, "The Philosophy of Education" (New York, 1910), pp. 73-74.

<sup>19</sup>Henry M. Leipziger, "Education as Affected by Industrial Arts," N. E. A. Proceedings (1892), p. 442.

<sup>20</sup>Theodore F. Struck, "Methods and Teaching in Industrial Education" (New York, 1929), p. 189.

One must realize that all changes come about through slow evolution. Every educator is cautious when new ideas of education are advocated as part of the school curriculum and Harris was no exception, yet his greatest contribution to industrial arts was his establishment of the kindergarten as part of the public school system of Saint Louis. His thoughts were that society would be benefited by the kindergarten which provided good association and industrial and intellectual training for the poor, and saved the child of the wealthy from ruin through self-indulgence and corruption ensuing on weak management in the family.

Furthermore, it was Harris' conviction that if the school is to prepare especially for the arts and trades, it is the kindergarten which is to accomplish this objective. For training of the muscles, if it is to be a training for special skill in manipulation, one must begin early in youth. If the child trains for one year on Froebel's "gifts" and "occupation" he will acquire use of his hands and a habit of accurate measurement of the eye which he will possess for life. The significance of Froebel's "gifts" as a preparation for industrial life, indicates Harris' ground for believing that the kindergarten should have a place in the common school system. This is especially true when one realizes that the kindergarten utilizes a period of the child's life in training for the arts and trades without robbing the school of a portion of its needed time. By the

utilization of this time the child gains from one to two years, at a time when academic training would not have too much value.

Again in the kindergarten, we find that Harris in studying Pestalozzi's doctrine of "learning by doing," discovered that through this training in the kindergarten the child is given an opportunity to train hand and eye and mind together. Froebel listed the order of presentation of the "gifts" and "occupations" and stated that their true worth lay in the fact that they offer full and free development for creative self-activity, for the expression of the inner life of the child.

Moreover, the kindergarten plan of self-action involving a series of objects leads to the possession of certain concepts such as buildings, stick-laying, drawing, weaving, clay modeling. Harris emphasized that this work need not be precision, but there might be a certain amount of play and freedom of expression.

To conclude Harris' remarks concerning the contribution of the kindergarten, the following interpolation will be used. The tenth "gift" spoken of by Harris is the training of the eye and hand by drawing. This subject is the surest and most effective discipline ever invented. It becomes

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evident that if the school is to prepare especially for the arts and trades, this work should be started in the kindergarten.<sup>22</sup>

Inasmuch as Harris stressed the study of the five windows of the soul, through his reading of Martin Luther he discovered that he advocated industrial arts. His contention was that industrial arts was not only a means of preparing for life's duties and responsibilities, but was also useful for religious and moral purposes. Luther believed that idleness was conducive to temptation. Since his primary thought concerned religion and living a moral life, he felt that one of the best ways to forestall youth's temptation toward vice and crime was to keep them efficiently occupied. Harris saw a dual purpose in the teaching of industrial arts, those mentioned by Luther, plus that of keeping boys in school longer, plus the stimulation of a love for truth and intellectual honesty.<sup>23</sup>

Needless to say, Harris read the philosophy of Otto Saloman and his principles of the educational industrial arts system in Sweden. Saloman pointed out that the development of the child's mental faculties were of utmost importance. The child's development was given first consideration and

<sup>22</sup>  
Ibid., pp. 147-150.

<sup>23</sup>  
Russell A. Peterson, Lutheranism and the Educational Ethic (New York, 1941), pp. 34-35.

the knowledge of tools and dexterity in the use of tools were incidental. The aims of Saloman were as follows and Harris will point out the faults of Saloman's aims:

1. To instill a taste for and love of labor in general.
2. To inspire respect for rough, honest, bodily labor.
3. To develop independence and self-reliance.
4. To train in habit of order exactness, cleanliness, and neatness.
5. To train the eye to a sense of form; to give a general dexterity of hand; and to develop touch.
6. To accustom to attention, industry, perseverance, and patience.
7. To promote the development of the physical powers.
8. To execute exact work.

Harris, through his great philosophical mind, points out the error made by the Swedish people in following Saloman. Harris criticized the nation for its lack of beauty in objects that they constructed. He pointed out that the United States purchased their raw material, but did not buy their manufactured articles because they were huge, unattractive, and heavy. This came about through their lack of training in drawing, thus losing economic stability. Whereas, Harris' advocacy of drawing points out the value that has been given to industry in discovering pupils who can draw and design, thereby giving the United States an opportunity to demand higher prices for its goods. Industrial arts drawing keeps

in mind the basic elements of design: regularity, symmetry, and harmony.<sup>24</sup>

In a speech that he gave, Harris was quoted as having said that he was not in favor of industrial arts. By his rebuttal he proved that he did advocate industrial arts to a certain extent. During a certain time in his teens every boy should have a systematic industrial arts course, and no school should be condemned for giving this opportunity to the student. If a school can offer to the students any course that they choose without losing its accreditation and efficiency, so much the better for the student. If industrial arts is modified, some phase of the work should appear in all grades of the school, "but it is folly to insist that industrial arts, properly so called, should go at once into all grades or none." The sequence of steps by which a child is to come into a mastery of the work through industrial arts process is "see something, then draw it,  
<sup>25</sup>  
then make it."

When using the topic of industrial arts at Concord, Massachusetts, Harris pointed out the value of an academic education along with studies in applied sciences which can produce results in the education of the individual. If the individual does not know the theory of what he is doing, it

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<sup>24</sup>W. T. Harris, "Art Education, the True Industrial Education--a Cultivation of Aesthetic Taste of Universal Utility," N. E. A. Proceedings (1889), pp.647-655.

