A practicum was developed to restructure 11th and 12th grade research modules, using a team planning approach to design and implement a sequential, developmental research program that would be relevant to the personal and academic goals of the students and produce high quality research products. This approach embedded the process of inquiry into the total English curriculum and emphasized to the students the essential nature of research to successful living. Objectives for grade levels were determined and media center access was maximized through the cooperation and collaboration of the school media specialists. Central to the successful progress of the program was the collecting and sharing of classroom activities and strategies designed to enhance student ownership of research findings and to augment fluency and voice in reporting. Tutorials were developed to assist students in utilizing available technology, not only for the searching stage, but also for the publishing of the reports. To address relevancy and application issues, teachers allowed more student choice in selecting life-related topics, encouraged the use of personal interviews and surveys, matched students with adult writing partners, and shared research findings with interested members of the community. The overall practicum outcome was positive. Eight of the 10 groups surveyed either met or exceeded the projected goals. Most students registered dramatic increases in their perceived ability to execute the research process and in their perceived confidence to publish a research report. (Thirty figures are included and six appendixes, including teacher and student surveys, are attached. Contains 30 references.) (Author/NKA)
Developing a Sequential, Relevant Approach to Research Writing for High School Juniors and Seniors

by

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Cluster XL

A Practicum II Report
Presented to the Ed.D. Program in Child and Youth Studies
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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1993
PRACTICUM APPROVAL SHEET

This practicum took place as described.

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This practicum report was submitted by Nancy C. Kirkland under the direction of the adviser listed below. It was submitted to the Ed. D. Program in Child and Youth Studies and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova University.

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ABSTRACT


The goal of this practicum was to restructure the eleventh and twelfth grade research modules, using a team planning approach to design and implement a sequential, developmental research program that would be relevant to the personal and academic goals of the students and produce high quality research products. This approach would embed the process of inquiry into the total English curriculum and emphasize to the students the essential nature of research to successful living.

Objectives for the grade levels were determined and a calendar developed for sequencing and scheduling projects in grades nine through twelve in order to maximize media center access. Important to the success of the project were cooperation and collaboration with the media specialists in expanding media services and assisting with the technological aspects of media research. Central to the successful progress of the program was the collecting and sharing of classroom activities and strategies designed to enhance student ownership of research findings and to augment fluency and voice in reporting. Tutorials were developed to assist students in utilizing the available technology, not only for the searching stage of their projects, but also for the publication of their reports. In order to address the relevancy and application issues, teachers allowed more student choice in selecting life-related topics, encouraged the use of personal interviews and surveys, matched students with adult writing partners, and shared research findings with interested members of the community.

The overall practicum outcome was positive. Eight of the ten groups surveyed either met or exceeded the projected goals. Of the two groups that scored under the anticipated score, one was excessively low in population which could have skewed the results. Most of the students registered dramatic increases in their perceived ability to execute the research process and in their perceived confidence to publish a successful research report. These gains strongly support the requisite for educators to focus on relevant research as an essential survival skill.

********

Permission Statement

As a student in the Ed.D. Program in Child and Youth Studies, I do ( ) do not ( ) give permission to Nova University to distribute copies of this practicum report on request from interested individuals. It is my understanding that Nova University will not charge for this dissemination except to cover the costs of microfiching, handling, and mailing of the materials.

July 6, 1993

(signature)
CHAPTER I
INTRODUCTION

Description of Work Setting and Community

The setting in which this practicum was performed is a public senior high school located in a mid-sized southern university city of approximately 200,000 people, 40,000 of whom are university students. The university community brings together a diverse group of people with a high density of intelligence, education, and relative affluence.

This particular high school serves a student population of approximately eighteen hundred, balanced racially and economically through zoning and bussing. The school population breakdown at the time of preparation of the practicum was approximately 74 percent caucasian, 23 percent Afro-American, 2 percent Asian, and 1 percent Hispanic. Built seventeen years ago in response to the need of an expanding community, the school stands as a monument to a local educator who made an international impact upon education. In deference to its high origin, the school strives to continue the tradition of excellence.

In July 1992, a new principal assumed the primary
leadership role at this leading district high school. A personal interview revealed him to be a strong consensus leader, who will continue the humanistic traditional education scenario (Groff, 1989). He values a comfortable climate of trust and respect with as much cohesiveness as possible among a 100 member faculty. In line with the theory of incremental change (Squires, Hewitt & Segars, 1989; Rosenbach & Taylor, 1989) the administration is shifting from a traditional power structure to a decentralized management model. A committee of teachers, administrators, students, and community personnel has been formed to devise a plan for restructuring which will include site-based management. Teachers are gaining more voice in decision making at the school level; they are assisting with peer evaluation and staff development; and they are instituting programs for enhancing school services to students.

As this high school is a state Blueprint Model school, the leaders are keenly aware of the critical posture of education in the future success of the state and nation. There is positive evidence of a curriculum restructuring to integrate academic and vocational education in preparing students for success in the information age.

To further strengthen the high school program, the business and university communities have established partnerships with the high school program. Five such
partnerships were working cooperatively to expand student services for the duration of this practicum.

The twenty-member English language arts department, to which the writer belongs, is keenly aware of its central mission in preparing effective communicators to take their places in an information gathering and processing society. To this end, the current high school language arts program was structured to develop self-awareness and to promote the concept of learning as a lifelong process, as it seeks to develop the skills of effective communication through listening, conversing, speaking, and writing.

Writer's Work Setting and Role

With twenty-five years of experience, the writer teaches college preparatory English, and public speaking and coordinates the twelfth grade team. Other responsibilities include serving as assistant department chairperson, president for the district Council of Teachers of English, and a member of the district council for the promotion of multicultural education. The specific work assignment entails teaching three sections of senior English, which is traditionally a year-long British literature and composition course, and two sections of public speaking, an elective course open to all interested students. Crowded facilities necessitate a floating arrangement for most faculty members, which produces an inconvenience in sharing rooms and
workspace. Approximately twenty-eight students per class are randomly scheduled by the registrar into the daily English classes for a semester. Every effort is made to reschedule students for the same teacher during second semester; however, some changes are usually necessary.

