A STUDY OF THE PHILOSOPHY OF ROUSSEAU CONCERNING THE
PRACTICAL ARTS AND HIS INFLUENCE ON THE PHILOSOPHY
OF INDUSTRIAL ARTS IN THE SECONDARY SCHOOLS
OF THE UNITED STATES

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OF THE UNITED STATES

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CHAPTER I

INTRODUCTION

Preliminary Remarks

Essentially democratic, as the early phase of the Enlightenment had been essentially aristocratic, the naturalistic movement finds both its origin and its most notable and influential exponent in Jean Jacques Rousseau. To estimate correctly the ideas and purposes of this man, and to understand the essential principles of the movement itself, especially to gain any conception of its bearing on the development of educational thought, one must be prepared to lay aside all prejudices toward the man himself.¹

In Jean Jacques Rousseau, probably beyond all others, is to be found the greatest mixture of strength and weakness, of truth and falsity, and of that which is commendable and that which is detestable. He was a man governed wholly by his emotions, possessing the highest ideals with the greatest power of embodying them in words, but with only the slightest ability to realize them in action. With clear insight, unbounded sympathy, little accurate knowledge, and even less disciplined power-of-mind, he gave an impetus to ideas held and expressed

by many others that has made him one of the most powerful fac-
tors in all history.²

Napoleon said that without Rousseau the French Revolution
would not have occurred; and, while it is impossible to say
what would or would not have happened, he certainly caused a
more complete revolution in educational thought and practice
than any other one man or group of men. He was one of the
first who preached the political and social gospel of the com-
mon man and gave to him an education as a right by birth.³

Statement of Problem

This thesis is a comparative study of Rousseau's philoso-
phy on education, with emphasis placed on the practical arts,
to show how his philosophy of practical arts has influenced
the philosophy of present day industrial arts in the secondary
schools of the United States.

Delimitations

This study is limited to the philosophy of Rousseau con-
cerning the practical arts and the effect of this philosophy
upon the philosophy of industrial arts in the secondary schools
of the United States.

Definition of Terms

Philosophy.—Webster's Dictionary defines the word

²Ibid.
³Ibid., pp. 339-369.
"Philosophy" as the "study or science of truths or principles underlying all knowledge and reality" or as "a system of principles for guidance in practical affairs." The latter definition applies more appropriately to this particular study.

Practical Arts.--Practical Arts is a term used to describe such subjects as woodworking, mechanical drawing, metal-work, printing, leather-work, jewelry-making, clay-work, book-binding, and other related subjects, when taught as a form of general education having for its chief purpose the development within the pupil, through practice in the school shops with a variety of exercises and practical projects of personal value, of manual skill and an appreciation of good design and construction.\(^4\)

Influence.--The word "influence" is used interchangeably with the word "effect" in this study. Either word designates the aftermath of Rousseau's philosophy on the practical arts as applied to industrial arts.

Industrial Arts.--Industrial Arts is one of the practical arts, a form of general or non-vocational education which provides learners with experiences, understandings, and appreciation of materials, tools, processes, and products of the vocational conditions and requirements generally incident to the manufacturing and mechanical industries. These results

are achieved through design and construction of useful products in laboratories or shops, appropriately staged and equipped, supplemented by readings, investigations, discussions, films, visits, reports, and similar activities characteristic of youthful interests and aptitudes in things industrial. The program includes such industrial representations as drawing and design, metal-work, wood-work, textiles, printing, ceramics, automobiles, foods, electricity, and other similar units, either as separate offerings or in various combinations.5

Source of Data

This study is a research problem based on material gathered from books, magazine articles, bulletins, pamphlets, and lectures. Instead of employing new ideas, this thesis co-ordinates ideas and theories already brought to light in order to show how and why the philosophy of Jean Jacques Rousseau has influenced industrial arts.

Procedure

The study has been divided into five parts or chapters. Chapter I is concerned primarily with the statement of the problem, the delimitations of the study, a definition of terms, an outline of the method of procedure, the source of

5Ibid.
data, and recent and related studies. Chapter II is a study of the factors which influenced Rousseau's philosophy, such as his life, economic, social, and political conditions, and the prevailing general educational theories and theories concerning the practical arts. Rousseau's philosophy of education, with emphasis on his theories of general education and the practical arts is the subject of Chapter III. This chapter also gives attention to Rousseau's aims and objectives in general education and practical arts education and to the methods of teaching he employed to reach his desired outcomes. Chapter IV is a study of the philosophy of industrial arts in the secondary schools of the United States showing the relationship of general education to industrial arts, the aims and objectives of industrial arts, and the methods of teaching these courses. Chapter V is a comparison of Rousseau's philosophy of practical arts with the philosophy of industrial arts in the United States. In conclusion, Chapter V gives a brief summarization of the study.
CHAPTER II

FACTORS INFLUENCING ROUSSEAU'S PHILOSOPHY

No philosopher has done more for the development of education than Jean Jacques Rousseau. Ameil has summed up the philosopher in this way:

If true human greatness constitutes deep insight, strong and well-distributed affection, and free, beneficent will, Rousseau was not in any sense a great man. His insight, like his knowledge, was limited and superficial; his affections were capricious and undisciplined; and his will was ungenerous and selfish. His importance in literature and history is due to the fact that he summed up in his character, expressed in his writings, and exemplified in his experience a group of tendencies and aspirations which had for some time been half-blindly stirring in the bosom of society, and which in him attained complete consciousness and manifestation for the first time.1

This statement by Ameil has given a complete and vivid description and analysis of the character of Rousseau.

His Life

Rousseau was born in 1712 at Geneva, Italy. Geneva was a city renowned for its great intellectual and moral vigor. The influence of Geneva was spread through Europe by Calvinism; and in France, England, and Scotland, by the Protestant population. Geneva was a city in which there prevailed an

1Ameil, Jean Jacques Rousseau, p. 4.
earnestness of moral life, purity of domestic relations, simplicity of social order, and freedom of government which were in sharp contrast with the luxury, wealth, artificiality, immorality, and cynicism of Parisian life. The memory of these early associations, intensified by the contrast with Rousseau's later Parisian association undoubtedly furnished the element of an ideal natural state.\(^2\)

Jean Jacques Rousseau was born to inherit a dissolute father and a neurotic mother who died when Rousseau was born. Rousseau was reared by his aunt, a silly sentimental person with a vivid imagination developed by trashy romances. The only training Rousseau received during his youth was one of indulgence. He learned to read at an early age and spent this ability on the devouring of trashy romances. Rousseau had only a few years of formal education, which failed to make any radical change in his character.\(^3\)

At the age of twelve Rousseau served an apprenticeship to a trade. Of this training Rousseau said that he learned more of deceit, idleness, and dishonesty than he did of craftsmanship. Four years after beginning his apprenticeship Rousseau was still listening only to his emotions and whims, which led him to become a common vagabond. He lived this type of life for several years; and its one merit was that it strengthened

\(^2\)Ibid.

both his love for, and his knowledge of, nature. 