<sup>25</sup>C. M. Woodward, "The Result of the St. Louis Manual Training School," N.E.A. Proceedings (1889), pp.73-91.

is not educative. After he learns how to perform the task it becomes a drudgery, but if the person could apply mathematics to his work, he could apply his mentality to other creative objects instead of just repetition. Repetition of the same process reduces the value of intellectual study but surpasses that of apprenticeship only by pointing out that when industrial arts is part of general education, skill is not the purpose, and therefore, a permanent valid place for industrial arts training should be in the course of study.<sup>26</sup>

Once again Harris, when discussing industrial arts, admitted the reasonable ness of substituting a system of industrial arts to replace the old system of apprenticeship. He insisted that it should not be taught until the child has reached his twelfth year because he should be instructed in the intellectual branches of school work, namely, in reading, writing, arithmetic and the like. He wholeheartedly advocated drawing; laid down the principle that industrial arts should be followed for educational value. "Studies are educative intellectually in proportion to their enlightening effect, and the duration and scope of the effect."<sup>27</sup>

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<sup>26</sup> W. T. Harris, "The Intellectual Value of Tool Work," N. E. A. Proceedings (1889), pp. 92-98.

<sup>27</sup> W. T. Harris, "Report of the Committee in Pedagogics, The Educational Value of Manual Training," N. E. A. Proceedings (1889), pp. 417-430.

During the time that Harris was superintendent of schools in Saint Louis, his fame as an educator increased. It is well to compare his views on industrial art with those of C. M. Woodward. Harris continually advocated the development of the intellectual mind, stressing this point on every occasion. Through this continual lecturing, Harris caused C. M. Woodward, the founder of industrial arts, to take a position against him. During a discussion of one of Harris' speeches for industrial arts, Woodward rose and refuted the statements made by Harris as untrue. According to Woodward, Harris did not encourage industrial arts or attempt to put it into a curriculum. The following is Woodward's statement:

As for Harris, I do not think he admits industrial arts anywhere into the general education of the ordinary boy. It occupies a position so low in his scale of educational values that it is far out of sight. 28

When the industrial arts movement was launched in the 1880's, Harris minimized its importance and denied that it possessed great intellectual value. His opposition was based to a large extent on his conviction that sense-training was less valuable than the thinking of Pestalozzi's. His view was that school education should develop the power to withdraw from the external world of the senses and to fix attention on forces and principles; it should also open the child's



soul to the cultural treasures of the past. He denied that hand labor had any particular moral value, unless it resulted in products for the market place, thereby subordinating the work for the good of others and in turn enabling him to share in their production.<sup>29</sup>

In expressing sympathy for the establishment of industrial arts schools for children "unwilling to carry any further their purely cultural studies, Harris, somewhat in the spirit of Dewey, wished these schools to teach not merely the narrow skills and techniques, but the broader aspects of trades, thus trying to defeat the purpose of industrial arts. His thoughts were that if the child learns to read and write he can thereby continue his education after he has entered industry.<sup>30</sup>

Since industrial arts was in such a bitter controversy at times, Harris included it in the course of study for reasons that are similar to those given for including science. Harris did not consider it coordinate with the other groups as a "window of the soul," but included it under applied mathematics as a means of "transforming material into structure for human use." His thinking on industrial arts indicated

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W. T. Harris, "What Shall the Public School Teach," The Forum, IV (February, 1888), 580.

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W. T. Harris, "The Intellectual Value of Tool Work," N. E. A. Proceedings (1889), pp. 92-98.

that it would grow in importance in cities, as a good means of grappling with the population of the slums.<sup>31</sup>

Moreover, society and occupation, too have changed greatly. Instead of a people whose industries are almost exclusively agricultural, the United States has become one of the leading manufacturing nations. "With a large portion of our people, the clumsy hand of the farmer has given way to the dextrous finger of the artisan."<sup>32</sup> The city by now represents a large proportion of our population and the learner no longer works with his father till he becomes master of his business. He grows to manhood with no knowledge whatever of the industry by which his father has supported him.

Harris when choosing a topic on which to lecture to a group of educators chose one in common with the prevailing conditions. The era of invention was transforming communities and he chose the subject of general education in which practically every individual was concerned.

The growth of industry here-to-fore mentioned in the paper needed workers. It is obvious that consideration and minute investigation were necessary. Harris felt that industrial arts did not provide special apprenticeship for any particular machine, but he did give a general insight into

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W. T. Harris, "Twenty Years' Progress in Education," N. E. A. Proceedings (1892), pp. 61.

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H. M. James, "Influence of Manual Training in Elementary Schools," N. E. A. Proceedings (1894), pp. 850-58.

the conditions and laws of mechanism in general. In this manner, Harris provides one with proof of his belief of the value of industrial arts. 33

Again Harris speaks on the value of drawing. His comments emphasized that there is industrial and aesthetic drawing which should have a place in all elementary school work. Pointing out again the value of training the hand and eye and its contribution to all other branches that require illustrations, if used with the study of the great works of art in the way previously mentioned, it helps to cultivate the taste and prepares the future workman for a more useful and lucrative career inasmuch as superior taste commands higher wages in the finishing of all goods.

Harris suggests

Sixty minutes each week to drawing from the second year to the eighth inclusive. . . . to industrial arts during the seventh and eighth year, so as to include sewing and cookery for the girls and work in wood and iron for the boys. 34

One finds that industrial arts training so far as the theory and use of tools is concerned has just claims on the elementary school for a reason similar to that which admits natural science. Science has aided man in inventions and has given him better means of livelihood and transportation. The

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W. T. Harris, "Educational Needs of Urban Civilization," Education, V (1885), 443-446.

