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A Presentation and Analysis of the Results of a Survey Reflecting Curriculum Content in the Woodworking Program in Virginia Beach

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A PRESENTATION AND ANALYSIS OF THE
RESULTS OF A SURVEY
REFLECTING CURRICULUM CONTENT IN
THE WOODWORKING PROGRAM IN VIRGINIA BEACH

A RESEARCH PROBLEM
PRESENTED TO THE FACULTY
OF THE GRADUATE SCHOOL OF EDUCATION
OLD DOMINION UNIVERSITY

IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE IN SECONDARY EDUCATION
WITH A GENERAL EMPHASIS CONCENTRATION
INDUSTRIAL ARTS INTEREST

BY
JOHN ZADELL
AUGUST 1979

This research paper was prepared by John Paul Zadell under the direction of his advisor and instructor in Problems of Education VIAE 636. It is submitted to the Graduate Program Director for Secondary Education in partial fulfillment of the requirements for the Degree of Master of Science in Education.

Date: August 2, 1979

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CHAPTER ONE

INTRODUCTION

The research analysis on course content in the High School Woodworking Classes in Virginia Beach was a follow-up study on the curriculum workshop conducted during the second semester 1975-1976 school year. During the past three years, efforts should have been made to reevaluate course outlines, objectives, goals, aims, and equipment used in the class to bring the course content up to date according to the Industrial Arts Programs Of Studies developed in July 1978. In using both Virginia Beach Course Outline Book and the Industrial Arts Program Of Studies, correlation of both will be researched and surveyed through the Industrial Arts Woodworking Teachers and woodworking students in the Virginia Beach School System. By using the teachers qualified knowledge and the students viewpoints toward the woodworking curriculum the research topic of The Study Of The High School Woodworking Curriculum In Virginia Beach in 1978-1979 can be achieved.

STATEMENT OF PROBLEM

The problem of this study was to analyze The High School Woodworking Curriculum in Virginia Beach in 1978-1979. The study will try to evaluate course content through a survey conducted in the Virginia Beach School System. Participating in the survey will be woodworking teachers and students enrolled in woodworking classes in Virginia Beach.

RESEARCH GOALS

The objective of this research paper was to bring the high school woodworking curriculum of Virginia Beach

to the present day trends in teaching woods in the senior high school. In developing this paper, a survey of the high school woodworking teachers and the woodworking students of Virginia Beach will be needed to achieve a full understanding of what should be included in the high school woodworking curriculum. The broad objectives that were included in this study were:

1. Teacher insight into curriculum design.
2. Students insight into curriculum design.
3. Individual needs of each student taking woodworking.
4. Present day methods of teaching woodworking in Virginia Beach.

In Chapter Three on Methodology, these objectives were expanded to produce the survey that is needed to fulfill the topic of this paper.

BACKGROUND AND SIGNIFICANCE

Since the development of the Virginia Beach School Industrial Arts Course Outline in the spring of 1975-1976, an annual or bi-annual evaluation of course content should have been conducted. Since then, course content outlines have changed to the present development of the Industrial Arts Program Of Studies developed in July 1978. Whether the Virginia Beach Woodworking Curriculum has kept up with new trends in teaching will be the objective of this research paper through the survey of industrial arts woodworking teachers and woodworking students in Virginia Beach. From the Industrial Arts Program of Studies developed in 1978, a correlation between the research on wood curriculum content and the present Industrial Arts Program of Studies will be the basis for this research paper.

Since becoming the Woods I and II Industrial Arts teacher at Bayside High School, the researcher has noticed voids in course outlines concerning woodworking developed in 1976 and the present day philosophy and objectives developed in July 1978. Research in this area on a local basis has been formulated by Maynard West, Alexander Woodhouse, Ernest Davenport, and Robert Parham who are Industrial Arts Wood teachers in Virginia Beach. They developed the present wood curriculum guide in 1976 during a curriculum workshop. Their input was a value in 1976 in the development of the Virginia Beach Wood Curriculum Guide, and their input will be of value in the study of this research paper on course content in woodworking in Virginia Beach.

LIMITATIONS

The findings and conclusions researched in this study will be limited to high school woodworking curriculum. From the basic work done in this research paper, the findings could hopefully be substituted to other phases in the Industrial Arts Curriculum. The study dealt with:

1. Course outlines consisting of technology of woods, design principles and planning, basic hand-tool processes, wood product construction, finishing, line/mass production, and wood product industries (Program of Studies, 1978).
2. Objectives consisting of: to develop in each student an insight and understanding of technology and industry, to discover and develop individual talents, attitudes, interests, and

potential, to develop technical problem-solving skills, and to develop basic skills in the safe use of tools and machines.