Morley says that it is useless to follow the life of Rousseau in detail except that in it may be seen a concrete ideal of education. Rousseau was an emotional, rather than a rational person; he exalted natural instincts and desires above all, and he held that moral and religious ideals could not develop in early childhood. Rousseau believed that more was to be derived from association with nature than from communion with books or from intellectual contact with others, and that proper development came from removing all restrictions and allowing natural tendencies to have full sway. This conception of education was merely the outgrowth of his own life.

When Rousseau reached the age of forty, Morley reports, his aimless, meaningless existence became possessed of a great idea which gave point to his sentimental feelings and to his emotional prejudices and beliefs: an idea that through him was to revolutionize the social structure of his adopted country as well as to modify profoundly that of many others; an idea which when applied to education, was to create a new epoch therein. The main idea was simple and is commonplace now: Human happiness and human welfare are the natural rights of every individual, not the special possession of a favored class; and legitimate social organizations and education exist but to bring about the realization of this ideal.

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4 Ibid.  5 Ibid.  6 Ibid.
Economic, Social, and Political Conditions

Until the middle of the eighteenth century, philosophy and reason concentrated most of their attacks upon the Church; after the middle of the century, criticism was directed toward the evils of the social and political organization of life. The earlier aim was to destroy the existing abuses; the latter, rather toward building up an ideal society. 7

There were other more fundamental distinctions between the two movements. The rule of reason had come to be for many no less a tyranny than the rule of authority. As opposed to the earlier belief, the view was now urged that the senses were not always to be depended upon and that reason was not always infallible. Locke says:

The business of education is not to make the young perfect in any one of the sciences, but so to open and dispose their minds as may best make them capable of any, when they shall apply themselves to it. 8

The emotions or the inner sentiments, as true expressions of our nature and as opposed to the cold, selfish calculations of reason, were rather to be followed as the guide to right conduct. The movement of the latter half of the century looked toward the improvement of the masses of the people, as the former had resulted in the formation of an intellectual aristocracy. 9

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7Schlosser, History of the Eighteenth Century, I, 14-62.
8Locke, Thoughts on Education, pp. 37-58.
9Schlosser, op. cit., I, 14-62.
Rousseau was the leader of one movement and Voltaire was the leader of the other. Voltaire was a leader in the first because of his brilliant intellectual power and his far-reaching rationalism; Rousseau, a leader in the second because of his deep emotionalism and his profound sympathy for the people. Schlosser says:

If it is an explanation of the popularity of Voltaire that he said what most of the people were thinking, then we may say that Rousseau was popular because he gave the most perfect expression to what others were feeling.\(^\text{10}\)

The early movement by Voltaire had led to freedom of the intellect, but yet had tolerated, or preserved for selfish reasons, the formalism of social institutions. Again Schlosser says:

Since Rousseau had neither the ability nor the training to move with the ease in this formal life of society when the opportunity was given him, he, led partly by personal feeling and partly by sympathy for the common lot made miserable by this indifference of the class, revolted most violently and propounded in place of the old law of reason the new gospel of faith in nature, in the common man, and in man's ability to work out his own good in life.\(^\text{11}\)

The second half of the century under the leadership of Rousseau was to develop a new faith in man, to work out a new ideal in life, to infuse a new spirit into society, and to re-establish a basis for religion in man's nature. There may be found a profound difference between the old and new periods.

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\(^{10}\) bid., pp. 78-89.

\(^{11}\) Schlosser, op. cit., I, 71-96.
Morley sums up the difference between the attitude of the Naturalistic period and that of the period preceding the En-
lightenment as follows:

Faith in a divine power, devout obedience to its supposed will, hope of ecstatic, unspeakable reward, these were the springs of the old move-
ment. Undivided love of our fellows, steadfast faith in human nature, steadfast search after justice, firm aspiration toward improvement, and generous contentment in the hope that others may reap whatever reward may be, these are the springs of the new.\textsuperscript{12}

It is important to note that the naturalists believed in religion as an essential part of human society, because it was an essential part of human experience. The general con-
ception of civilization held by Voltaire and his associates was the elimination of religion. The government of Voltaire permitted the common people no rights; it had no sympathy with the masses, and erected a polished, intellectual society, pre-
serving its identity by a cold formalism and its morality by a punctilious observance of stiff rules. Reason was accepted as a guide in thought; materialism as a standard in morality; and self-interest, or rather selfishness, as the principle of action. In this conception of society is to be found the animus of Rousseau's contention that civilization is a curse.\textsuperscript{13}

Of this contrast Flint states:

\textsuperscript{12}\textsuperscript{12}Morley, op. cit., I, 10-58.

\textsuperscript{13}\textsuperscript{13}Schlosser, op. cit., I, 67-149.
Voltaire's appreciation of civilization was likewise at once very sincere so far as it went, and yet very defective. He had a genuine enthusiasm for culture of a kind; a keen sense of the worth of science, art, literature, and social refinement. But his idea of civilization was most defective. It excluded all earnest religious faith, and included nothing higher than intellectual cleverness, moral respectability, and polished manners. It was not the idea of a civilization appropriative of all that is human, comprehensive of all that educates mental and spiritual life, and which, while it should refine and discipline nature, should likewise preserve its simplicity, respect its freedom, and favor individual and national originality; but rather that of a civilization of a special and artificial type such as can only be local and temporary, and as was to be seen in all its glory in the fashionable salons and philosophic circles of Paris in the Voltairian period.\(^{14}\)

The above quotation gives a complete description of the type of government that prevailed during the early years of Rousseau. It is also the type of government that Voltaire thought would be the best for his country.