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W. T. Harris, "Correlation of Studies," N. E. A. Proceedings (1889), p. 324.

child today lives in a world where machinery is constantly at hand. A course of training in wood and iron work, together with experimental knowledge of physics or natural philosophy makes it easy for him to learn the management of such machines. His theory was "one half day in each week for one half year each in the seventh and eighth grade will suffice for industrial arts for wood and iron work by the boys." It should be mentioned, however, that the advocates of industrial arts in iron and wood work recommend these branches for secondary schools, because of the greater maturity of body and less likelihood to acquire wrong habits of manipulation in the third period of four years of school.<sup>35</sup>

Nevertheless, Harris professed that to succeed one must progress forward even though advancement is not in a direct path. Experiments must be made even though failures are tremendous; progress comes about through the failure of experiment. It is through the discussion of trial and error that accomplishment comes about. Experiments are so costly that caution must be exercised. Many of the educators were advocating industrial arts, some were awaiting the outcome of the experiment of others and some looked upon the experiment as unnecessary. Eminently able men were advocating the adoption of putting industrial arts into elementary education

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<sup>35</sup>  
Ibid., p. 311.

after debate and discussion of the results of experiments as they appeared.<sup>36</sup>

The early agitation for the introduction of industrial arts, as evidenced in a discussion in the meeting of the Department of Superintendents in March, 1889, was in the main based on the conception of formal training. Industrial arts was entitled to a place in the school because it exercised the observation, trained the reasoning powers and strengthened the will. In contrast, Harris contended with Goethe that education must offer the pupil a "seed corn which is the possibility of countless harvests." While the educative effects of excessive industrial arts training he compared to offering a piece of bread which nourishes only for a day.<sup>37</sup>

Once again Harris, in his travelling and speaking on educational subjects, spoke in defense of industrial arts in the curriculum. When properly correlated with other lines of work it greatly increased the powers of the student. It is an additional method of intellectual expression, and contributes as much to his power as any other method of expression.<sup>38</sup>

In the span of a human lifetime, one can either leave a mark of distinction or be obscure. Harris left a name so

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Kurt Leidecker, Yankee Teacher (New York, 1946), p. 525.

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W. T. Harris, "Address," N. E. A. Proceedings (1904), p. 28.

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J. R. Arscott, "Two Philosophies of Freedom," School and Society, LXXIV (November 3, 1951), 276-279.

prominent that he was considered one of the most dominant educational figures in the latter half of the nineteenth century.<sup>39</sup> Harris' philosophical mind was constantly weighing the problem of industrial arts. In one of Harris' speeches on industrial arts he spoke on the economic value of the subject. C. M. Woodward, the founder of industrial arts, rebuked Harris for his stand on the economic value of industrial arts. It is not the purpose of industrial arts to substitute for any schooling that a child now receives. All that he gets if of value, stated Woodward.

I say, add the industrial arts to his present curriculum. Will he not be a better farmer? Will it be of value to him to know how to repair a window, hang a door, to plan and erect a barn, to mend his plow or harrow, to supply a bolt or nut or missing link on his reaper or mowing-machine, or to keep in order a windmill or a farm wagon? You will surely agree with me that to be a successful farmer one must join the skillful hand to the cultural mind. 40

Many more examples were given of the value of industrial arts and one in particular concerned the training he received when a boy in a general repair shop. Also, a noted surgeon expressed his thanks in that he could design his own tools. In bringing out these examples Woodward was able to point out to Harris that in a sense his idea should change, too, in

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<sup>39</sup>W. T. Harris, "What the South Is Doing for Education and What Education Is Doing for the South," N. E. A. Proceedings (1895), p. 747.

<sup>40</sup>C. M. Woodward, The Manual Training School (New York, 1887), p. 230.

this respect in regard to industrial arts in that the habit of working on an exact plan, of analyzing an apparently complicated operation into a series of simple steps, enables one to solve many a new problem with new material and under entirely novel circumstances. This is the same manner as the working of mathematics or physics.

Any one who professes a great idea is subject to criticism regardless of his topic; some people are for him, while many are against his ideas. Harris took the criticism not as a degrading matter, but on the side of education. Everyone has a right to his opinion. Harris professed, therefore, when he received the criticism he would sit down and analyze his thoughts on the subject. In his talk in the South Harris pointed out that industrial arts would give discipline and habits of regularity, obedience, self-control, co-operation, and industry. "The Negro man must teach himself to be a capitalist." But in addition to industrial arts, the Negro must be given a cultural education which not only would fit him for the profession he chose to follow, but would also introduce him to the root of our civilization and enable him to become integrated in our national life.<sup>41</sup>

Inasmuch as Harris continually spoke to educational groups, his interest continued to be broadened. His early training stood him in good stead for he proved that his

mechanical ability was not artificial. Harris' thoughts on industrial arts may have been derived from his desire to tinker. Before grappling with a problem, Harris would apply his mechanical talents at home, whether it was making a stool to reach the top shelf of his bookcase or constructing a telescope, for he was interested in the heavenly bodies. Through this skill of using his creative mind he saved himself quite a sum of money. Also, his interest in practical appliances and inventions, a true Connecticut trait, was of advantage especially later when he became superintendent of schools, for he was able to check and order the tools and machinery needed in the schools. He kept every circular which the manufacturers sent him, no matter what type of circular, whether it concerned steam engines, pumps, paint, or sewing machines. He rarely passed up an opportunity to admire every gadget that meant convenience and saving of time.<sup>42</sup>

Harris, throughout his career as an educator, fought unsuccessfully in any attempts to over-emphasize industrial arts. His contention was that too much "training" would war against the purpose of education in a democracy where care must be exercised not to limit a person's capacities for experience, but to give him as much opportunity as possible to explore and understand, and thus find the place for which his individuality prepared him. Harris wanted the industrial arts school

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<sup>42</sup>Leidecker, *op. cit.*, pp. 189-90.



separate from the common school which he regarded as an "unmixed good," for it gave to youth a greater amount of directive power than any other equal expenditure of effort can possibly do. The common school to him offered a sort of labor saving machinery for the acquisition of knowledge. "The illiterate works with his unaided head." Not so the educated man who has been reinforced, as it were, by the intelligence of the race.<sup>43</sup>

Needless to say, Harris was instrumental in establishing a School of Design in Saint Louis which produced students that were accepted in many colleges and foreign countries as capable of doing advanced work.<sup>44</sup>

This criticism of education which looks toward a harmonious development of all faculties does not rule out industrial arts from education, but to the contrary. Industrial arts training fits many for some useful occupation which they may fill as their special vocation. Neither does it prove that industrial arts is not of a general educative character. That is something to be anticipated.<sup>45</sup>

<sup>43</sup> W. T. Harris, "Industrial Education in the Common School," Education (1886), p. 530.