3. Goals consisting of students acquiring competencies that lead to responsible citizenship through technological understanding, consumer knowledge and the productive use of leisure time.
4. Equipment to help the students benefit fully in the use of machines and other devices used in the wood-working industry.

BASIC ASSUMPTIONS

It will be assumed in this study that:

1. Outlines, goals, and objectives in each high school woodworking class are similar.
2. Each woodworking teacher has formulated their own ideas of what should be included in the curriculum and this information can be developed into a curriculum package.
3. Each student has ideas of what should be included into a curriculum package.
4. That information concluded in the report will coincide with the state guidelines for high school wood-working curriculum.

PROCEDURE FOR COLLECTING DATA

All information needed for the research paper

will be collected in a survey format. Each woodworking teacher and wood student responded to the survey and their viewpoints will be tabulated, and these findings were analyzed in Chapter Four and summarized in Chapter Five.

DEFINITION OF TERMS

In this research paper on surveying the woodworking curriculum four terms must be defined:

1. Curriculum is the content of specific course of study.
2. Course outline consist of the summary of the unit of instruction in a subject area.
3. Objectives deal with the aims of the subject area.
4. Goals deal with an aim that one strives to attain.

A better understanding of these four terms adds to the significance of the paper, and it lets one become more involved in the research and the final conclusions reached in the paper.

SUMMARY

Chapter One has given an overview of the research study. The topic, background and significance, limitations, assumptions, and definition of terms were the topics of this chapter that dealt with the scope of this research paper. In the study of the High School Woodworking Curriculum in Virginia Beach in 1978-1979, the other chapters will expand upon the topic and finally in Chapter Five, conclusions will be reached to support the topic of this research paper.

CHAPTER TWO
REVIEW OF LITERATURE

In this study of the High School Woodworking Curriculum in Virginia Beach in 1978-1979, the course content is evaluated to see what changes should be made to keep up with the current trends and concepts of teaching Industrial Arts. Studies involving curriculum change in woodworking curriculum have been very scarce. Attempts to evaluate a need for reform in this study deals with:

1. That Industrial Arts should be providing an understanding of American Industry and an awareness of its changing technology.
2. Teacher insight into a need for curriculum change.
3. Student insight into curriculum change.
4. Establish concept approaches in making the curriculum more understandable for student groups (Rubin, 1977, p. 255).

Programs using this as the basic objectives are identified with a technology approach. In its simplest form, this approach redefines the old objective of "a degree of skill" as an understanding of the necessity for skillful use of tools (Rubin, 1977, p. 256).

In the field of woodworking, the project has been the basis for the course. In today's society, there is a strong need of creating an understanding of the concepts, principles, generalizations, problems, and strategies of industrial technology as a body of knowledge, to develop an interest in and an appreciating for industry as an integral part of the economic system that provides

industrial goods for human wants, and significant value for occupational, recreational, consumer, and sociocultural purposes (Rubin, 1977, p. 258).

Although evaluation has only one basic goal, the determination of the worth or value of something, it has many roles (Saylor and Alexander, 1974, p. 298). Appraisal of the outcomes of student learning in all of their ramifications is an example of one role. This type of evaluation is familiar to most teachers and administrators; it is accomplished through testing, measuring, and assessing pupil achievements.

Another significant function of evaluation is determining the value of the curriculum itself. Is the curriculum fulfilling the purposes for which it was designed? Are the purposes themselves valid? Is the curriculum appropriate for a particular group of students with whom it is being used? Are the instructional modes selected the best choices in light of the goals sought? Is the content the best that may be selected? Are the materials recommended for instructional purposes appropriate and the best available for the purpose envisioned (Saylor and Alexander, 1974, p. 298)? These are the tools in which a curriculum at any level should be evaluated.

How often should the curriculum be changed? Curriculum theory says continuously in order to keep up with the technological advances of our society. A need for a change might include:

1. Textbooks out of date.
2. Lack of interest in the activity program.
3. Not enough time to cover the course.

4. Parents not really interested in the students school work.
5. Curriculum not challenging enough (Oliver, 1965, p. 21).