The compression of the world community through technology has generated an awareness of the United States' emergence as an information-gathering society and an imperative for students to view learning as a lifelong venture. Success in the business sector and in the private world as a consumer demands a knowledge of research skills which enable one to gather, process, synthesize, and summarize information in a clear, concise, and grammatically acceptable fashion (Quible, 1991). This shift in emphasis in education is urging educational institutions to reevaluate and restructure their writing programs. This general educational trend is reflected in the local work setting.
CHAPTER II
STUDY OF THE PROBLEM

Problem Description

The problem addressed in this practicum was that the research modules for the eleventh and twelfth grades were individually planned by the various teachers, non-sequential in their developmental objectives, and frequently disconnected from the personal lives and goals of students. As a result of the random planning, students were often confused by the varying processes and the apparent inconsistencies that emerged. This approach to research also resulted in an imbalance in the depth and extent of the research experience among the various classes. The problem became particularly perplexing at the twelfth grade level for both students and teachers when the class populations represented vastly varied experiential backgrounds. Closely aligned with this facet of the research problem was the fact that the existing program followed no sequential, developmental plan. Designing such a program was difficult as there had been no consistency in the presentation of
material among the classes at a given grade level. The
problem was further exacerbated by the fact that research
projects were usually once-a-year experiences that loomed
preponderantly over students as nearly impossible hurdles
which must be jumped in order to graduate. Topics
frequently required students to search out in-depth
information that they regarded as stuffy, remote, and
disconnected from their reality. Briefly stated, the
English department had not developed a coordinated,
sequential research writing program for grades eleven and
twelve.

The English department had been cognizant of the
problem for several years, but other more pressing issues
had diverted attention. However, during the 1991-92 school
term, concern escalated as teachers observed a mounting
disinterest, on the part of students, in the research
projects as compared with previous years, especially in the
regular academic tracks. Selecting appropriate research
topics was more difficult and time consuming, and student
frustration levels were higher. As the projects progressed,
more students tended to lag behind the time-line in meeting
due dates for various components of the research as a result
of inefficient use of library time. More students declined
to submit a paper, or completed the project so late that
little or no credit could be granted. A generally more
negative aura existed regarding research than ever before.
In the spring of 1992, the writer informally interviewed five English staff members who identified the problem with the upper level research modules as being two-fold: there were no established goals and expectations for either process or product, and there was inconsistency in the style and form requirements within and across both grade levels. The general consensus indicated that the English faculty was ready to address the problem with the research writing modules for the upper level students.

Problem Documentation

In the spring of 1992, the English faculty was surveyed relevant to their feelings, observations, and recommendations regarding the research writing program for eleventh and twelfth grade students. The survey instrument used is entitled Research Project Teacher Survey (see Appendix A). Those who participated in the survey indicated a general dissatisfaction with the research curriculum. There was a sense of disappointment with the research products, especially in the regular tracks. Several teachers mentioned the need for team planning and sequencing in the developmental aspect of the program. Others expressed a need for planning and cooperation between the English department and the media center, especially in the availability of media facilities to students after school.

To investigate the problem from a student perspective,
on May 28, 1992, all junior and senior students responded to a teacher-made survey instrument designed to measure students' self perceptions of mastery of research skills and success in completing the research product. The instrument entitled Eleventh and Twelfth Grade Survey of Perceived Research Knowledge (see Appendix B) asked students to respond in three areas: (1) to rate on a scale from "A" to "E" the strength of their perceived ability to perform 15 research skills, (2) to rate on a scale from "A" to "E" the extent of perceived success experienced on the research product relevant to ten criteria for a successful research report, and (3) to identify the most important goal of the research assignment. Results of the survey provided interesting insight into the problem.

According to eleventh and twelfth grade teachers' evaluations, these upper level high school students had a generally accurate perception of the extent of their research skills upon completion of the term projects. On a scale from "A" to "E" with "A" indicating no skills, "B" denoting limited skills, "C" representing moderate skills, "D" acknowledging adequate skills, and "E" declaring exceptional skills, 30% to 40% of the regular and honors students viewed their research skills as being adequate, while 47% of the advanced placement students rated their skills exceptional. These students indicated a perceived success rate on their research projects ranging from 31% to
45%, depending on their grade level and track; and 19% to 48% understood the major goal of research writing to be that of teaching one critical thinking skills such as synthesizing information and making judgments. The following figures summarize the data gathered on the initial student survey. Figures 1 and 2 on page 11 reflect self evaluations by 11th grade regular and honors students, rating their ability to execute 15 identified steps in the research process. These graphs depict the breakdowns by gender. Figures 3 and 4 on page 12 display 11th grade regular and honors students' self perceptions of having met ten criteria characteristic of a successful research project. Figures 5 and 6 on page 13, and 7 on page 14 reveal self evaluations by 12th grade regular, honors, and advanced placement students rating their ability to execute 15 steps identified in the research process. Figure 8 on page 14, and figures 9 and 10 on page 15 show 12th grade regular, honors, and advanced placement students' self perceptions of having met ten criteria characteristic of a successful research project. Again, all graphs reflect gender breakdowns. Percentages depicted were derived as follows: The total number of students in a given set multiplied by the number of questions equaled the total potential score for each response at each level "A" through "E." Each level was then divided by the potential score, the dividend of which was the mean percentage for that level.
Figure 1. Eleventh Grade Regular Students: Perceived Ability to Execute 15 Steps in the Research Process.

Figure 2. Eleventh Grade Honors Students: Perceived Ability to Execute 15 Steps in the Research Process.
Figure 3. Eleventh Grade Regular Students: Perceived Success on Having Met 10 Criteria for a Successful Research Project.