<sup>44</sup> W. T. Harris, "Education of the Negro," Atlantic Monthly, LXIX (June, 1892), 720-736.

<sup>45</sup> W. T. Harris, "The Psychology of Education," Education, XXX (May, 1889), 576-577.

## CHAPTER V

### SUMMARY

William T. Harris, a rural American, was born September 10, 1825, at North Killingley, Connecticut. He enjoyed a high intellectual background from both mother and father. Like most famous men, Harris disliked his early school life. His later school life was more enjoyable, especially at Yale where he began to develop a philosophy of education.

Early disappointments in the business world led Harris to seek a teaching career in Saint Louis. This first teaching practice afforded him an opportunity to study the philosophy of Hegel. Shortly afterward Harris became the co-founder of the philosophical group known as the Saint Louis Movement.

Promotion came rapidly after Harris was married in 1858. He advanced from principal to assistant superintendent within a short period of years. During this time, his qualities of leadership became outstanding.

Harris soon became a champion of teachers. He was successful in obtaining better salaries and more recognition for members of the teaching profession.

After resigning his position as superintendent of schools in Saint Louis, Harris went to Europe to observe the educational systems on the European continent. In visiting a variety of schools, he took particular notice of the prominence

of women teachers. In order to fulfill his motive for coming to Europe he did not indulge in sightseeing.

Upon returning from Europe he went to the Concord Summer School of Philosophy as a teacher. While living in Concord, Harris was offered many positions in the educational world. He traveled extensively during the years at Concord, giving numerous lectures on many different subjects to educational assemblies in all parts of the United States.

In the latter part of his school years in Concord Harris was mentioned as a candidate for the position of United States Commissioner of Education. Since he did not expect to be given the appointment, he sailed for Europe with his family. While touring France he was notified of his appointment to the office of United States Commissioner of Education.

As he began his career as Commissioner of Education Harris' position was rather obscure, however, he soon began to achieve fame through his persistence and hard work. He always had a word for the educators, not in a dictatorial manner but in an advisory way. Harris encouraged the consolidation of schools to provide better education. He advocated the teaching of a broad, intellectual curriculum.

He did not approve of the teaching of the Bible in schools supported by tax money. While Commissioner of Education, Harris was in a position to have his educational theories tested and winnowed. His articles, reports, and lectures became more numerous and more frequently sought after. This put his name

in the field of education above that of most of his contemporaries. He served on many committees and sub-committees whereby he was able to offer his ideas to others and to help promote a sound educational system for American children.

After seventeen years of faithful service as Commissioner of Education he resigned. His fame became greater than ever before. Because of his hard work in uplifting education, he had the honor of getting the first pension of \$3,000 yearly from the Carnegie Foundation for Advancement of Teaching. Every schoolman of any consequence paid tribute to Harris upon his retirement and when news was received abroad, foreign nations sent their congratulations to him for his educational achievements.

Harris, with his great psychological insight, wrote extensively. His favorite topic was education of the American youth. His career did not start as a writer but as a teacher and student of philosophy. Harris based his education upon the five windows of the soul--mathematics, geography and biology, art and literature, grammar and history. Along with these ideals of formal education, Harris' idea was to have the pupils continue their study upon leaving school through university extension work. The establishment of the home study extension courses whereby the pupils were visited by a teacher was championed by Harris. The desire that he held for education made him speak out in favor of education for women and the establishment of a public library.

Harris' political views did not coincide with those of other educators, yet his political affiliation did not deter him. Friends and foes alike sought his opinion. His position as Commissioner of Education did not slacken his lust for work and thus his program for the people of Alaska was initiated and put into operation. Harris used the newspapers to promote American education. During his retirement Harris published his thirty-seventh volume, Psychological Foundation of Education. His last public work was with Webster's International Dictionary. Here he invented the famous divided page edition.

During Harris' career he worked through two wars and a depression. A political upheaval came while he was Commissioner of Education. The last era of his brilliant career, his retirement, found him writing extensively and putting all his works in order.

An insight into the reading that Harris did was given by a summary of the philosophers whose works he had read. From these he laid the foundation for his broad philosophical viewpoint. His educational view came from sociology and philosophy. Harris always surveyed the whole of a subject before giving his opinion. The status of an individual's birth would determine his educational possibilities. Through countless ages man has improved his living conditions and each generation contributes to this improvement. Advancement often comes through trial and error, and Harris believed that the ideals of education are determined by society and not by the

ability of an individual. Education is to give one the tool of intercommunication and to teach him the ideals that underlie his civilization by pointing out the customs and tradition of society. Man has to adjust himself to his environment and through all his training man becomes self-alienated.

Harris, through his ideals, points out that man has two selves, the physical self and the spiritual self. Each is developed logically and thus education replaces man's mere animal caprice in the social order. In turn man begins to train his will through the mastery of content unfamiliar to him. Man must learn to distinguish between good and evil. Harris also points out that interest must be found and subordinated to the child's greatest potentialities for enrichment. Through the development of a variety of interesting methods, teachers encourage the child to improve rapidly.

Harris objected to rigid discipline and strict authority. His theory of education did not have a place for drill exercises. The development of self control, Harris points out will bring about self-discipline. He insisted that Latin and Greek were important to the development of grammar and that class recitation was important from the standpoint of social activity and the interchange of ideas. Harris believed in content rather than form.