Rousseau was a very primitive type of man; his aimless, emotional life had its positive side. His life was entirely spontaneous, simple, happy, earnest, and honest. Rousseau compared his life with the life of the Parisian society, a life of the formal, false, hypocritical, superficial, unfeeling, harsh, selfish, cruel, and to him inhuman type of life. Much of the unattractiveness of its form was due to the lack of that sophistication so characteristic of the social life of

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\(^{14}\) Flint, History of the Philosophy of History in France, pp. 301-355.
the times and was more than counter-balanced by its genuineness.\(^{15}\)

Rousseau spent several years in contact, though not in sympathy with, the society of culture, wealth and position, on the one hand and, on the other, with that circle of powerful intellects centered around Voltaire which controlled the new thought and influenced most of the political and social hierarchies of Europe. With neither of these societies had he any sympathy. The one principle which he honestly lived up to throughout his life was the democratic one—his feeling for the common man, his belief in the worth of the individual. It was this hollow and insincere, though brilliant, witty, wealthy and "cultured" society that was before him when he produced his famous essays and those works for the following thirteen years ending with the *Emile*, which were to render him famous and to revolutionize society.\(^{16}\)

**Prevailing General Educational Theories**

In regard to education in the schools the rationalistic movement had little direct influence, though it controlled the private education of the upper class. The type of education received is one similar to that received by the son of Lord Chesterfield. This education was one of worldly wisdom, a perfection in forms of behavior, a lack of all that is most

\(^{15}\)McDonald, Studies in the France of Voltaire and Rousseau, Ch. II.

\(^{16}\)Ibid.
serious in life, an emphasis on the importance of polite conduct, a higher appreciation of manners and courtliness than that of virtue and seriousness, and attention to outward form without regard to inward reality, a smattering of knowledge of all kinds, a purely materialistic judgment of affairs of life, a nature developed to decide all things in the cold light of reason, full command of the body, with opinions never fully revealed,—this constitutes the ideals of the education of the rationalistic-aristocratic period.\textsuperscript{17}

Educational Theories Concerning the Practical Arts

Many leaders of educational theory have included the manual arts in their theory, but not in their practice. Luther proposed a system of education for industrial workers, but it was not put into operation; Comenius extended and modified Luther's scheme, but only a very small part of it was carried into operation under his direction; Hartlib, Petty, and Locke had visions of manual work as a means of improving methods of education and of giving it a more scientific and practical content.\textsuperscript{18}

With the exception of teaching drawing, all the theorizing of the sixteenth and seventeenth centuries resulted merely in a change of educational philosophy. During these centuries the

\textsuperscript{17}Barnard, National Education in Europe, pp. 208-315.

\textsuperscript{18}Ibid., pp. 234-376.
the manual arts did not, with a very few exceptions, come within the walls of the schoolroom. The theory of learning by doing was accepted by many, but was not put into practice in the schoolroom. The school and the workshop were two entirely separate spheres of human activity. Manual work was outside the realm of school work, because its fundamental educational value was not yet recognized.\textsuperscript{19}
CHAPTER III

ROUSSEAU'S PHILOSOPHY OF EDUCATION

The Emile, the most celebrated of Rousseau's works on education, is a long tale, part novel, part didactic exposition. Rousseau relates the proper education of the youth by showing the training of the child taken from his parents and the schools, isolated from society, and put into the hands of an ideal tutor, who brings him up in contact with Nature's beauties and Nature's wonders. The Emile was the cause of an upheaval in educational thinking. The book caused the author to flee from France to avoid arrest. It would seem that this kind of writing was necessary in order to break down the wall of educational formalism and make way for the on-coming advocates of a pedagogy that recognized the nature of the child as the center of pedagogical inquiry.¹

While the Emile is more interesting to the educator, the Social Contract is one of the greatest political works. The Social Contract may be considered as the basic doctrine of the French Revolution, and it also contains the germinal ideas of the American Constitution. The Emile contains the germinal ideas of the kindergarten, of modern elementary school work,

¹Davidson, Rousseau, Pt. I.
and the entire modern conception of education. Rousseau was possibly the first man to advocate the modern theory of education, that the education of the child should start with the child himself.

Educational Theories

The awakening of Rousseau's desire to write relates back to the summer of 1749 when he undertook to compete for a prize offered by the Academy of Dijon for the best dissertation on the subject "Whether the Progress of the Sciences and of Letters Has Tended to Corrupt or to Elevate Morals." He was so good in his paradoxical condemnation of civilization that he achieved at once a brilliant success. The opening and probably the most significant sentence ever written by Rousseau is, "Everything is good as it comes from the hand of the author of nature; and everything degenerates in the hands of man." The above statement is the fundamental principle of the Emile. In it education is received from nature, man, and things. When the training received from these three teachers is not harmonized, the individual is badly educated. Quoting from Emile, "He in whom they all coincide and tend to the same end, he alone may be said to move toward his destiny and to live consistently; he alone is well educated." Harmony in education

2Payne, Rousseau's Emile, Introduction.

3Ibid.
is obtained by subordinating the education of man and of things to that of Nature.

Nature, according to Rousseau, is a habit, and education is nothing but habit. Primary dispositions, unaltered by enlightenment, by sophistication, or by suggestion from others constitute nature. Habit in its usual significance indicates that which is acquired by direct imitation of other human beings, by suggestion, or by obedience to command. Rousseau says this concerning habit, "The only habit which the child should be allowed to form is to contract no habit whatever."\(^4\) As a subordinate connotation throughout the treatise, education according to nature thus indicates that instinctive judgments, primitive emotions, natural instincts, and first impressions are more trustworthy as a basis for action than all the reflection, the caution, and the experience that comes from the association with others.\(^5\)

The prevailing conception of human nature and especially of child nature, re-enforced by both educational and religious teachings, was diametrically opposed to that of Rousseau. Human nature was considered essentially bad; the purpose of religious training as well as of education in general was to eradicate the original nature and to replace it by one shaped under man's direction. Rousseau opposed this idea with the

\(^4\) Munroe, The Educational Ideal, pp. 25-38.

\(^5\) Ibid., pp. 39-47.
following principle:

The first education then should be purely negative. It consists, not in teaching the principles of virtue or truth, but in guarding the heart against vice and the mind against error.  

The entire education of the child was to come from the free development of his own nature, his own powers, and his own natural inclinations.

The general principles of negative education underlie all education. Rousseau held that each phase of education, physical, intellectual, and moral, had an appropriate time. The development of the child was through sharply defined periods which had little or no connection with each other. Each period would need a separate education of its own. There would be four separate and distinct periods of training in the child's life. Each period would be concerned with a special stage of the child's education. These periods would be arranged according to the child's chronological age and the development he reached through the other periods of training. 