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Figure 10. Twelfth Grade Advanced Placement Students: Perceived Success on Having Met 10 Criteria for a Successful Research Project.
Causative Analysis

Interviews, observations, conversations, and experience working in the English department highlighted eight possible causes for the problem of a non-sequential, non-developmental approach to research writing in the upper grades. Shifting demographics were changing the demands on all aspects of the curriculum. Students with widely varying experiential backgrounds comprised classrooms in which common goals and expectations no longer existed. Many of today's students were less intrinsically motivated for academic success than students of the past. Some were simply tired of school and eager to be "free" and out on their own. Then there were others who were overburdened with family problems and responsibilities that forced them into premature adulthood. More careful planning and coordinating was required to capture the attention of these students and make research a relevant part of their world.

The problem of ineffective research modules was intensified by insufficient departmental planning and coordination of the research writing component. The failure to collaborate at a departmental level resulted in inadequate communication among English staff members, spawning inconsistencies in style, form, and depth of experience in the research process. This weakness precipitated unclear goals and expectations and rendered efforts at sequencing skill development virtually futile.
The failure to plan cooperatively further indulged the assignment of topics that were often remote to real life from a student perspective. Students, therefore, performed the process as an exercise to be completed for credit and forgotten as soon as possible, rather than as an essential life skill that would empower them to be intelligent consumers and producers.

The problem was additionally exacerbated by the fact that instructional focus for the past several years had been on personal writing; therefore, research writing had been virtually ignored, and old patterns and habits had been routinely repeated. As a result of the focus on personal response, in-service education rarely addressed the issue of research writing, and professional literature on the subject was limited. This new personal focus had also caused research to be pushed into a "corner" to be pulled out once-a-year, dusted off, and tossed out as a stumbling block in the path to graduation. This practice presented the research process as detached and difficult, rather than as natural and integral to the process of inquiry.

Relationship of the Problem to the Literature

The problem of effectively engaging high school students in worthwhile library and media searches is documented in the literature. Perrin (1987), Capossela (1991), and Horning (1991) effectively summarize the issues
in their articles which focus on the critical need for attention to the problem of research as an isolated project, reserved for the senior year; the selection of unauthentic topics; and the irrelevancy of most research projects to the lives and plans of students. Perrin (1987) discusses the problem of delaying the research problem until the senior year. This practice denies students, as they progress through the grades, the opportunity to get the much needed practice in executing the research skills and forces research to be perceived by students as detached from the regular curriculum. Perrin suggests that such a detached approach to research indicates the tendency of teachers to stress mechanical form above learning about an important subject, thus emphasizing the "secondary rather than primary purpose of research" (p.52). Perrin further warns that this mechanical focus can intensify the problem by focusing on a single documentation style at the exclusion of all other. The students who are aware of only one style are apt to be confused or frustrated later when they encounter a variety of style manuals.

Capossela (1991) amusingly refers to most research projects as "dummy runs" (p.75) and concurs with Ambrose Bierce, whom he quotes as observing such writing as comparable to the task of "moving tombstones from one graveyard to another" (p.75). Capossela supports Perrin's view that technical accuracy often takes precedence over
learning and renders many high school and college freshman research compositions lifeless and futile.

Horning (1991) addresses the problem of making research relevant to the personal lives and goals of students. She suggests that learning environments and assignments may intensify students' discomfort with themselves, their abilities, and their indecision. Such discomfort in a learning situation inhibits meaningful inquiry.

Renner (1980) aptly reminds readers that the problem of determining how and when to teach the research project is at least 20 years old. While this knowledge may offer comfort to those struggling to solve their research problems, it is realistic to accept the fact that there is no "quick fix" for the problem of providing a relevant, meaningful research module at the high school level.

Peacock (1987) observes that teachers sometimes take a "grin-and-bear-it" (p.57) approach to research, perpetuating in the students the old fears and frustrations engendered by the assignment of long, documented papers on topics for which they have little or no knowledge. Peacock expresses concern that students are sometimes expected to search without adequate library skills, topics that are too advanced for them. Such experiences not only take the joy out of learning, but also cause students to approach with fear and dread learning a process basic to successful living.
Benson (1987) recalls her reading of the "deadly dull and downright bad" (p.5) research papers thrown together at the last minute by high school researchers who cared "not a whit for the topic" (p.54). Benson places part of the blame for these inferior research products upon the system and the obligatory assignments outlined in The Curriculum Guide. These guides frequently mandate a research paper at the upper level of high school and list the skills of research as mastery objectives. Conscientious teachers feel compelled to defer to the district and state guidelines for curriculum.

Stotsky (1991) documents that most students at the high school level consider the writing of the research paper a separate process from the research process itself, illustrating a weakness in interrelating the skills used in research. Because of these negative experiences in teaching the research assignment, many English teachers have adopted an unfavorable view of it; they feel students are overwhelmed by the information gathered in outside sources and are unable to summarize and synthesize the ideas into an organized paper. Additionally, Stotsky reports that students have inadequate library skills and often resort to gathering and assembling chunks of plagiarized materials to satisfy research assignments.

Hayes (1989) decries the frequent submission of verbatim copies of resources consulted in the research,
illustrating students' inadequacy in summarizing their readings. Hayes views this problem as a failure on the part of teachers to teach the skill of summarizing. Assignments that require students to summarize are made on the assumption that the students have been taught the skill by previous teachers. This is usually a false assumption, and students are faced with an assignment which they are not equipped to execute.

Hill (1991) concurs with Hayes' (1989) conclusion that students turn to plagiarism as a result of their poor summarizing skills. This problem emerges because teachers erroneously assume that students have been taught how to write a summary. Hill views this problem as particularly prevalent among secondary teachers across the United States.