Both teachers and administrators have primary responsibilities in determining curriculum weaknesses. Also student evaluation should be used to give curriculum evaluators an insight to student feelings toward the material taught to them in school. If the administrators, teachers and students allow the curriculum to become stagnate, the five principles outlined for changing a curriculum will take place.

Other determining factors in curriculum change are school facts that are symptoms for a need of change in the curriculum plan and they consist of:

1. How great is the teacher turnover.
2. Are the teachers well qualified.
3. What provisions are made for suitable equipment, facilities, and instructional aids.
4. Does the school staff participate in professional activities (Oliver, 1965, p. 21).

These are the symptoms in which there is a need for change in the curriculum. If no one sees a need for a change then we, as teachers and administrators, can only blame ourselves for the type of education the young adults are getting in our schools today.

In the field of Industrial Arts, it has grown over the years from a single course in manual training to a comprehensive group of courses depicting industrial technology for students at all educational levels. This growth has reflected the technological growth of our

society and has been the subject of extensive curriculum research (Ressler, 1977, p. 250).

In the past decade there has been a sacrifice of the hands-on teaching method in Industrial Arts for book work in order to generate a more comprehensive content. The primary task of Industrial Arts should be providing students with the "survival skills" they will need as consumers, future homeowners and parents (Ressler, 1977, p. 250).

In the last ten years, Industrial Arts educators have stressed self-fulfillment education. From this content, students learn construction, manufacturing, and the economic aspects of American industry. Finally we have gone away from the curriculum which in essence, teaches survival skills, skills such as using tools and machines safely and effectively, and being able to repair, select, and to care for industrial goods. This is the opinion of one in trying to justify a need for curriculum evaluation in Industrial Arts. The project method versus technology education are two phases in which curriculum should work together to keep abreast of the changing technological world.

According to Webster's Third International Dictionary, education is "the process of providing knowledge, skill, competence or desirable qualities of behavior or character (Webster's Third International Dictionary, 1960, p. 460). John C. Walters expands this definition to include the process of providing skills to enable individuals to function adequately and happily in society regardless of station, and the development of human potential to its fullest (Walters, 1977, pp. 233-235). To prepare students for the future, curriculum developers

must look at the factors that are responsible for current conditions.

In a 1968 study by Kerby Backus, he wrote, that in terms of objectives, industrial arts personnel identified habits of orderly performance, shop skills and knowledge, drawing and design as the most important and an interest in industry was ranked ninth in importance. No mention was made to include an understanding of technology or its efforts.

Based on these traditional objectives, it is apparent that most Industrial Arts Programs reflect a technology of a pre-industrial culture. Industrial Arts, as most perceive it, is an anachronism in modern society. Industrial Arts educators are teaching skills that the majority of students never will use, because they never will need to use them. Instead we need to teach skills related to industrial technology that can be put to use when adolescents reach adulthood and face this world on their own (Walters, 1977, pp. 233-235). And if we accept Walter's definition of industrial arts which consist of "Industrial Arts identified as those phases of general education which deal with industry, its organization, materials, occupations, processes, and products, and with the problems resulting from the industrial and technological nature of society" (Walter's, 1977, pp. 233-235), then we would be enrolling students with a wide range of interest and abilities. If Industrial Arts taught relevant, current concepts, it would attract students with a wide variety of interest and abilities, and the only way to attract these types of students is through constant re-evaluation of curriculum content.

Other points to consider in curriculum change is the human element researched by Andrews, Duvall, and Trocki (1978, p. 15). In their study they contrasted two viewpoints consisting of curriculum viewed as the course taught, or curriculum as all that happens to the child while at school. Curriculum reform is only emphasized when funding priorities develop such as competency based education, career education, or education for the gifted.

Educators have viewed the process of curriculum change as some sort of external activity which can be developed without regard for the "context" of the plan, the "place" where the real learning occurs (Andrews, Duvall, Trocki, 1978, pp. 10-13). They believe that a program developed for rural Appalachia would work well in the large cities of the United States. Plans for universal curricula have emerged onto the scene such as:

1. The Core Program
2. The Community School
3. Career Exploration
4. Technology for Children
5. The Industrial Arts Curriculum Project

These are a few of the plans that have emerged, and in most cases these plans did not receive widespread adoption. Other efforts such as; better teacher handbooks, innovative curriculum guides, teacher aids, media librarians and improved educational technology have all served to improve the effectiveness of instruction. Still, contrary to popular belief, changes have been slow and few drastic renovations have occurred (Andrews, Duvall, Trocki, 1978, pp. 10-13).