The first book of Emile is concerned with the education of the child from one to five years. Rousseau would have the father be the child's natural teacher and the mother the child's natural nurse. The mother and the father would give the child the greater part of his early training and this would be primarily in the physical sense. Concerning the wickedness of

6Rousseau, Emile, p. 7.
7Munroe, op. cit., pp. 39-54.
the child during this period Rousseau relates,

All wickedness comes from weakness. A child is bad only because he is weak; make him strong and he will be good. He who can do everything does nothing bad.8

The above statement is the basic principle that underlies all the early training of the child and is strictly in the physical sense. During this period there is very little attention paid to the child's intellectual or moral training. The restriction of the child's vocabulary during this period is evident. From Emile we read, "It is a great disadvantage for him to have more words than ideas, and to know how to say more things than he can think."9

The period from five to twelve is the most critical period of human life. The education during this period should be negative, and the moral training should be by natural consequences. Instead of attempting to give the child all sorts of ideas, a teacher should do nothing at all toward molding or forcing the child's mind. Concerning this Rousseau says, "Nature desires that children should be children before they are men."10 The child should not be taught to read, though he will probably pick this up of his own accord at the time he sees a need for reading. The child should hardly know what a book is during this period of growth and mental development.

8Rousseau, op. cit., p. 17.
9 Ibid., p. 18.
10 Ibid., p. 19.
Rousseau relates, "Exercise the body, the organs, the senses and powers; keep the soul lying fallow as long as you can."\(^{11}\)

Although the child knows nothing of books and education, he will on the other hand judge, foresee, and reason on things which are directly related to him. During this period of the child's education the training should be largely the training of the senses. This training could be received by a constant association with the forces and phenomena of nature.\(^{12}\)

The period from twelve to fifteen is one in which the strength of the individual is greater than his needs; this is the period of education in which intellectual training is of the most importance. At this age level the greatest amount of stress should be laid upon the acquisition of knowledge. Rousseau asks this question, "What will the child do with his surplus of power and energy?"

He will endeavor to employ it in tasks which may profit him when the occasion comes; he will project into the future, so to speak, that which is superfluous for the time being. The robust child will make provisions for the feeble man; but he will place these stores neither in coffers which can be stolen from him, nor in barns which are not his own. In order that he may really appropriate his acquisitions to himself, it is in his arm, in his head, and in himself, that he will lodge them. This study; and observe, it is not I who have arbitrarily made this choice, but it is nature herself who indicates it."\(^{13}\)

\(^{12}\)Hudson, *Rousseau and Naturalism in Life and Thought*, Pt. I.

\(^{13}\)Rousseau, *op. cit.*, pp. 28-39.
Curiosity—the ardor for knowledge which comes from natural desires, the innate desire for well being, not the ardor for knowledge that is founded on the desire to be considered wise—is the sole motive and the sole guide. The test of all learning is its practical use, according to Rousseau. The child should be allowed to study only the things which natural instincts lead him to pursue and studies should not be forced upon him if he has no natural taste for the particular study. There would probably be very little "book knowledge" during this period of training. Rousseau recommended the book Robinson Crusoe, a book of life according to nature, or self help, of the uselessness of most knowledge and all social forms, as the best for the child to read during this period of training. He said that knowledge would be clearly distinguished from truth, and the useful should be distinguished from both. Quoting from Emile,

Since all our errors come from our judgment, it is clear that if we never needed to judge we should have no need to learn; we should never be happier in our knowledge. Who denies that scholars know a thousand true things which the ignorant will never know? Are scholars nearer the truth on this account? Quite the contrary: they depart from truth as they advance; because the vanity of judging, ever making greater progress than knowledge, each truth which they learn brings with it a hundred false judgments. 14

One of the most significant ideas as advanced by Rousseau in his Emile, from the industrial arts and vocational standpoint, is his advocacy of trade training. This, too, was in

14 Ibid., pp. 31-39.
the face of the old idea of Aristotle that the trade was banal-
istic and only for artisans and slaves. Rousseau would have
this trade taught for the trade's sake rather than for the oc-
cupational advantages received by it. He also emphasized many
of the social advantages, without comprehending at all the psy-
chological advantages that are so emphasized at present. At
the end of this period Rousseau intended for Emile to be in-
dustrious, temperate, patient, firm, and full of courage.

During the years fifteen to twenty Emile would receive
training of the heart. By this time the body senses and the
brain of Emile would be formed. Up until this time the child
had been the controlling motive; self-perfection, self-
development, the ultimate end. It is now time for the youth
to learn to live with others and to be educated in social re-
lationships. The controlling motive in this stage becomes the
love for others; emotional development and moral perfection,
the goal. Rousseau called particular attention to the tran-
scendent importance of the period of adolescence in education.
Concerning this he said,

At this stage the ordinary course of education
ends; but strictly speaking, here one's education
should begin. Up until this time Emile had not
been brought into direct contact with others, he
had to learn to adapt himself to conduct and the
interest of others. Emile had known no motive ex-
cept those of interest and curiosity. He never,
up until this time in his life heard the name of
God. During this period his education would be
concerned mainly with moral and religious thoughts.¹⁵

¹⁵Payne, op. cit., Pt. I.
Emile's previous attachments had been merely the result of habitual association; now they are to be based on unity in sympathy and upon emotional experiences. The whole character of his education changes. Rousseau says,

The study proper for man is that of his relations. While he knows only his physical existence, he should solely study his relations to things; this is the employment of his childhood. When he begins to feel his moral existence, he ought then to inquire after his relations to mankind; for this is the proper occupation of his whole life, beginning from the period which he has now reached. 16

Rousseau believed profoundly that experience is the best teacher and he would therefore have everything possible taught by actions, and would have us say only what we cannot do. As an example, Rousseau would have Emile taken for a walk after breakfast and become lost in the woods. He would probably be so tired, hungry, and thirsty by noon that he would cry. Then he would have Emile learn to determine the points of the compass from the sun by observing the direction of his own shadow. With this Emile would reason which way to go and would get out of the forest. Rousseau reasoned that with this type of learning Emile would never forget the things that he had learned in a day's experience. Concerning experience he says,

I do grow weary of repeating that all the lessons of young men should be given in action rather than words. Let them learn nothing in books that can be taught them by experience. 17

16ibid.