Bell (1992) targets the problem young adult researchers have in locating sources in the media center. This difficulty leads to "term paper blues" (p.34) every spring as high school juniors and seniors seek to satisfy the requirement of a research paper. Bell also acknowledges a deficiency in cooperation between public librarians and school media specialists in providing adequate self-help opportunities for young researchers, strong support for school assignments, and sufficient instruction in library skills. Inadequate staffing in high school media centers accounts, to some extent, for this apparent lack of cooperation with public facilities. Insufficient media
personnel is particularly debilitating when a class of 30 students arrives in the media center for a research assignment. The teacher, even assisted part-time by a media person, cannot provide appropriate assistance to all the students.

Shanks (1988) speaks to the problem of effective research by suggesting that the research project is shrouded in mystery: the stereotyped researcher cloistered among the stacks who produces "stuffy, well documented papers that fill up someone's filing cabinet" (p.82) needs to be changed.

Capossela (1991) speaks specifically of the problem of irrelevance in students' research, and their efforts to cope by engaging in "drudge work" (p.75). Students cannot write lively papers with significant meaning unless they are interested in the topic and recognize its relevance to their lives and goals.

Horning (1991) also directly addresses the issue of relevance in research writing. She asserts that all students need to learn to write well and to use research materials effectively, a goal hampered by the traditional approach to research.

Perrin (1987) highlights the problem of an imbalance of emphasis on mechanics and form and the content of the paper. Although mechanics and form are important to a successful paper, the more important component is the learning
experience derived from the reading about a given topic.

Calkins (1986) claims the problem with the research projects lies in an improper focus. She points out that most educators are so concerned with covering the curriculum that they overlook the critical need to uncover curriculum.

Some of the underlying causes for the problem of ineffective research assignments are documented in the literature.

Perrin (1987) asserts that teaching of the research project has a long-standing tradition that is often predicated upon myths which interfere with effective teaching. Twelve of Perrin's fifteen myths are highlighted here as being particularly relevant to the high school predicament:

1. Research should be taught only to college bound students. This myth causes educators to overlook the importance of research skills to development of effective consumers among all students.

2. Research is for seniors only. When the research project is reserved for the final year of high school, it becomes "Research with a capital R" (p.50). Research becomes a formidable challenge viewed by students as an irrelevant hurdle that must be scaled in order to graduate.

3. Research assignments should be limited to English and social studies classes. This isolation of research disregards important learning that can occur in other
classes.

4. Research skills come naturally. This myth results in the frustration and floundering of students who are faced with research assignments for which they lack the skills to successfully accomplish.

5. Only certain kinds of sources are acceptable. The requirement of a certain number and type of resources runs counter to "real world" (p. 51) research in which people gather information from any source that is available.

6. Traditional methods of researching work best. Such an approach to research denies students the opportunity to use the electronic computerized methods that simplify the research process.

7. If librarians do their jobs, teachers need not be heavily involved. This view of research fails to harness the knowledge and expertise of the teacher and makes the librarian's job virtually impossible.

8. Teachers can teach research without doing research themselves. This myth disregards the concepts of learning by doing and of learning by example.

9. Research is equivalent to the mechanics of complex documentation. This belief perpetuates the emphasis on the secondary rather than the primary purpose of research, which is to become informed about a subject.

10. Research topics must be highly abstract. The tradition of having students research highly theoretical and
formal subjects has perpetrated negative attitudes toward research.

11. A student's personality must not show through in a research paper. This detached approach takes students outside the research process.

12. Research must lead to a lengthy paper. This myth denies the importance of brief and varied research as a basic life skill and limits students' options for worthwhile research.

Both Hayes (1989) and Hill (1991) attribute the cause for poor products in the research process to the fact that teachers assume students know how to summarize the material in their sources, and therefore, do not teach the skill. The fact that students simply do not know how to summarize results in their submitting verbatim copies of their sources. Hill points out that summary writing is more complex than generally perceived, and most students' summaries contain only generalities about the articles, or student opinions stated in vague terms.

Renner (1980) suggests two causes for the embedded problems of research. First, problems of relevancy and sequence in teaching research results from increased class sizes and changing student attitudes. The need for more individual help in research activities places increased demands on both the classroom teacher and the media personnel. Students' greater diversity in backgrounds,
goals, and expectation further intensify the problem of making research relevant and meaningful. Second, Renner points out that the "patched-together nonsense" (p.20) in research papers is caused by poor reading comprehension. When students fail to read and comprehend the sources of material, they cannot summarize the material effectively, and, therefore, cannot write a thoughtful, organized research report.

Peacock (1987) declares that part of the problem with teaching research is that the research assignments are no fun. They are dull, lifeless exercises in the technicalities of documentation. Students are offered little outlet for creativity and enjoyment.

Finally, Stotsky (1991) asserts that the problem of relevancy in research writing lies partially in the disparity between the traditional view of writing as a means for expressing imagination and communication and the more recent view of writing as a means of developing independent critical thinking and learning. This shift in purpose reflects the effort of education to adapt to the changing societal demands. These necessary readjustments are accompanied by some confusion and frustration in the learning environment.

The literature repeatedly affirms the problem of providing a meaningful developmental approach to research writing at the high school level. Assignments are
frequently too difficult in scope, too detached from the students' real world, too drenched in the mechanics of documentation, and too dull in approach to capture the imagination of contemporary students. A common thread throughout the literature indicates that these factors work against student success. To this end teachers need to give greater attention to collaboration in planning and implementing research assignments as it is "probably the most important vehicle that teachers have for fostering independent critical thinking at all educational levels" (Stotsky, 1991, p.194). Personalizing research to meet the needs of individual students is imperative to their being prepared to cope in the future. In light of the research the thrust of this practicum was to design and implement a personalized approach to research at the eleventh and twelfth grade levels in the writer's work setting.
CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENT

Goals and Expectations

The overall goal of this practicum was to restructure the eleventh and twelfth grade research modules, using a team planning approach to design and implement a sequential, developmental research program that would more nearly meet the needs of the students, produce an improved research product, and generate a research handbook for the perpetuation of the program.