Andrews , Duvall, and Trocki tried to develop curriculum content into two phases. Phase One consisting of curriculum change process begins with the development of a curriculum plan. The curriculum plan consisting of what should be taught in the schools. The plan should consist of a philosophical base, and recommended content, and methods. In Phase Two, it involves the process of modifying the plan to meet the needs of the specific community where the curriculum change is to occur. Without community involvement, acceptance of curriculum change cannot occur within the community (Andrews, Duvall, Trocki, 1978, pp. 10-13).

The process of curriculum reform set up into these three phases consisting of:

1. The community's conception of their local needs.
2. The curriculum designer's conception of the "grandplan", a philosophical basis, content and method.
3. The synthesis "an adopted curriculum" (Andrews, Duvall, Trocki, 1978, pp. 10-13).

Through these three curriculum phases, diffusion and adoption occurs. The diffusion consist of the process of communicating new ideas to a particular social group or system over an extended length of time. Ideas, methods, techniques, or even products are communicated to teachers or administrators in a school system by industrial firms, independent researchers, the universities, and other areas. This is the idea of diffusion of the curriculum area. Adoption occurs when the school community agrees reform must take place in order for the schools to keep up with a changing world (Andrews, Duvall, Trocki, 1978, pp. 10-13).

In planning curriculum for the future, where do we, as educators, begin? How do you develop new goals for the

future and at the same time express confidence in the present program? Specific goals might be to:

1. A change in direction
2. Adjust or readjust our direction
or change or correct our course
3. Adopt an amendment

Our role for the future must be broader in scope, and might be described as a widened horizon (Fuglsby, 1978, pp. 22-23).

Fuglsby states that the rate of change that we are experiencing makes it necessary for us to concentrate upon a broader base, and revise our methods of teaching learning to fit that broadened base. By developing curriculum and re-evaluating it, we will better assist students in thinking and acting to meet their needs now and in the future, and to extend their potential.

Past experiences have dealt with problem/solution approach in encouraging logical thought. The individual approach is also a positive promotion to learning. Finally, future goals should place greater emphasis on approaches to student involvement in the curriculum, one procedure for this is the following:

1. The statement of problem
2. Analytic research
3. Possible solutions
4. Experimentation
5. Final solution
6. Application of the solution

If we can guide our students in a logical way to solve their problems in school, then we can hope that this will transfer to their future problems (Fuglsby, 1978, pp. 22-23).

Finally in order to develop curriculum and re-evaluate curriculum in Industrial Arts and especially woodworking, tools, machines, materials and processes must be evaluated. By successfully teaching students to use tools and machines, they will be better equipped to use those they may face in the future. Teaching items such as:

1. Make the necessary adjustments so that the machine will function as it was intended.
2. Use the machine for the purposes that it was designed.
3. Maintain that machine, including adjustments, lubrication, and the ordering and replacement of worn parts.
4. Demonstrate the use of the machine, both for the safety of the operator and the machine.
5. Determine machine set-up requirements including space, power, and reading assembly instructions.
6. Develop specifications for new machine purchases (Fuglsby, 1978, pp. 22-23).

If the students can achieve these types of goals, then they will be able to transfer this learning method to all tools and machines (Fuglsby, 1978, pp. 22-23).

In speaking of materials and the methods materials are used, woodworking provides an understanding of wood as a material. For example, chipboard is a material concept using the wood element, chips and adhesive. This material has properties that are different from the whole piece of wood. By understanding other materials, students may develop material concepts which can be synthesized when a variety of materials is combined. These concepts

rely on past skills and understanding, but they try more skills and innovative ways to change the curriculum to make it more meaningful for the student (Fuglsby, 1978, pp. 22-23).

In the next chapter of Methodology, it will deal with how the literature reviewed can help develop a survey in which course content in woodworking can be re-evaluated. It will try to find what changes should be made to keep up with technological trends in teaching woodworking in schools and especially in Virginia Beach.

CHAPTER THREE

METHODS AND PROCEDURES

Chapter Three of this study deals with the methods needed for carrying out the research study. The methods include:

1. Population
2. Instrument Development
3. Data Collection
4. Data Analysis

POPULATION

The population for this study consisted of secondary woodworking teachers in the Virginia Beach School System, and students enrolled in the woodworking one class. A list of the teachers participating in this study was acquired from Armand Taylor, Virginia Beach Industrial Arts Supervisor and Curriculum Specialist. A request to conduct the survey was directed to Dr. Philip E. Meekens, Director of Program Development and Evaluation for the Virginia Beach City Schools. Approval was provided and participation was on a voluntary basis on the part of the teachers and students.