Rousseau was far from preaching the dangerous doctrine that one should learn to avoid evil through experience of its consequences. In case the experience is dangerous, instead of making it ourselves, Rousseau says that we should draw the lesson from history. Thus Emile is taught not only to shun evil, but to do good. He should be especially good to the poor and the oppressed who call for his sympathy and his assistance. He should be firm in the assertion of his own rights, and as quick to the defense and protection of others. Emile should be an exponent of the virtues of peace. "The spirit of peace is the effect of his education."\(^{18}\)

In a similar way Emile was to receive his religious education. "At the age of fifteen, he did not know that he had a soul, and perhaps at eighteen it is not yet time for him to be informed of it; for if he learns it too soon, he runs the risk of never knowing it."\(^{19}\) This quotation contains the underlying principle of Rousseau's teachings concerning religious education. The religious ideas which the child receives are mere forms of verbal imitations worthless so far as real experience is concerned.\(^{20}\)

The last book of Emile is dedicated to the education of women. This book takes up the education of Sophia, a girl, who was to become the companion of Emile. As her future was

\(^{18}\)Ibid.  
\(^{19}\)Ibid., pp. 46-57.  
\(^{20}\)Payne, op. cit., pp. 78-98.
already set-forth for her, she would be educated only in the way in which she might be of help to her companion, Emile. In this Rousseau violates his fundamental idea, that each individual is to be educated for himself and guided by the needs and rights of his own personality. Since this was the custom in Europe generally with regard to women, we must make allowances for his ideas concerning women, as most men of practically all European nations felt toward women in this manner.

An outstanding point of Rousseau's philosophy of education is that education is a natural development from within; and that education comes through the workings of natural instincts and interests and not through external forces. Education, according to Rousseau, was the expansion of natural powers, not an acquisition of information. He believed that education was life itself, and not the preparation for a future state remote in interest and characteristics from the life of childhood.

As Rousseau felt that experience was the best teacher and he would therefore have everything possible taught by action, and would have us say only the things that could not be done, Emile would not have books until he had a real use for them and this would not probably be for a long time. The way was therefore open in his system, and especially in his "education from circumstances," for a large amount of education through nature study and manual arts.

Labor is the duty of both rich and poor alike. Emile
was to be taught the simple manual arts, concerning which
Rousseau says, "Emile will learn more by one hour of manual
labor, than he will retain from a whole day's verbal in-
structions." Concerning books he thought that they would
teach people to talk about things which they did not under-
stand.

The manual arts occupations served to furnish subsistence
to mankind and were the closest type of subsistence to nature.
"Of the various occupations which serve to furnish subsistence
to mankind those which approach nearest to a state of nature
are the manual arts." The most respectable of all the arts
and professions was agriculture; next to agriculture he con-
sidered smithing and carpentry. Rousseau thought that Emile
should learn a trade or a mechanical art. About this he says,
"A mechanical art, in the exercise of which the hands are more
employed than the head; an art by which he will never get a
fortune but may be enabled to live without one." The purpose
in having Emile learn a trade was not for the reason of live-
lilhood, but because it was a vital part of his education. He
believed that the manual arts might possibly be a means of
mental training. This theory prepared the way for the educa-
tional methods of Pestalozzi, Froebel, and those who followed
in their train. However, his theory was the vision of a seer,

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22 Ibid., pp. 45-67.
23 Ibid.
the voice of a prophet; he did not put his theory into practice.

Rousseau placed himself ahead of many of his predecessors and many of those who came after him in his ideas setting forth the practical arts. Concerning this he says,

If instead of making the child stick to his books I employ him in a workshop, his hands labor to the profit of his mind, he becomes a philosopher but fancies he is only a workman. It is necessary that he work like a philosopher, lest he become as idle as a savage. The great secret of education is to make the exercises of the body and the mind serve a relaxation to each other.24

The above statements give the fundamental philosophy of Rousseau concerning the practical arts. It also sets forth his ideas that the manual arts were taught and received not only for the purpose of earning a living, but also to complete the child's education.

As for the choice of a trade or trades he believed that Emile should be allowed to choose his own. It is assumed that by this time Emile would be looking for the more useful things in the way of a trade. He would probably not be satisfied to throw away his time on an unprofitable employment. It would be possible for Emile to choose a trade that might have been used by Robinson Crusoe on his desert island. By this time Emile would be ready to do whatever might be required of him; he would know how to handle the farm tools, the mallet, the plane, the file, and all the tools of the workman would be familiar to him. Emile would learn the trade of the joiner

24Tbid., p. 56.
because it is neat and useful and may be carried on indoors; it is sufficiently laborious to keep the body in exercise, and its use requires both diligence and dexterity.

Evidently Rousseau did not intend for the manual arts to be a part of the regular school program. He believed that the boy should be apprenticed to first one master of a craft and then to another so that the child could obtain the knowledge of several crafts and skills. He emphasized the fundamental belief that the manual arts was not only a means of obtaining skills, but was also a means of mental training.

**Aims and Objectives**

An underlying objective of Rousseau's philosophy is that education is received by harmonization of the learning processes of the child through the teachings of Nature, man, and things. This harmony is obtained by subordinating the education of man and of things to that of nature. He also believed that there was a relationship which existed between nature, habit, and education. The terms habit and nature were synonymous, and to him education was nothing but habit.

One of the basic aims in the development of the child was that he would be educated through sharply defined periods of maturity, each period would be independent of the other, and each would contain a separate education of its own. During the early period of development the objectives were in the physical alone. The moral and intellectual growth of the child was placed aside during the early part of his life. During
this period emphasis was also placed on the restriction of the vocabulary.\footnote{25}

During the period from five to twelve, the most critical period of human life, the objective was to place emphasis upon the negative education of the child and the moral education through natural consequences. Nothing should be done to mold or force the child's mind.

The acquisition of intellectual training was the prime objective during the period of twelve to fifteen. Although Rousseau never gave the idea of forcing or making the child study books at any time in his outline of the perfectly educated person, he believed that there should be some sort of handwork throughout the entire education of the child. Therefore the learning of a trade would be an important aspect in the development of the child during this period of training.

Religious training would be received in approximately the same manner in which the rest of the education was received. The training of the heart and the religious training were to be given at the same time and when the need did arise for such training. When the training of the heart and the religious training were taught, he felt that the student should also be taught how to get along with others in a given society.