Self-alienation through work without regard to interest and activity might cause the child to regress. In his emphasis

on the value of content the love and reverence Harris had for childhood is pointed out.

Since he believed that the amount of education a student receives is determined by his birth, Harris continually emphasized the need for a rich course of study and the value of cultural subjects over vocational classes. He recognized the need for co-education, and for compulsory attendance laws. Through education one learns that all institutions of society unite to teach man to live with his fellow men.

Harris did not believe in vocational education because it limited the child's opportunity to learn. His course of study excluded religion, for he believed that when religion is taught by a secular school, religion degenerates. Furthermore, if religion was taught in public schools it would tend to form a new universal sect that expected all to accept. Harris claimed that religion imparted a spiritual value that strengthened the intellect, will and conscience of the individual.

Christianity teaches individuals to respect the rights and property of others. Harris points out the difference between religious education and secular teaching. The basis of religious education is authority, whereas secular education teaches man to depend upon demonstration and verification.

The psychological view of education points out the necessity of developing the innate powers and capacity of the individual. Education should be based on the mental ability

of an individual and proceed from this basis to develop his powers and abilities to their fullest extent.

Harris' philosophical ideas are based on the principles of self-activity. He did not let his psychological thinking determine the curriculum. Harris used psychology to determine the sequence of topics and the method of presentation. He believed a teacher who knew psychology could best determine the length of the class recitation and prevent the pupils from becoming bored, and could arrange the subject matter according to the abilities of the class.

However, Harris believed that it is necessary to teach the individual to read, so that he may be able to master the contents of the textbook. The ability to read helps to develop the ability to express himself during class discussion, which he contends is the best method of instruction. The exchange of ideas during a discussion brings out the individual's interpretation of the subject matter and his mode of thinking.

Play and work, according to Harris, are a means of achieving an end. In play one gives way to his individual whim and caprice, whereas in work he gives up his likes and dislikes, thereby surrendering himself to society and to its particular demands.

The growth of science has been rapid, but Harris says that too much emphasis placed on biology and physiology would lower the status of the mind. Consequently, he believed that



biological studies could not furnish ideals or aims for education, and if accepted, they would lead the individual to atheism and materialism.

Harris' failure to realize the value of body conditions resulted in their omission from the curriculum. Hygiene and physiology were given a place a little above body conditions. Harris objected to physical education because, he emphasized, it put will into muscles and he preferred to have the old-fashioned recess in its place. These defects that characterized Harris' curriculum were the result of his lack of understanding of the true psychological and biological nature of the child. His sole interest was to bring the child, most expeditiously, into a correct understanding of his relation to the race.

The first industrial arts school was started in Saint Louis, Missouri, by C. M. Woodward in 1880. During the National Education Convention, Harris made his stand on industrial arts in 1889 before the Department of Superintendents.

In his opinion there are two opposite trends, one is conservatism and the other is progress and improvement. Custom and tradition characterize the conservative group but action, repair and replacement of obsolete education are advocated by the progressive group. The conservative group always blames everything on the administration and never on their own negligence.

Repression is one of the functions of education. This teaches the individual to inhibit his native, animal impulses and desires by an effort of his own will. If too much will power is developed a mere mechanical human will result.

If the policy of laissez-faire is followed to its fullest extent, self-activity would cease to exist. Therefore, a nation must educate its individuals through the proper amount of self-activity by a central administration for the good of the whole.

Success does not follow a pre-determined path, but rather the path of experiments carried out and tested. Experiments in industrial arts were made and advocated by eminent men. The mental development of the individual who takes industrial arts is as great as it is for other branches since it provides both mental and physical action for the individual. All of man's faculties have the same opportunity to develop harmoniously. Therefore, a definition of education could be stated as a harmonious development of all faculties.

The education of an individual by the sloyd system was designed to give each person an over-all education in the use of tools, in physical education, and in training the eyes in the sense of form.

Education at certain stages may come from trivial matters and if this education continues it may cause a serious arrest in the development of the powers of the individual. Much of the early training of a person is received at home where retardation may be discovered.

When comparing academic subjects with those of industrial arts the individual must keep in mind that each requires an application of specific knowledge. Each subject therefore must be measured individually and not in terms of the knowledge gained. Man depends on society and society depends on man, thus each requires both types of education.

Industrial arts does not profess to produce a single skill, whereas some of the academic classes produce specialists in their field. The course of study should anticipate the mastery of the letters, as means of communication and should be related to the needs of the individual.

Industrial arts furnishes one an opportunity for self-expression. It teaches the pupil to have coordination of mind, hand and eyes. The over-all results derived from industrial arts are numerous. It helps to balance the curriculum. The best results from industrial arts are derived from the knowledge gained in self-expression rather than from the value the pupil receives from the sale of his article.

Establishing a new subject in the curriculum is difficult because changes are accepted slowly. One of Harris' greatest contributions to both academic studies and industrial arts education was his introduction of industrial arts in the kindergarten. This utilizes the immaturity of the child when he is less fitted for academic subjects. The tenth gift spoken of by Harris is the training of the eye and hand by drawing.

In a public debate concerning the role of industrial arts Harris and C. M. Woodward discussed the topic openly with the result that Woodward accused Harris of not advocating industrial arts.

In a public debate, pointing out the faults of the Sloyd system of Sweden Harris brought out his belief in industrial arts by stating that with training in drawing and the basic fundamentals of design, the American youth could learn the value of good design.

When the industrial arts movement started Harris minimized its importance. He feared that it would take the child and train him for industry. Harris' aim was to give the child a full-rounded education first and then let him train for that which he chose.

Drawing was readily admitted by Harris as industrial arts work. It helped to develop coordination between the eyes and the hands. Consequently aesthetic drawing was one of Harris' favorite subjects.

Society began to change rapidly towards the close of the nineteenth century. Cities began to grow in population and inventions produced employment which caused the rural families to move to larger communities. The machine age thus brought industrial arts to the forefront in the curriculum.