Several other related general goals were also anticipated. In order for student research efforts to be more practical and directly applicable, students were introduced to strategies for relating their research projects to the needs of the school and business communities. Another general goal was to integrate, to a greater extent than in years past, the use of technology in the research process. This goal was expected to encompass the use of technology for both the searching phase in the media center and the publication process in the computer lab. A third general goal was to collect and share classroom activities and strategies that would embed the
research skills into the total English curriculum for the eleventh and twelfth grades. A final goal was that teachers would express a greater satisfaction with the research modules for eleventh and twelfth grades as a result of having participated in this project.

**Expected Outcomes**

The following goals and outcomes were projected for this practicum:

1. Eleventh grade regular male students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

2. Eleventh grade regular female students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

3. Eleventh grade honors male students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

4. Eleventh grade honors female students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

5. Twelfth grade regular male students will indicate a
mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

6. Twelfth grade regular female students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

7. Twelfth grade honors male students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

8. Twelfth grade honors female students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

9. Twelfth grade advanced placement male students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

10. Twelfth grade advanced placement female students will indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills as measured by a teacher-made instrument.

11. Eleventh grade regular male students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as
measured by a teacher-made instrument.

12. Eleventh grade regular female students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

13. Eleventh grade honors male students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

14. Eleventh grade honors female students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

15. Twelfth grade regular male students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

16. Twelfth grade regular female students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

17. Twelfth grade honors male students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

18. Twelfth grade honors female students will indicate
a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

19. Twelfth grade advanced placement male students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

20. Twelfth grade advanced placement female students will indicate a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper as measured by a teacher-made instrument.

**Measurement of Outcomes**

The twenty specific objectives were measured by a teacher-made instrument entitled Eleventh and Twelfth Grade Survey of Perceived Research Knowledge (see Appendix B). A teacher-made measure was selected, as the writer was not aware of an existing measure appropriate for determining students' perception of their mastery of basic research skills and of their success in publishing a research project. The instrument for survey II was exactly the same instrument used in the pre-survey to gather the initial data. In the interim between the two surveys, the research skills and the criteria for evaluating effective research, were addressed in the classrooms. This instruction took place from September 1992, through May 1993, which
encompassed the implementation period for the practicum. Questions 1-4 of this measure were designed to gather necessary demographic information on the respondents. In Section I students were asked to rate on a scale of A to E (1-5) their ability to execute 15 skills basic to the completion of a research project. A indicated a respondent felt he/she had no skills in executing a given step of the research process, B denoted limited skills, C reflected moderate skills, D identified adequate skills, and E affirmed excellent skills in executing various research steps. Section II asked students to rate on a scale of A to E (1-5) the extent to which they felt they had achieved 10 characteristics of a successful research product. A on this section indicated no competency in a given characteristic of a successful research project, B identified limited competency, C equaled moderate competency, D reflected adequate competency, and E denoted excellent competency in meeting given criteria for a successful paper. Section III asked the respondents to select from a list of five goals the one they regard as the most important goal of research. Section IV gleaned information for teacher consumption regarding student preferences and problem areas in working through the research process.

The instrument required approximately 30 minutes for completion and was administered to approximately 475
students who comprised the population of the eleventh and twelfth grade English classes. The writer was the teacher for three of the sections of regular twelfth grade English.
Discussion and Evaluation of Solutions

The problem under investigation in this practicum was that the research modules for the eleventh and twelfth grades were individually planned by the teachers, non-sequential, and often irrelevant to the personal lives and goals of many students. This approach to teaching research had effected a program that was unbalanced in the presentation of research skills in the various classes at each grade level, developmentally ineffective for grade level goals setting and achievement, and disconnected from the eleventh and twelfth grade curricula. As a result of these problems, students feared the research assignments and regarded them as major hurdles to be scaled in order to graduate; and teachers and students alike experienced relief rather than satisfaction when the projects were over.

The literature reviewed discussed a variety of approaches that could be applied in resolving or diffusing the problem of developing and coordinating a well-planned, sequential, and relevant research module.

Calkins (1986) argues several strong points for
increasing relevancy and improving the product in student research projects. She emphasizes the integral relationship of research to the rest of the curriculum by saying "We need to bring all we know about teaching writing to this important genre" (p.273). Research experiences should begin by exploring the student's prior knowledge of the topic in order for him/her to be interested in the subject and to feel confident of success in the research venture. Calkin recommends the use of classroom writing workshops to provide mini lessons on various aspects of the research project, and reiterates the importance for the focus to be on uncovering rather than covering the curriculum. In order to improve the research product, Calkins recommends the inclusion of several short research assignments prior to making a major research assignment; the use of peer response groups and other classroom discussion techniques that provide students opportunities to become experts on their topics through thinking, learning, and teaching; the practice of having students write first drafts without notes in order to establish fluency and voice in the writing prior to inserting the quotes and documentation; and the development of titles for the projects that target the essence of the report, rather than serve as mere labels.

Bell (1992) suggests the provision of self-help for students in the media center through the establishment of a Term Paper Resource Center comprised of materials such as a
thesaurus, a dictionary, copies of the MLA handbook (and/or other handbooks) and supplies, as well as resource information handouts. Such helps, even at the public library and other libraries accessible to students, would help allay fears and foster self-confidence by making necessary items easier to find, replacing lost or forgotten supplies, and presenting the library as a friendly and helpful center.

Shanks (1988) provides two simplified, fun-filled alternatives for the research paper, using the student team approach. She suggests students team up to exchange friendly letters based upon their research findings, or that students form teams to conduct real research designed to meet specific school needs requested by various faculty members. Shank's approach involves the students on a personal level and reinforces the practical and useful nature of research in the real world. An additional benefit is that students learn and improve the quality of their own work while they assist other students.