The objective upon which Rousseau based his entire

\footnote{25Morley, \textit{Rousseau}, Vol. II, Ch. VII.}
philosophy was that education is life, and not the preparation for living. Another basic aim in his philosophy, as been said, was that education was the expansion of natural powers, and not acquisition of information.26

Method of Teaching

The plan for the theory of modern education was set forth by Rousseau, and with this plan he also had a definite method of teaching. The underlying idea in his plan for teaching was to let the child be taught as much as possible through natural experiences. Education was received through three main sources: nature, man, and things. He believed that it was necessary to have harmony among these three sources to teach the individual properly.

As far as the teacher was concerned, Rousseau felt that experience was the best teacher. He believed that teaching through experience would more adequately equip the child to cope with the problem of every-day living. Anything that was learned through experience would be more impressive to the child, and the task of remembering would be made easier.

The naturalist, Rousseau, felt that the father should be the natural teacher of the child, and the mother should be the natural nurse of the child. He believed that the father and mother would probably be the best teachers during the

26 Monroe, The Educational Ideal, pp. 91-129.
the child's early development because the training would be concerned primarily with physical development.

Rousseau based his theory of method on the chronological age of the child with a definite teaching period and with certain goals and outcomes in mind. The preceding period would have nothing to do whatever with the period of training which was under way.

When the child reached the second period of development he should be taken from his parents and the schools and isolated from society. The child would then be placed in the hands of an ideal tutor who would teach the child through the beauties and wonders of nature. He said that education according to nature indicates that instinctive judgments, primitive emotions, natural instincts, and first impressions are more trustworthy as a basis for action than all the reflection, the caution, and the experience that comes from the associations with others.28

During the Middle Ages the apprentice not only worked but lived in the same house with the master, and now Rousseau proposed to have the boy sent to the master one or two full days each week. He believed that the child should be allowed to choose his own trade. This would tend to reinforce his belief that education is a natural development and that education comes through natural instincts and interests and not through

28 Hudson, Rousseau and Naturalism in Life and Thought, Pt. I.
external forces.

Rousseau's philosophy of teaching might be summed up in the statement that "he learned to do by doing." While his philosophy seems very simple, yet for the past two hundred years we have been trying to find out what he meant by the above statement. Many and various methods have been tried—notably the school of Fellenburg in the manual arts movement and then in the mechanical institutes of America.
CHAPTER IV

A COMPARISON OF ROUSSEAU'S PHILOSOPHY OF THE PRactical ARTS WITH THE PHILOSOPHY OF INDUSTRIAL ARTS IN THE UNITED STATES

Education is the combination of training received from nature, man, and things (Rousseau uses things and circumstances interchangeably). Over two of these man has considerable control; over the third, nature, he has none. Harmony among these constituents is a necessity in the education of the child, such harmony in education being obtained by subordinating the education of man and of things to that of nature.

This education we receive from nature, from men, and from circumstances. The constitutional exertion of our organs and faculties in the education of nature; the uses we are taught to make of that exertion, constitute the education given us by men; and in the acquisitions made by our own experience, on the objects that surround us, consists our education from circumstances.¹

This was the fundamental belief upon which Rousseau based his entire philosophy of education and also may be considered as a basic precept of the modern educational theory.²

Such ideas that education is a natural, not an artificial process; that it is a development from within, not an addition

¹Rousseau, Émile, p. 14.
²Ibid.
from without; that it comes from the workings of natural instincts and interests and not in response to external forces; that it is life itself, not a preparation for a future state in life, constitute the fundamental teaching of Rousseau. This type of thinking was also carried on by Pestalozzi, Fellenburg, Froebel, Cygnaeus, Della Vos, Salomon, and Woodward. Rousseau, along with these educational thinkers and reformers, possessed in common one fundamental notion, that children learn best through activity participation in the concrete experiences which have to do with the phenomena of their physical and social environment.

The philosophy of industrial arts today is the same as the basic theory of Rousseau, "learning by doing." It is believed by many today that the child learns best through actively participating in many concrete experiences. The leaders in this field believe that the child will learn more readily the facts if he is actually engaged in participating in the action itself. Theresa Gunther found in a study of elementary school children that they acquire industrial knowledge in their industrial arts classes better through manipulative participation than through conventional methods of teaching the same knowledge. They also retain what is learned much longer and with more accuracy of recall when the facts were taught by a means of manual activity.3

3Ibid.
Since the time of Rousseau many leaders have believed that the growing mind of the child learns most readily to think clearly and effectively when engaged in thinking about doing while engaged in doing. Rousseau expressed this idea when he said,

Emile will learn more by one hour of manual labor than he will retain from a whole day's verbal instruction... If instead of making the child stick to his books, I employ him in the workshop, his hands labor to the profit of his mind...4

This is the fundamental concept underlying the thinking of both the Renaissance and the modern advocates of educational hand work. It is noteworthy that whereas the earlier advocates of this doctrine based their belief upon the precepts of faulty psychology and the later and present-day advocates base theirs upon the modern psychology, the doctrine itself remains unchanged.

The present-day interpretations of the meaning of industrial arts vary but little, although the interpretations differ in wording. Probably the most clearly expressed definition is as follows:

Industrial arts is a phase of general education that concerns itself with the materials, processes, and products of manufacture, and with the contribution of those engaged in industry. The learnings come through the pupil's experience with tools and

4Ibid.
materials and through his study of resultant conditions of life.\(^5\)

This definition, plus the list of objectives, is helpful in determining and interpreting the philosophy if the objectives are expanded. The industrial arts objectives, in many respects, do not differ materially from those usually accepted for general education.

The great variety of forms which these ideas have been given during the nineteenth century are but new versions of the ideals originally proclaimed in exaggerated form by Rousseau. The old conception of education aiming to remake the nature of the child by forcing upon him the traditional way of thinking and doing things, and the idea that the child was only a miniature adult of no value and of no rights until he could faithfully mimic the adult, were concrete examples of Rousseau's general protest against the entire idea of education.

As a subordinate thought throughout the work Emile, education according to nature indicates that instinctive judgments, primitive emotions, natural instincts, and first impressions are more trustworthy as a basis for action than all the reflection, the caution, and the experiences that come from the associations with others. These temperaments before being changed by habits of thought and judgment acquired from others

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was one of Rousseau's underlying definitions of nature.