During a convention of superintendents Harris pointed out that industrial arts had a place in the curriculum because

it exercised the observation, trained the reasoning power and strengthened the will.

During his life Harris was interested in all kinds of inventions, gadgets, labor saving devices and enjoyed making useful articles for his home. He purchased all types of machinery while superintendent because of his interest in mechanics. Harris' contributions to industrial arts, either direct or indirect, were for a time doubtful. He would at times profess their values in a curriculum and then refute his statement later, leaving one to wonder which position should be taken.

## BIBLIOGRAPHY

### Books

- Bennett, Charles Alpheus, History of Manual and Industrial Education, Peoria, Illinois, Manual Arts Press, 1870.
- Blow, Susan E., The Motives and Commentaries of Friedrich Froebel's Mother Play, New York, D. Appleton and Company, 1895.
- Clifton, John L., Ten Famous American Educators, Columbus, Ohio, R. G. Adams and Co., 1933.
- Colegrove, Chauncey P., The Teacher and the School, Chicago, Charles Scribner's Sons, 1910.
- Cubberly, Ellwood P., History of Education, Boston, Houghton Mifflin Company, 1920.
- Cubberly, Ellwood P., Public Education in the United States, Boston, Houghton Mifflin Co., 1920.
- Curti, M. E., Social Ideas of American Educators, New York, Charles Scribner's Sons, 1935.
- Davidson, Thomas, Rousseau and Education According to Nature, New York, Charles Scribner's Sons, 1935.
- Fenner, Mildred Sandison, Pioneer American Educators, Washington, D. C., High Birch-Horace Mann Fund, National Education Association, 1944.
- Harris, William Torrey, A. Bronson Alcott, His Life and Philosophy, Boston, Roberts Brothers, 1893.
- Harris, William Torrey, Eulogy on the Life and Character of C. E. Childs, St. Louis, E. P. Gray, 1867.
- Harris, William Torrey, Hegel's Logic, S. C. Griggs and Co. Chicago, 1895.
- Harris, William Torrey, Horace Mann and Our Schools, New York, American Book Co., 1898.
- Harris, William Torrey, Psychological Foundations of Education, New York, D. Appleton and Co., 1898.

- Harris, William Torrey, The First-Fifth Reader, New York, American Book Company, 1878-1879.
- Harris, William Torrey, The Spiritual Sense of Dante's Divine Commedia, London, K. Paul, Trench Trubner & Co., 1901.
- Horne, Harman Harrel, The Philosophy of Education, New York, Macmillan Co., 1910.
- Keating, M. W., Comenius, New York, McGraw-Hill Book Co., 1931.
- Kilpatrick, William Heard, Froebel's Kindergarten Principles Critically Examined, New York, Macmillan Co., 1916.
- Leidecker, Kurt F., Yankee Teacher, New York, Philosophical Library Inc., 1946.
- MacVannel, John Angus, Educational Theories of Herbart and Froebel, Contributions to Education, No. 4, New York, Bureau of Publication, Teachers College, Columbia University, 1935.
- Monroe, Paul, A Brief Course in the History of Education, New York, Macmillan Co., 1907.
- Parker, S. C., The History of Modern Elementary Education, Chicago, Ginn and Co., 1912.
- Perry, Charles W., St. Louis Movement in Philosophy, Norman, Oklahoma, University of Oklahoma Press, 1930.
- Peterson, Russell A., Lutheranism and the Educational Ethics, New York, Macmillan Co., 1941.
- Pochmann, Henry A., The New England Transcendentalism and St. Louis Hegelianism, Philadelphia, Carl Schurz Memorial Foundation, 1948.
- Roberts, J. S., The Educational and Related Philosophical Views of William Torrey Harris, Washington, D.C., National Education Association, 1924.
- Rosenkranz, Johann Karl, Philosophy of Education, edited by W. T. Harris, New York, D. Appleton and Co., 1899.
- Ross, W.D., Aristotle Selections, New York, Charles Scribner's Sons, 1927.
- Struck, F. Theodore, Methods and Teaching in Industrial Education, New York, John Wiley and Sons, 1929.

Thwing, Charles F., A History of the United States Since the Civil War, New York, Macmillan Co., 1927.

Thwing, Charles F., Guides, Philosophers and Friends, New York, Macmillan Co., 1927.

Trent, William Peterfield, Cambridge History of American Literature, New York, G. P. Putman and Sons, 1921.

Ulich, Robert, History of Educational Thought, New York, Macmillan Co., 1945.

Wilds, Elmer Harrison, The Foundation of Modern Education, New York, Farrar and Rinehart, 1936.

Woodward, C. M., The Manual Training School, D. C. Heath & Co., New York, 1887.

#### Public Documents

Clarke, Isaac E., Art and Industry, Washington, D. C., Government Printing Office, 1889.

Cook, John W., Bulletin No. 17, Washington, D. C., U. S. Office of Education, Government Printing Office.

#### Unpublished Materials

Kinzer, John Ross, "A Study of the Educational Philosophy of William T. Harris," unpublished doctoral dissertation, College of Education, Feabody College for Teachers, Nashville, Tennessee, 1940.

#### Reference Books

Catholic Encyclopedia, Vol. XIV, New York, The Encyclopedia Press, 1912.

Cyclopedia of Education, Vol. III, edited by Paul Monroe, New York, Macmillan Company, 1912.

Dictionary of American Biography, Vol. VIII, New York, Charles Scribner's Sons, 1932.

Encyclopaedia Britannica, Vol. II, Chicago, Encyclopaedia Inc., 1943.



The Encyclopedia Americana, Vol. XIII, New York, American Book Strantford Press, Inc., 1953.

The Encyclopedia of Modern Education, New York, Philosophical Library of New York City, 1943.