Perrin (1987) recommends several strategies for making research more relevant. First, he advises that students should research in the "real world" using resources such as personal and telephone interviews, surveys, and personal experience. This technique permits students to take an active role in society and to get involved in live issues. Perrin also supports the use of technology whenever possible.
in the research process, asserting that it relieves the drudgery and saves time. According to Perrin, teachers are better guides in research instruction if they, too, are actively involved in research.

Horning (1991) proposes the assignment of short, documented research essays leading up to a longer, more complex paper. This strategy provides an initial experience with compiling ideas from outside sources and giving appropriate citations. Horning also concurs that collaborative group efforts enhance both the effectiveness of the research and the quality of the products. Horning further advocates having students keep a research log which chronicles their work for the project, stores developing plans, and records information gathered from interviews and surveys. Horning also underscores the helpfulness of tutorials in assisting students in the technical aspects of research and stresses the importance of frequent student-teacher conferencing while works are in progress.

Capossela (1991) advocates the assignment of formal and informal speaking activities during the research process in order to provide students the opportunity to learn by teaching, to discover gaps in their information, to promote ownership of the material, and to generate enthusiasm. Activities such as these stress the interrelatedness of the language experiences and help students recognize the relevance of research to basic communication.
Renner (1980) discusses the use of teaching strategies that address self-management skills in the writing process and the improvement of reading comprehension. Renner purports that the teaching of self-management skills is often overlooked at home and at school, resulting in students' inability to schedule work or break large assignments into smaller tasks. Therefore, according to Renner, all the activities should take the form of short, repeatable, first person projects, rather than the traditional term paper.

Peacock (1987) favors research assignments that reduce stress and engender fun. This approach eliminates the "grin-and-bear-it" (p.57) experience for teachers, while research becomes a more palatable adventure for the students.

Benson (1987) stresses several important points to consider in improving the research product. First, she says students need to engage in response group discussions of life-related research topics. This kind of involvement allows students to become comfortable and confident in handling their data prior to writing and leads to further research as an outgrowth of the desire to know. Next, Benson also advises that students should formulate outlines for their papers after the research has been completed. This practice encourages students to review their notes and organize their material. Then she suggests having students
write their initial rough drafts without the assistance of notes in order to develop voice and fluency. Benson recommends that the crowning event in the research experience be one of celebration complete with refreshments.

Stotsky (1991) identifies six fairly distinct phases in the research process helpful in teaching: In the first step called task initiation, students explore possible topics. In the second phase labeled topic selection students identify a topic for research. The third phase is prefocus exploration, the period during which students locate sources, take notes, and begin to discover a focus. Phase four known as focus formulation involves students in an in-depth search for a theme or thesis. In phase five labeled information collection, students gather information to define and support the focus. In the sixth phase, called search closure, students confirm the completion of their research and organize their notes. This process takes the students logically through the research process to the point of publishing the finished product.

Hayes (1989) focuses on the importance of teaching summarizing skills in successful research projects and recommends a method called GRASP, Guided Reading and Summarizing Procedure. The strength of this approach is that the teacher leads students step by step through the summarizing process. The goal of the technique is to prepare students to write summaries independently in various
situations that require reports. Research writing offers such an opportunity to apply the summarizing skills.

Macrorie (1984) strongly favors the personal approach to writing. He stresses the importance of free writing exercises to develop fluency and truth. His emphasis is on students' sincerely and subjectively becoming involved with the quest for information, the "scratching of an itch" (p.14) to know. Macrorie calls his version of the research paper an I-Search paper, for the papers are written in first person and chronicle the story of the pursuit for knowledge.

Faigley, Cherry, Jolliffe, and Skinner (1985) observe that several researchers maintain that computer text editors are aids to effective revision because writers are freed from the time-consuming task of recopying. Computer assisted editing can be an invaluable tool in assisting students with the tedious process of revision. Computer editing is also more fascinating than the laborious traditional process, and students seem to retain computer-taught editorial skills more readily than teacher taught skills.

An English faculty survey gathered some interesting suggestions for solving the problems with the research curriculum in the two upper high school grades. The following suggestions were appropriate possible solutions which paralleled the theories set forth in the literature:

1. The department needs to develop a sequential plan
for research that is implemented by grade-level and across-grade-level teams working cooperatively on developing goals and expectations, suggested topic ideas, skill development strategies, and a calendar for scheduling various grade level research projects in order to maximize access by students to the materials in the media center.

2. Students need to be guided in the selection of topics of personal significance, perhaps within a field they wish to pursue and for which they may intern or serve an apprenticeship during the course of research.

3. A plan needs to be developed to provide more teacher/student conference time in order for students to get one-on-one help with their writing.

4. The media center needs to expand its after-school and evening hours to provide more student access to resource materials.

5. Teaching strategies need to be developed for curing the problem of boring, irrelevant, dry, uninspired, plagiarized research reports.

Other possible solutions gleaned from various sources included instituting a multidisciplinary research seminar class (Ward, 1983), helping students get their writing published (Balcher, 1990), visiting various business enterprises in town to offer student services in researching their problems and concerns, developing tutorials for use in the computer lab and in the media center to render
technology more accessible to students, and involving parents and other community personnel in the education of their youths.

Description of Solution Selected

On the basis of the preceding bibliographic research, the writer was convinced that revising the eleventh and twelfth grade research modules, using a team planning approach to design and implement a sequential research program that would more nearly meet the needs of students, was the most appropriate approach to solving the problem of a non-sequential and often irrelevant research program in a mid-sized district high school English department. The revised program needed to include classroom activities and interactions that would promote the selection of relevant research topics, increased ownership of the gathered information, more direct application of the results of the research experience, and generally improved research projects. This revised, expanded, sequential, and more student-centered approach to the research curriculum was in line with the theories expounded by Calkins (1986), Perrin (1987), Horning (1991), Capossela (1991), and Benson (1987).