INSTRUMENT DEVELOPMENT

The survey statements were composed by the researcher concerning woodworking curriculum evaluation. The questions for the survey were based upon the review of literature, the researcher's personal experiences, informal interviews with present and former woodworking teachers, and students in the woodworking one class in the Virginia Beach School System.

The questionnaire was divided into two sections. The first section contained questions concerning

curriculum content. The question dealt with areas of concentration in the woodworking curriculum guide. The second section dealt with on how the curriculum helps the student. A wide range of questions were asked such as student safety, developing avocational skills, and making wise consumer choices.

In developing the questionnaire, the researcher attempted to keep the questions and responses as precise and direct as possible. A four point rating scale was used on the teacher survey, and a combination of different measuring techniques was used on the student survey. Appendixes One and Two contain samples of the surveys used.

DATA COLLECTION

All questionnaires were sent through the interschool mailing system to all Virginia Beach City High School Woodworking Teachers and woodworking students. This method was utilized by the researcher to facilitate a lower number of followups to non-respondents. Each teacher and student received a packet which contained a letter of explanation and copies of the survey instrument for one teacher and his students for his classes.

DATA ANALYSIS

A talley was made for each individual question and their responses. The results of the questionnaire statements were compared as follows:

1. The validity of the program being taught.
2. Do the responses have any correlation between the Virginia Beach Curriculum Guide and the Industrial Arts Program of Studies.
3. The results of the questionnaire statements were studied and further

compared to the information found
in the review of literature, and the
assumptions found in this study.

SUMMARY

This chapter has presented the methods and procedures followed in selecting the population, developing the survey instrument, distributing and receiving the survey instrument. Computation of the mean for each statement on the survey and computation of the composite mean for all statements were procedures used in the analysis of data.

CHAPTER FOUR

FINDINGS

This study sought to identify teacher and student attitudes toward the woodworking one curriculum in Virginia Beach, Virginia. The research questions which were established in Chapter One included:

1. teacher insight into the curriculum
2. student insight into the curriculum
3. individual needs of each student taking woodworking
4. present day methods of teaching woodworking in Virginia Beach

The data analysis for each of these questions is presented in this chapter.

RESPONDENTS

Eight senior high school woodworking teachers administered the survey to the students and to themselves concerning their attitudes toward the woodworking curriculum. All eight teachers chose to administer the survey to their students. Out of 520 questionnaires sent out, 440 responded. The eight senior high school woodworking teachers responded making a 100 percent total.

TEACHERS ATTITUDES TOWARD THE WOODWORKING CURRICULUM CONTENT

Table One provides data which is quite similar concerning the woodworking curriculum. Questions one through seven provided information stating the curriculum should continue as is or expanded in content. No teacher thought each of these areas should be reduced or eliminated from the curriculum. In question seven, the responses varied from continue as is to reduced in content.

TABLE ONE
TEACHERS ATTITUDES TOWARD THE
WOODWORKING CURRICULUM CONTENT

Item Number	Continue As Is	Expanded In Content	Reduced In Content	Eliminate Entirely
1. Course Introduction	62.5%	37.5%	0	0
2. Shop Safety	37.5%	62.5%	0	0
3. Hand Tool Safety	75%	25%	0	0
4. Machine Safety	25%	75%	0	0
5. Finishing	37.5%	62.5%	0	0
6. Product Design And Development	48.8%	48.8%	0	0
7. Wood As A Material	37.5%	62.5%	0	0
8. Hand Tool Use	24.4%	37.5%	37.5%	0
9. Fasteners	24.4%	37.5%	12.2%	24.4%
10. Hardware	24.4%	37.5%	12.2%	24.4%
11. Machine Use	12.2%	81.4%	0	0
12. Finishes	24.4%	73.2%	0	0

Thirty-seven and one-half percent believed less emphasis should be placed on the amount of material covered in handwoodworking. Whereas another 37.5 percent said it should be expanded in content. This states a different philosophy concerning what should be covered in this area. While 24.4 percent believed the content that is being taught should remain the same.

The next two questions eight and nine, showed the same correlation between the rating scale. One striking characteristic found in these two questions was that 24.4 percent thought these two sections should be eliminated entirely. The amount of material that is covered in these two sections dwells too much on types of fasteners and hardware.