#### Articles

Ames, C. H., "William Torrey Harris, Journal of Philosophy, Psychology, and Scientific Methods, VI (December 23, 1909), 701-9.

Arcsott, J. R., "William T. Harris, Education for Freedom," School and Society, LXX (November 5, 1949), 289-92.

Arcsott, J. R., "Two Philosophies of Freedom," School and Society, LXXIV (November 3, 1951), 276-79.

Berle, A. A., Sr., "William T. Harris--Pragmatic Hegelian," Journal of Philosophy, XLV (February 26, 1948), 121-33.

Blow, Susan E., "In Memoriam: Dr. W. T. Harris," Kindergarten Review, XX (December, 1909), 259-60.

Brown, Elmer Ellsworth, "Address at Funeral of Dr. Harris," Educational Bimonthly, IV (February, 1910), 229-30.

Brown, E. E. "Tributes," Journal of Education, LXX (December 9, 1909), 607-8.

Brown, E. E., "Tributes to Dr. Harris," Kindergarten Primary Magazine, XXII (April, 1910), 236-7.

Brown, George Pliny, Cary, C. P., and Brown, E. E., "In Memoriam, W. T. Harris," Proceedings of National Education Association (March, 1910), 119-20.

Byrne, L., "Committee of Correlation of Studies," Junior-Senior High School Clearing House, VI (December, 1910), 197-201.

Cohen, M. R., "Biographical Sketch," Philosophical Review, XLVI (March, 1937), 196-9.

Compagre, Gabriel, "La Mort de Wm. T. Harris," Educateur Moderne, V (January, 1910), 1-2.

Fitzpatrick, Frank A., "Appreciation," Journal of Education, LXXI (March 10, 24, 31, 1910), 257-9, 312-13, 340-1.

Fitzpatrick, Frank A., "Wm. T. Harris: An Appreciation," Educational Review, XXXIX (January, 1910), 1-2.

Frost, J. W., "Connecticut Honors Harris," Journal of Education, CIX (October 5, 1936), 426-36.

Greenwood, James M., "William Torrey Harris," National Education Association Proceedings (1910), 92-97.

Greenwood, James M., "William Torrey Harris--Educator, Philosopher and Scholar," Educational Review, XXXIX (February, 1910), 121-43.

Harris, William Torrey, "Address," National Education Association Proceedings (1904), 28.

\_\_\_\_\_, "Art Education--the True Industrial Education--A Cultivation of Aesthetic Taste of Universal Utility," National Education Association Proceedings (1889), 647-655.

\_\_\_\_\_, "Classification and Instruction in Rural Schools," National Education Association Proceedings (1897), 121-122.

\_\_\_\_\_, "Correlation of Studies," National Education Association Proceedings (1889), 324.

\_\_\_\_\_, "Education at Close of Century," National Education Association Proceedings (1900), 199-202.

\_\_\_\_\_, "Education of Negroes in Saint Louis," The Journal of Negro Education, X (October, 1941), 634-649.

\_\_\_\_\_, "Education of the Negro," Atlantic Monthly, LXVIII (June, 1892), 721-736.

\_\_\_\_\_, "Educational Needs of Urban Civilization," Education, V (1885), 443-446.

\_\_\_\_\_, "Educational Value of Manual Training," National Education Association Proceedings (1889), 417-423.

\_\_\_\_\_, "His Intellectual Growth and His Educational and Philosophical Work," Education, VIII (June, 1888), 619-630.

Harris, William Torrey, "His Reply to Henry George," Education, VIII (October, 1887), 111-118.

\_\_\_\_\_, "Historic Ornament--Why Drawing Teachers Should Teach Historic Ornament," Journal of Education, XXX (June 27, 1889), 7-8.

\_\_\_\_\_, "How I Was Educated," The Forum, I (1886), 552-561.

\_\_\_\_\_, "How the Superintendent May Correct Defective Classwork," National Education Association Proceedings (1906), 342.

\_\_\_\_\_, "How the Will Combines with the Intellect in the Higher Order of Knowing," National Education Association Proceedings (1896), 440-448.

\_\_\_\_\_, "Industrial Education in the Common School," Education (1886), 320-330.

\_\_\_\_\_, "Method of Pedagogical Inquiry," National Education Association Proceedings (1886), 492-505.

\_\_\_\_\_, "Pedagogical and Psychological Observations," National Education Association Proceedings (1890), 108-118.

\_\_\_\_\_, "Pedagogical Inquiry," National Education Association Proceedings (1885), 492-505.

\_\_\_\_\_, "Psychological Inquiry," National Education Association Proceedings (1885), 91-100.

\_\_\_\_\_, "Psychology of Manual Training," Education, IX (May, 1889), 571-580.

\_\_\_\_\_, "Rational Psychology for the Teacher," National Education Association Proceedings (1898), 574.

\_\_\_\_\_, "Report of the Committee in Pedagogics, the Educational Value of Manual Training," National Education Association Proceedings (1889), 417-430.

\_\_\_\_\_, "Report of the Sub-Committee on Discipline in Rural Schools," Report of the Commissioner of Education (1896-1897), pp. 873-885.

William Torrey Harris, "Report of the Sub-Committee on the Correlation of Studies in Elementary Education," National Education Association Proceedings (1895), 288-370.

\_\_\_\_\_, "Report of the Sub-Committee on the Correlation of Studies in Elementary Grades," National Education Association Proceedings (1895), 293.

\_\_\_\_\_, "Social Culture in the Form of Education and Religion," Education Review (January, 1905), XXIX, 18-37.

\_\_\_\_\_, "The Effect of Exercise on the Vital Organs," National Education Association Proceedings (1898), p. 931.

\_\_\_\_\_, "The Intellectual Value of Book Work," National Education Association Proceedings (1889), 92-98.

\_\_\_\_\_, "The Old Psychology Versus the New," Report of the Commissioner of Education (1893-1894), pp. 433-437.