Education according to nature has a more complete meaning in the sense when contact with the phenomena of nature was elevated into an end in itself. The education which comes from man is to be counter-acted by contact with nature and with physical forces of all kinds. Rousseau's conception of the life of man leads to a complete isolation from society and to the preference for the life of the recluse. Both morally and physically he believed that cities were the graves of man. The prevailing trend today is a progressing movement of man from a more densely populated area to a more sparsely settled type of community. This indicates the desire of the people to find a more complete and fuller meaning of life through closer contact with nature.  

Only with certain phases, not necessarily the most important, did Rousseau influence the institutional organization of education. Education was to be universal and to be free; but it was also largely political and social. Political power is developed and organized to protect accumulated property. This principle, as set forth in the Social Contract, contains the basic doctrines of the French Revolution as well as the Declaration of Independence. Thus the conception of the natural state is modified; it is no longer the life of the savage, but life in a society organized under the

6Ibid.
rule of the people. Such society can devote itself to the development of an ideal life, wherein man is not hampered, freedom is not lost, and the arts and sciences are not developed. However filled with error as these principles are, we are primarily concerned with their influence on modern educational thought. The philosophy of our schools today has been away from the archaic conception of education to the more democratic learning processes. It is obvious that there should be opportunities for self-expression in the educational program of a democracy. Modern educational theories place emphasis upon individual thinking and self-expression, and industry and business are looking for persons with initiative and originality rather than blind following of traditions and directions.

The trend in the philosophy of industrial arts has been away from the specialized skills to the recognition of individual differences. This will aid in the correlation of industrial arts subjects with other subjects in school work. Paralleling Rousseau's theories on education by man or society are the theories of John Fries in his philosophy of Industrial Arts. A few of his outstanding ideas are:

1. Learning in developmental experiences in the industrial arts is essential in the complete social education of every boy in a dominantly industrial democracy.

2. Too much of our school work today centers around the life experiences of others. Children have such education served to them on a platter as recorded experiences of others. Such education
is unreal. For the man, an education of recorded second-hand thoughts only is socially dangerous.

3. Industrial arts and vocational industrial education are complementary parts of a complete industrial education—an education based upon important factors of current industrial life and development.7

These more recent educational philosophies are but restatements of the principles formulated by Rousseau.

Finally, we find in the teachings of Rousseau, that education should aim to develop the primitive man, that is it should prepare the individual to live in a society wherein he contributes to his own welfare; so emphasis must be placed on the learning of a trade or occupation as a component part of his education. His aim for learning a trade was not for the purpose of earning a living, but it was a vital part of the process of education. "Of the various occupations which serve to furnish subsistence to mankind those which approach nearest to a state of nature are the manual arts."8

It would appear that the child through his "education from circumstances" would acquire a large amount of education through nature study and the manual arts. Although the child was to receive some training in the practical arts through the educational periods of his life, emphasis would be placed on trade training during the period from twelve to fifteen.

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7Friese, Course Making in Industrial Arts, p. 59.

8Rousseau, op. cit., p. 18.
The present-day tendency of training in industrial arts is expressed in its expansion to become a vital part of the curriculum of the elementary schools, rather than a limited area of work in the secondary schools. Thus we may now assume that the philosophy of industrial arts is emerging as a vital, living force, applying to all grades of the public school, the lower grades emphasizing it as a means to an end, with a gradual shift to an end in itself toward the end of high school and finally merging into vocational education in the last year or two of high school and perhaps two years beyond high school.  

In his discussions of the importance of the manual and industrial activities in education, Rousseau emphasized many of the social advantages that are emphasized at present. While he recognized the fact that the manual arts might be a means of mental training, curiosity and the creation of natural desires might be the test of its practical use. Education in the industrial arts is concerned with providing experiences for pupils which will aid them in understanding the industrial factors in their environment, in exploring their aptitudes for industrial occupations, in developing interest in modern industry, in finding desirable means of expressing their natural urge for constructive activity, and in developing good habits in attacking problems. Education

Ibid.
has turned from the cultural development to the realization of the fact that the student is incomplete without the concepts, understandings, and appreciations regarding industry and its host of workers.\textsuperscript{10}

The industrial arts program is a vital area in the general educational program and should be treated as such. It is prepared to stand its ground firmly with the other departments of our schools in the attack on, and the solution of, those problems which challenge public solution and which develop from our complex industrial civilization.\textsuperscript{11}

Not until recently have educators considered the industrial arts training as general education. For the most part the industrial arts training originally was acquired in the home or through apprenticeships. When it became apparent that the industrial arts would be taught in the schools, it was not placed on a level with the other so-called solid subjects. Fortunately now it is generally agreed that our public schools should develop the individual to the fullest extent of his ability for a maximum of success in living and for a maximum social adjustment and contribution. Industrial arts is accepted as vital curriculum area and in some educational programs it is considered the integrating core for the less


\textsuperscript{11} Hopkins, "Contribution of Industrial Arts to General Education," \textit{Industrial Arts and Vocational Education}, (Nov., 1943), p. 37.
tangible elements. When industrial arts is approached from this standpoint, it may be considered that it contributes greatly to general education.\textsuperscript{12}

Furthermore a careful examination of the objectives of general education with those of industrial arts shows that there is no conflict in the ideals set forth. As a part of the general education program it is the special function of the industrial arts to provide experiences which will develop certain habits and points of view which have been neglected altogether or merely touched upon in the other subjects.\textsuperscript{13}

The leaders of industrial arts believe that every child should be introduced to work, partly through industrial arts, and he should also be given the benefits and responsibilities work can provide as an integral part of his education. A few years ago a committee appointed by the American Council of Education made a study for the American Youth Commission on the secondary school curriculum. It was recommended that work experiences be included as an essential element in a general education, and that a more favorable social attitude be taken toward work.\textsuperscript{14}

There have been, and are, many corollaries to the basic

\textsuperscript{12} Ibid.


doctrine, and numerous statements of objectives are predi-
cated upon it: but the educational foundation of all indus-
trial arts work in the schools is still that expressed by
Rousseau. The modern program of industrial arts education
contains specific aims and objectives. Some of these listed
by Gruhn and Douglass are as follows:

1. To develop in each pupil an active interest
in industrial life and in methods of production and
distribution.

2. To develop in each pupil the ability to se-
lect, care for, and use properly the things bought.

3. To develop in each pupil the appreciation
of good workmanship and good design.

4. To develop in each pupil an attitude of
pride or interest in his ability to do useful things.

5. To develop in each pupil the habit of an
orderly method of procedure of performing any task.

6. To develop in each pupil a feeling of self-
reliance and confidence in his ability to deal with
people and to care for himself in an unusual or
familiar situation.