Question 11 concerning machine use stated more emphasis should be placed on this area. Today more students obtain power equipment to make different projects, whether complex or simple, and it is easier to work with and more emphasis should be placed in this area.

Question 12 stated more emphasis should be placed on students achieving a fine finish on their projects. This enhances the project and student pride in work well done.

STUDENTS ATTITUDES TOWARD THE
WOODWORKING CURRICULUM CONTENT

Table Two provides data which is quite varied among the units studied in woodworking one. For questions one through four, students felt the content of the curriculum should continue as is and lower percentages of students differed toward curriculum content. Questions five and six concerning finishing and project design, students felt more emphasis should be placed in this area to help them plan better projects and to achieve a fine finish on their projects completed. Question seven revealed that students should not spend as much time studying wood as a material, and a strong percentage felt this section should be eliminated entirely. Question eight dealt with fasteners; students felt this area should remain the same, and question nine on hardware showed students felt this area should be expanded in content.

TABLE TWO
STUDENTS ATTITUDES TOWARD THE
WOODWORKING CURRICULUM CONTENT

Item Number	Continue As Is	Expanded In Content	Reduced In Content	Eliminate Entirely
1. Course Introduction	64%	8%	28%	0
2. Class Safety	64%	18%	18%	0
3. Hand Tool Production	58%	20%	20%	2%
4. Machine Production	60%	34%	4%	2%
5. Finishing	46%	40%	14%	0%
6. Product Design And Development	28%	40%	28%	4%
7. Wood As A Material	34%	8%	28%	30%
8. Fasteners	60%	28%	10%	2%
9. Hardware	28%	52%	12%	8%

Table Three provides data concerning similar questions that were obtained for Table Two. This table dealt with the amount of time spent on each unit in the woodworking curriculum. In questions 10-18, over 50 percent of the students felt enough time was spent on each unit area. Only on question 18 concerning hardware, was a great percentage of students felt that not enough time was spent in this area.

TABLE THREE
ADEQUACY OF CLASS TIME TO COVER ALL CURRICULUM UNITS

Item Number	Too Much	Adequate	Not Enough
10. Course Introduction	30%	60%	10%
11. Class Safety	16%	66%	18%
12. Hand Tool Production	38%	50%	12%
13. Machine Production	8%	60%	32%
14. Finishing	10%	62%	28%
15. Product Design And Development	16%	60%	24%
16. Wood As A Material	32%	56%	12%
17. Fasteners	8%	60%	32%
18. Hardware	6%	50%	44%

In Table Four, students responded with a yes or no answer concerning reasons for selecting the course. Most students took woodworking one because of interest in the course, usefulness of course material, and expectations that the course would be fun. Students were generally satisfied that they were being offered the material they expected, and that the course material was useful to them in conducting their daily lives.

A further indication of the student's positive attitude toward Woods One is the fact most plan to take

Woods Two next year, and most would recommend this course to others. In terms of student's desire to pursue curriculum units as a career, or hobbies, most students either showed no strong attitudinal preference or they were very negative.

TABLE FOUR
REASONS FOR SELECTING THE COURSE

Item Number	Yes	No
19. Interest in the course	100%	0
20. Usefulness of the course material	70%	30%
21. Expectation that the course would be fun	75%	25%
22. Expectation that the course would be interesting	82%	18%
23. Expectation that the teacher would be good	44%	56%
24. Did the course offer the material and information you expected	64%	36%
25. Do you feel the knowledge you gained in the course is useful to your present life	82%	18%
26. Was the material in the text understandable	60%	40%
27. Did the material in the text relate to class projects and lectures	74%	26%
28. Could you take home the textbook	58%	42%
29. Do you feel it is necessary to have a textbook that you can take home in order to adequately learn course curriculum	66%	34%

Item Number		Yes	No
30.	Does being able to take the textbook home help students earn better grades.	62%	38%
31.	Did your homework assignments relate to class projects and lectures.	54%	46%
32.	Was the lab adequately equipped with supplies, materials and tools.	70%	30%
33.	Did you have to purchase extra supplies to complete a class project.	76%	24%
34.	Would you pursue as a career any part of the wood industry.	50%	50%
35.	Would you pursue as a hobby any part of the wood industry.	82%	18%
36.	Were safety and safety rules stressed adequately in class.	82%	18%
37.	Should career opportunities be stressed more in the course.	50%	50%
38.	Do you feel the course helped you become a better consumer.	46%	54%
39.	Is there enough emphasis placed on comparing course work with work performed in industry.	86%	14%
40.	Do you plan to take Woods Two.	86%	14%
41.	Would you recommend this course to others.	88%	12%