Basic to the improvement of the research modules for eleventh and twelfth grades was the formation and coordination of English faculty teams comprised of volunteers. An English project team coordinated the
necessary collaboration between the grade level teams in developing the appropriate concerted, sequential, and relevant focus on research. This project team assumed responsibility for determining the objectives and expectations for grades eleven and twelve and for the various tracks within those grade levels. They also developed a calendar for scheduling research projects in grades nine through twelve in order to maximize library access. Another charge for this committee was to generate a list of topics or research ideas that would serve as suggestions for research projects for the various grade levels. This group also coordinated communication and cooperation between the English department and the media center. In addition to the project team, grade level teams were formed to develop plans appropriate for their respective grade levels. Ideas, plans, and suggestions from these groups went to the general team for discussion and infusion into the sequential plan. In line with the findings of Ornstein and Hunkins (1988), affording those who would implement the program opportunities to collaborate in the planning enhanced the sense of ownership and fostered success.

Important in the development of more relevant and sequential research modules for grades eleven and twelve was the cooperation of the media specialist and the media team. The English project team collaborated with the media
personnel in developing student handouts designed to assist in the awareness, knowledge, and location of the various resource materials. Additionally, the project team assisted the media specialists in developing tutorials that enabled students to use more expeditiously the electronic resources provided by the media center (Ekwurzel & Saffran, 1987; Jones, 1988). The project team also explored with media personnel the advantages of the Term Paper Resource Center (Bell, 1992). Such an area was deemed feasible and advisable and was established for the convenience of the students.

Of primary importance to the success of the improved research modules for grades eleven and twelve were the classroom activities and interactions. As the project ensued, team members continued to search for meaningful classroom ideas and strategies. Several techniques gleaned from the literature were worthy of evaluating with the students. First, the research process was embedded into the total writing program so that shorter, less demanding research assignments led to a major research effort (Horning, 1991; Calkins, 1986; Renner, 1980). Response group activities provided opportunities for students to teach and learn as they developed ownership of their material (Barron, 1991; Benson, 1987; Calkins, 1986; Capossela, 1991; Liftig, 1990). Informal writing assignments such as logs, journals, and free writing were
used to encourage fluency and voice (Benson, 1987; Macrorie, 1984). An important strategy employed in classrooms was the use of portfolio assignments as an integral part of the writing program preparatory to the major research assignment (Herter, 1991; Ballard, 1992).

Additional strategies and ideas selected for implementation in the revised research curriculum included the following:

1. Expanded use of technology in the English labs was employed incorporating teacher-made tutorials to assist students in the most efficient use of the word processing and editing software (Faigley, Cherry, Jolliffe, & Skinner, 1985; Perrin, 1987; Salant, 1990).

2. Some teachers employed the technique of having students write initial rough drafts without the assistance of notes or note cards in order to develop voice and fluency in their research papers and to avoid the temptation to plagiarize (Benson, 1987; Calkins, 1986).

3. The exploration of students' prior knowledge and the selection of life-related, as well as community and business related, research topics received high priority (Calkins, 1986).

4. Emphasis was placed upon the importance of a carefully selected title which targeted the point of the paper (Calkins, 1986).

5. Some class time was devoted to writing workshops
which provided mini lessons on the various skills necessary for research (Calkins, 1986).

6. Stotsky's (1991) six phases of research were employed in organizing class presentations on the research process.

7. Special focus was placed upon the importance of teaching students how to summarize (Hayes, 1989; Hill, 1991).

8. Opportunities were provided for students to orally share their research findings with peers, faculty members, parents, and other community personnel (Calkins, 1986).

9. The culminating experience of celebration for the completion of the research project was planned (Calkins, 1986).

10. All handouts, worksheets, activities, and tutorials were collected to be compiled into a research handbook for use in the future by the English department and to be shared with other departments within the school or district.

These solution strategies were viewed as appropriate and potentially effective techniques for solving or ameliorating the problem of providing a developmentally sound and life-related approach to inquiry at the eleventh and twelfth grade levels. The rationale for the solution selected was that when faculty members collaborate to provide class activities that support the selection of more
relevant and directly applicable research topics, students should experience a deeper understanding of the material, a stronger ownership of the ideas, and greater fluency in synthesizing and summarizing the main points of the research.

**Report of Action Taken**

Several preliminary steps were accomplished prior to the official implementation period. These steps were taken in order to assure that the organizational machinery was in place, and support of the district and local school administrators and personnel was secured.

The English department made preparations for the implementation period. English faculty teams were formed, and began making preliminary preparation early in September. Teachers discussed plans for the project with the students, who were asked to explore possible research topics and consider business or community partnerships with which they would enjoy working. A teacher-made survey was administered to the students to determine their views regarding the present approach to research, their perceived competencies in the various research skills, their perceived success on previous research papers, and their preferences for future research projects. Peer response groups were established, and students were instructed in the response procedure that would be followed during the research process. Preliminary
writing assignments involving various features of research were executed prior to the major paper in order to establish research as an integral part of the writing curriculum. A letter was composed to send to parents during the first week of implementation, explaining the research project and soliciting their cooperation in making the program successful. Finally, the department continued to research the literature to locate ideas for activities and teaching strategies that foster a concerted, sequential, and relevant approach to research at the secondary level.

The cooperation of a number of people outside the language arts department was vital to the success of this project. The principal and district language arts supervisor needed to read the outline for the project and pledge their support before implementation could begin. Initial conferences with the media center staff and the career resource counselor were held to solicit their cooperation in fulfilling the goals of the project. The media staff was apprised of the goals and expectations of the project and the nature and extent of their role was defined. The career resource counselor was made privy to the plan for the project, and her cooperation in working with the business community to coordinate research projects undertaken by students for various business concerns was sought.