\_\_\_\_\_, "The Pendulum of School Reform," Education, VIII (February, 1888), 347-350.

\_\_\_\_\_, "The Place of University Extension in America," National Education Association Proceedings (1890), 242-253.

\_\_\_\_\_, "The Psychology of Education," Education (May, 1889), pp. 576-577.

\_\_\_\_\_, "The Relations of the Kindergarten to the School," National Education Association Proceedings, (1879), 147.

\_\_\_\_\_, "The Separation of the Church from the School Supported by Public Taxes," National Education Association Proceedings (1896), p. 196.

\_\_\_\_\_, "The Study of Natural Science, Its Uses and Dangers," Education, X (January, 1890), 277-287.

\_\_\_\_\_, "The Teacher as a Social Factor," National Education Association Proceedings (1892), p. 196.

\_\_\_\_\_, "Theory of Culture and Civilization," International Education Review (1935), pp. 266-278.

Harris, William Torrey, "Twenty Years' Progress in Education," National Education Association Proceedings (1892), p. 61.

\_\_\_\_\_, "Vocation Versus Culture; On the Two Aspects of Education in American Institutions of Instruction," Education, XII (December, 1891), 193-206.

\_\_\_\_\_, "What Froebel's System of Kindergarten Education Is," National Education Association Proceedings (1906), p. 342.

\_\_\_\_\_, "What Shall the Public Schools Teach," The Forum, LV (February, 1888), 580.

\_\_\_\_\_, "Why Arts and Literature Ought to Be Studied in Elementary Schools," Educational Review, XIII (January-May, 1897), 324-333.

\_\_\_\_\_, "What the South Is Doing for Education and What Education Is Doing for the South," National Education Association Proceedings (1895), pp. 747-748.

Hogg, A., "Appreciation," Journal of Education, LIII (January 6, 1910), 11.

"In Remembrance of William Torrey Harris," symposium, Journal of Education, LXXXII (December 16, 1915), 593-

James, H. M., "Influence of Manual Training in Elementary Schools," National Education Association Proceedings (1845), 850-858.

John, W. C., "He De-regimented Schools," School Life, XV (January, 1936), 121.

Lang, Ossian, "The Commissionership of Education," The Nation, LXXXIII (July, 1906), 9.

Leidecker, Kurt F., "Century of U. S. Educator," National Republic, XXIII (January, 1936), 17.

Leidecker, Kurt F., "Debt of Melvin Dewey to Wm. T. Harris," Library Quarterly, XV (April, 1945), 139-42.

Leidecker, Kurt F., "Harris and Indian Philosophy," Monist, XLVI (January, 1936), 112-53.

Leipziger, Henry M., "Education as Affected by Industrial Arts," National Education Association Proceedings (1892), p. 442.

- McConnell, R. E., "Leadership Qualities of Wm. T. Harris," Kadelpian Review, IX (March, 1930), 209-16.
- Mosier, R. D., "Educational Philosophy of Wm. T. Harris," Journal of Education XXIX (July, 1951), 24-33.
- Mowry, Wm. A., "Reminiscences of Wm. T. Harris," Journal of Education, LXX (December 16, 1909), 629-30.
- Mowry, Wm. A., "Wm. T. Harris, LL.D.; His Early Life and His St. Louis Reports," American Education, XIII (March 10, 1910), 308-11.
- Mowry, Wm. A., "New Currency Plan," Journal of Education, LXVII (May, 1937), 373-375.
- Perry, C. M., "Wm. T. Harris and the St. Louis Movement in Philosophy," Monist, XLVI (January, 1936), 59-79.
- Roberts, J. S. "The Education and Related Philosophical Views of Dr. Wm. T. Harris," National Education Association Proceedings (1924), pp. 54-55.
- Roberts, J. S., "The Philosophical and Attending Educational Views of Wm. T. Harris," National Education Association Proceedings (1895), pp. 286-333.
- Russell, Henry R., "Manual Training: How Its Benefits May Be Secured," Education, III (June, 1888), 657-658.
- Sabin, Henry, "Reminiscences of Wm. T. Harris," Journal of Education, LXXI (May 5, 1910), 483-84.
- Sadler, Michael, E., "Influence of the Late Dr. W. T. Harris in English Education," Journal of Education, XXXII (January, 1910), 78, 80.
- Sadler, Michael, E., "The Service of Wm. T. Harris to British Education," Educational Review, XXXIX (February, 1910), 191-194.
- Schaub, E. L. "Harris and the Journal of Speculative Philosophy," Monist, LXVI (January, 1910), 80-98.
- Schwienker, L. M., "Harris' Essay on Horace Mann," School and Society, XLIV (October 31, 1936), 568-70.
- Schwienker, L. M., "Wm. T. Harris," Educational Administration, XIX (March, 1933), 227-31.

- "Sketch," Journal of Education, LXX (November, 1909), 464-465.
- Smith, P., "In Appreciation of W. T. Harris," Educational Record, XVII (January, 1936), 129-40.
- Sutton, Wm. S., "Contributions of Wm. T. Harris to the Development of Education in America," Educational Review, XXXIX (March, 1910), 298-308.
- Tadd, J. Liberty, "Manual Training Method in Philadelphia Public School," National Education Association Proceedings (1894), p. 888.
- Thwing, Charles Franklin, "How I Was Educated," The Forum, I (August, 1886), 556.
- Winship, A. E., "Appointment of Dr. Harris as Commissioner of Education," Journal of Education, LXXI (April 7, 1910), 369-70.
- Withers, J. W., "Tribute to W. T. Harris," School and Society, XLIII (March 14, 1936), 356-60.
- Woodward, C. M., "The Result of the St. Louis Manual Training School," National Education Association Proceedings (1889), pp. 73-91.
- Young, E. F., "Dr. W. T. Harris: A Notable Tribute," Journal of Education, LXVI (September 12, 1907), 225-227.