SUMMARY

This chapter indicated the number of responses, and implications to the questionnaire statements by the use of the tables and percentages. In Chapter Five, summaries, conclusions, and recommendations will be dealt with concerning teachers and student attitudes toward the woodworking curriculum.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

This study sought to find the teacher's and student's attitudes toward the Woodworking One Curriculum in Virginia Beach. This chapter attempts to summarize these findings, provide conclusions and recommendations concerning the Woods One Curriculum.

SUMMARY

The purpose of the curriculum evaluation is not to suggest that a unit be eliminated because of teachers and students do not like it. Rather, it is hoped that teachers and curriculum specialists could utilize the data to determine which units need improvement and restructure. Research questions central to the study were:

1. providing teacher insight into curriculum design,
2. providing student insight into curriculum design,
3. taking into account individual needs of the students, and
4. providing information on what must be improved or remain the same for maximum use of course curriculum.

CONCLUSIONS

Based upon the findings of this study and upon the effectiveness of the survey instrument designed to gather teacher and student perceptions on the Woods One Curriculum, several conclusions can be drawn:

1. Teacher's in all questions felt all material covered should be expanded

or continued as is as set in the wood-working one curriculum. The areas to be expanded included; lab safety, machine safety, finishing, wood as a material, machine use, and finishes. The areas that should continue as is includes; course introduction and hand tool safety.

According to the teacher's insights, the content taught in the woods one curriculum meets the students needs and keeps in align with the Industrial Arts Program Of Studies developed in 1978.

The only units the teachers thought covered too much material is fasteners and harware. In woodworking one, less emphasis should be placed on these two areas, but to eliminate them from the course curriculum would leave out an important section to the studying of project construction and completion.

2. Students felt that areas covered in Woods One varied according to the units taught and what they should get out of each unit. Students felt that machine woods, product design, and finishing are units that should provide more work than the curriculum offers. The only negative reactions is in the field of studying wood as a material. The approach in studying wood as a material

should change and the curriculum committee should refine the structure of this unit.

3. Students felt enough time was spent on each curricula area in Woods One. The wood curriculum now being offered in the Virginia Beach Schools meets the needs of the students in each area of study.
4. Finally students response for selecting the course was generally favorable to the material discussed in class. Woodworking One is an area in Industrial Arts which appeals to most students. The curriculum discussed in class does meet their needs and only small adjustments should be made to keep up with the trends in Industrial Arts.

RECOMMENDATIONS

Based on the findings of this research study, several recommendations for further study can be made:

1. Both teachers and students recommended that the use of this study can be a valuable instrument in the assessment and improvement of instructional quality in the schools, thus providing material in which students would be more interested in, and causing less problems for teachers and students in the individual course area.
2. It may be also used to determine strengths and weaknesses, and also in the development of curriculum workshops to utilize the data to determine which units need improvement and restructure.

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APPENDIX 1

TEACHER EVALUATION OF THE WOODWORKING CURRICULUM

The following survey is designed to gain insight into the teachers attitude towards the current woodworking curriculum. The survey is comprised of twelve general items concerning curriculum content. Read each item carefully and respond to each item on the survey. The ratings will be numbered on a four point scale with:

- A. 4= continue as is
- B. 3= expanded in content
- C. 2= reduced in content
- D. 1= eliminate entirely

Please provide honest and sincere response that will closely describe your feelings towards the woodworking curriculum content.

CURRICULUM UNITS:

- | | | | | |
|--|---|---|---|---|
| 1. Course Introduction | A | B | C | D |
| a. overview of the course | | | | |
| b. possible careers available in woodworking | | | | |
| c. purposes of the course | | | | |
| d. laboratory orientation | | | | |
| 2. Safety | A | B | C | D |
| a. general lab safety | | | | |
| 1. clean-up | | | | |
| 2. safety glasses | | | | |
| 3. first aid | | | | |
| 4. reporting accidents | | | | |
| 5. general tool safety | | | | |
| 3. Hand Tool Safety | A | B | C | D |
| a. cutting tools | | | | |
| b. scraping and abrasive tools | | | | |
| c. transport of hand tools | | | | |
| 4. Machine Safety | A | B | C | D |
| a. bandsaw | | | | |
| b. planer | | | | |
| c. scroll saw | | | | |
| d. radial arm saw | | | | |
| e. others (teach safety on others as needed) | | | | |