7. To develop in each pupil the habit of self-
discipline which requires one to do a thing when it
should be done, whether it is a pleasant task or not.

8. To develop in each pupil the habit of care-
ful, thoughtful work without loitering or waste of
time.\textsuperscript{15}

The above statements do not by any means complete the list of
aims and objectives of industrial arts. As it is a part of
general education, it would seem only reasonable that a great

\textsuperscript{15}\textit{Gruhn and Douglass, The Modern Junior High School,}
p. 164.
many of the objectives of general education would be the same as those of industrial arts. As the cardinal principles of general education apply to the field of manual arts, it appears that the general trend of industrial arts is to work toward the aims and objectives of general education.

The present-day theory of industrial arts goes far beyond the doctrine of its value as a means of mental growth and the learning of facts. It is held by many that it is a highly effective means of developing creative thinking and of satisfying the normal creative urge of the human mind. Likewise it offers a most desirable opportunity for self expression in a way most typical of racial evolution, namely, the making of useful objects. As the race has evolved mainly through creative expression in the practical arts, so does the child develop through such expressions.

Thus Rousseau says that we are formed by three masters: nature, man, and things. The educated man, accepted by the world was the learned man, the socially cultured man; to Rousseau the educated man was the developed man. According to his theories of education, interest stimulated in the child predominated over the effort necessary to overcome difficulties as a value of training. This conflict between the education of effort and the education of interest started by Rousseau continues today. The conflict between the elective and the prescribed course in college, between the disciplinary studies and the interest studies in the elementary grades are forms of
this same struggle. The struggle between theory and practice is the task of the present. Thus in Rousseau is found the negation of the conception of education of the Renaissance and of all its future developments.

The conception of education as a process of life would imply that the process would last for life or at least from birth to adulthood. Education then is no longer a procedure by which the child as a little man is made into a big man through the hands of the teacher. Expressed as a theory by Rousseau and as a practice by Pestalozzi, sympathy with the child, intellectually, morally, and personally has become recognized as an essential in the educative process of the child. Rousseau's interpretations of nature mark the outline of educational development during the nineteenth century. These interpretations or influences on education and the actual work of the school were felt even in the literature of the same period.

Industrial training has been recognized as a phase of education by Rousseau, but upon social and economic grounds only. On purely education grounds Froebel gave to all manual, industrial, and constructive works the place which they are coming to occupy in the modern schools.
CHAPTER V

SUMMARY

This thesis is a comparative study of Rousseau's philosophy of education, with emphasis placed on the practical arts, and is an attempt to show how his philosophy of the practical arts has influenced the philosophy of the present day industrial arts in the secondary schools of the United States.

In Jean Jacques Rousseau, probably beyond all others, is to be found the greatest mixture of strength and weakness, of truth and falsity, of that which is commendable and that which is detestable; and yet he gave impetus to ideas held and expressed by many others that made him one of the most powerful factors in all history. He was one of the first who preached the political and social rights of man and gave to him the right of education by birth. Rousseau's conception of education was merely the outgrowth of his own life and was based on one main idea: Human happiness and human welfare are the natural rights of every individual.

The Emile, the most celebrated work on the part of education, was the cause of an upheaval in educational thinking and did much to break down the formalism of education. In this exposition Rousseau became the first man to advocate the modern theory of education, that education of the child must begin with the child himself. The opening sentence, which
proves to be the fundamental principle throughout the treatise, explains that education is received from three sources: nature, man, and things. Unless the training received from these three teachers is harmonized, however, the individual is badly educated; and such harmony can be had only if the education of man and circumstances be subordinated to that of nature.

One of Rousseau's many definitions of nature is that nature is habit, and a further interpretation leads to the idea that education is nothing but habit. Education, according to nature, has a more complete meaning in the *Emile* when contact with nature has been elevated into an end in itself. As a subordinate thought, education according to nature would thus indicate that instinctive judgments, emotions, instincts, and first impressions are more trustworthy as a basis for action than the experiences that come from association with others.

It was in the *Social Contract*, which contains the basic doctrines of the French Revolution as well as our Constitution, that Rousseau modifies the conception of the natural state. No longer was it to be the life of the savage, but rather a life in a society under organized rules of the society. Education was not only to be universal and free, but also political and social.

The child must, through his "education from circumstances," acquire a large amount of education through nature study and the manual arts. The manual arts occupations serve to furnish subsistence to mankind and are the closest type of
subsistence to nature, agriculture being considered the most respectable of all the occupations. Labor then becomes the duty of both rich and poor alike and therefore Émile was taught the simple manual arts.

His entire education was to come from the free development of his own nature, his own powers, and his own natural inclinations. Rousseau held that each phase of education, physical, intellectual, and moral, had an appropriate time. The development of the child was through four sharply defined chronological periods, each being a separate education of its own. The first period was concerned primarily with the physical development of the child and with the restriction of the child's vocabulary. The second period dealt with negative education and moral training by natural consequences. The acquisition of intellectual training was stressed during the third level of learning. During the fourth and last period Rousseau intended for emphasis to be placed on the training of the heart.

The purpose of teaching the manual arts was not only for personal gain, but also for the completion of the child's education. Evidently, Rousseau did not intend for the manual arts to be a part of the regular school program. He believed that the boy should be apprenticed to first one master of craft and then to another so that the child could obtain the knowledge of several crafts and skills. The manual arts was emphasized as not only a means of obtaining skills, but also as a means
of mental training.

The philosophy of industrial arts today is the same as the basic theory of Rousseau, "learning by doing." Many educational reformers since that time have believed that the growing mind of the child learns most readily to think clearly and effectively when engaged in thinking about doing while engaged in doing. Rousseau expressed this idea when he said, as has been quoted before,

Emile will learn more by one hour of manual labor than he will retain from a whole day's verbal instruction... If instead of making the child stick to his books, I employ him in a work shop, his hands labor to the profit of his mind...¹

This is the fundamental concept underlying the thinking of both the Renaissance and the modern advocates of educational handwork. While this philosophy seems very simple, yet for the past two hundred years we have been trying to find out what he meant by the above statement. The educational foundation of all industrial arts work in the schools is still that expressed by Rousseau and the evidence of its soundness seems increasingly convincing and is seldom questioned today.

¹Rousseau, Emile, p. 56.
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