5.	Finishing	A	B	C	D
	a. finishes				
	b. solvents				
	c. finishing utensils				
6.	Product Design and Development	A	B	C	D
	a. designing and developing an idea				
	b. design wood products				
	c. bill of materials				
	d. plans of procedure				
	e. sources of project ideas				
7.	Wood As A Material	A	B	C	D
	a. lumbering				
	b. seasoning				
	c. growth				
	d. kinds of classifications				
	e. grading and dimensioning				
	f. plywood and veneer				
	g. hardboard and particle board				
	h. wood joints in a project				
8.	Hand Tool Use	A	B	C	D
	a. importance of good quality tools				
	b. uses and kinds				
9.	Fasteners	A	B	C	D
	a. glues				
	b. nails and screws				
	c. other fasteners				
10.	Hardware	A	B	C	D
	a. hinges				
	b. catches				
	c. handles and pulls				
11.	Machine Use	A	B	C	D
	a. importance of good quality tools				
	b. uses and maintenance of each				
12.	Finishes	A	B	C	D

APPENDIX 2

STUDENT EVALUATION OF THE WOODWORKING CURRICULUM

The following survey is designed to gain insight into the students attitudes towards the current woodworking curriculum. The survey is comprised of 41 characteristics concerning the overrall woodworking curriculum. Read each item carefully and respond to each item on the survey. The ratings for Part One will be numbered on a four point rating scale with:

- A. 4= continue as is
- B. 3= expanded in content
- C. 2= reduced in content
- D. 1= eliminate entirely

Please provide honest and sincere responses that will closely describe your feelings towards the woodworking curriculum content.

PART ONE: COURSE CURRICULUM AREAS

1. Course Introduction	A	B	C	D
2. Class Safety	A	B	C	D
3. Hand Tool Production	A	B	C	D
4. Machine Production	A	B	C	D
5. Finishing	A	B	C	D
6. Product Design and Development	A	B	C	D
7. Wood As A Material	A	B	C	D
8. Fasteners	A	B	C	D
9. Hardware	A	B	C	D

PART TWO:: ADEQUACY OF CLASS TIME TO COVER ALL CURRICULUM UNITS

This section is judged on a three point scale with:

- A. 3= too much time
- B. 2= adequate time
- c. 1= not enough time

10. Course Introduction	A	B	C
11. Class Safety	A	B	C
12. Hand Tool Production	A	B	C
13. Machine Production	A	B	C

14.	Finishing	A	B	C
15.	Product Design and Development	A	B	C
16.	Wood As A Material	A	B	C
17.	Fasteners	A	B	C
18.	Hardware	A	B	C

PART THREE: REASONS FOR SELECTING THE COURSE

This section is judged on a yes or no response.

19.	Interest in the course	y	n
20.	Usefulness of course material	y	n
21.	Expectation that the course would be interesting	y	n
22.	Expectation that the course would be fun	y	n
23.	Expectation that the teacher would be good	y	n
24.	Did the course offer the material and information you expected	y	n
25.	Do you feel the knowledge you gained in the course is useful to your present life	y	n
26.	Was the material in the text understandable	y	n
27.	Did the material in the text relate to class projects and lectures	y	n
28.	Could you take home the textbook.	y	n
29.	Do you feel it is necessary to have a textbook that you can take home in order to adequately learn course curriculum.	y	n
30.	Does being able to take the textbook home help students earn better grades.	y	n
31.	Did your homework assignments relate to class projects and lectures.	y	n

- | | | | |
|-----|---|---|---|
| 32. | Was the lab adequately equipped with supplies, materials and tools. | y | n |
| 33. | Did you have to purchase extra supplies to complete a class project. | y | n |
| 34. | Would you pursue as a career any part of the wood industry. | y | n |
| 35. | Would you pursue as a hobby any part of the wood industry. | y | n |
| 36. | Were safety and safety rules stressed adequately in class. | y | n |
| 37. | Should career opportunities be stressed more in the course. | y | n |
| 38. | Do you feel the course helped you become a better consumer. | y | n |
| 39. | Is there enough emphasis placed on comparing course work with work performed in industry. | y | n |
| 40. | Do you plan to take Woods Two. | y | n |
| 41. | Would you recommend this course to others. | y | n |