The writer further prepared for implementation by
investigating various means by which businesses could be contacted and their services enlisted to engage students to do research which could be meaningful to the goals and objectives of their businesses. The career resource counselor's services were employed in this endeavor. Additionally, calls, and visits when appropriate, were made to business leaders with whom the writer is acquainted. The Chamber of Commerce, the Rotary Club, and the school business partners cooperated in identifying business people who were willing to work with the students as partners in research.

The timeline for formal implementation of the revised research curriculum for eleventh and twelfth grades extended for eight months beginning September 21, 1992, and concluding May 21, 1993. The following summary outlines the action taken to implement the plans and strategies designed to accomplish the goals and objectives of the practicum:

Month I

Week I

Teachers reminded students that formal implementation of the research project was in progress. General goals and expectations were discussed with them and questions that arose relevant to the program were answered. The students in round one classes were given a letter to deliver to their parents or guardians, explaining the research project and
soliciting their cooperation and support. Then students were asked to seriously consider the selection of a topic by discussing ideas with teachers, parents, friends, and peers.

During the beginning of implementation, the English department project team met to finalize the calendar timeline that was to be followed in rotating the research assignments through the various tracks at each of the two grade levels.

The process for identifying business and community personnel willing to assist with the project was diligently pursued. Individual teachers were asked to assist in procuring business and community volunteers to team up with the young researchers in seeking information of mutual interest and benefit.

**Weeks II-V**

Weeks two through five were devoted to planning and preparation for the initiation of the eleventh and twelfth grade research projects. The grade level teams developed specific teaching objectives, lesson plans, handouts, and tutorials for use in the research module. These grade level teams met with the project team to coordinate specific teaching objectives and to coordinate sequencing between the two grade levels.

Continued effort was directed toward securing business and community cooperation in the research projects through the Rotary Club, the Chamber of Commerce, and the
school business partners. The writer met again with the career resource counselor to request and encourage her continued effort in effecting the cooperation of the business community. She was very cordial and provided invaluable service in launching the project with business and community backing.

The writer and team volunteers met with the media specialists to generate handouts for resource materials and their locations and to design tutorials to assist students in the use of electronic resources. The feasibility of establishing and maintaining a Research Resource Center in the media center was considered with the media specialist. An agreement was reached that such an area would assist the media personnel in better serving the students, and plans were instigated to establish a center. The writer and team-member volunteers also planned with media specialists possible ways for offering students more after-school access to media resources and facilities. Because of working hours and problems of gaining access to the building during after-school hours, this problem was difficult to dispel. However, a few improvements were negotiated: the media specialist agreed to conduct after-school workshops for students who needed extra help with library skills or other research skills; all resource materials were placed on an over-night check-out basis; and after school hours were briefly extended for two afternoons per week.
The project team and the grade level teams cooperated in designing, with the assistance of the Mac Lab technologists, tutorials to guide students in the use of the English Mac Lab for publishing their research papers.

Initial plans were made for formatting and organizing a research handbook which is planned for later publication as a teacher-student guide for perpetuating the revised program.

Month II

Week VIa

The first two days of this week focused on phase one, task initiation, of the first round of student research projects. During this time students explored interests for research by talking with others and browsing through the library. Students were encouraged to talk with business, school, and community partners as they began to select and narrow a topic and establish a partnership for research. Grade level teams met during this time to discuss the week's progress and coordinate procedures.

Week VIb

The last three days of this week involved phase two, topic selection. At this time students made their final decisions on topic selection and began initial reading and gathering of sources. Students were asked to locate and read at least three sources relevant to their topics. Then they discussed their findings with friends, teachers,
librarians. Classroom mini workshops for this phase were planned to remind students of the information required for a reference citation.

Week VII

This week's activities emphasized phase three, prefocus exploration. In peer groups, students discussed their findings from the three articles located last week in order to begin feeling ownership of the material. Students continued to review information and take notes, and surveyed a wide range of data in order to isolate a focus, or controlling idea, for their project. Mini workshops this week stressed notetaking skills.

At the end of the week, the eleventh grade team met to evaluate the progress and to plan for the coming weeks.

Week VIII

Week eight covered phase four, focus formulation, for the research projects. The students were expected to locate a focus for their information gathering, using notes they had gathered. Research continued with emphasis upon becoming experts on their chosen topics. Special trips were organized to visit libraries located at the University of Florida and Santa Fe Community College, as well as the public libraries. The mini workshop topic for this week was techniques for formulating a thesis statement.

The eleventh grade team met to evaluate practices, procedures, and progress and to plan for future classes.
Month III

Weeks IX and X

Weeks nine and ten encompassed phase five, information collection. During this time students conducted in-depth research to define, expand, and support their central idea, taking detailed notes. They visited with their school, business, or community partner to discuss findings to date. Sharing with their partner helped students discover gaps in their information, afford opportunities to consider organization possibilities, resolve points of disagreement, and determine points of agreement. Appropriate titles were discussed, and research narrowed to exactly which aspect of the topic would be discussed in the paper. To complete the visit, students wrote a brief report of their visit with the research partner. The mini workshop focused on outlining skills, and students clustered ideas to initiate the formation of an outline.

Grade level teams met for evaluation and planning.

Week XI

Week eleven was devoted to phase six, search closure. Students studied their notes to determine whether or not the research was complete. Then they organized the cards according to the manner in which the cards were to be used in the report. From this information, an outline was developed.

In-depth peer response group discussions were held.
In these discussions new information were shared, thesis statements were developed and polished, and ideas for introductory paragraphs were shared. At the end of this phase, outlines, thesis statement, and introductory paragraphs were due for review.

**Weeks XII and XIII**

These weeks were spent in publication. Students wrote an initial draft without the aid of notes. Drafts were revised and expanded using note cards; in-text documentation was supplied; and reference lists were compiled. From these rough drafts students generated a computer rough draft, using tutorials and teacher assistance. The last step involved revising and editing the drafts for final publication.

**Month IV**

**Weeks XIV and XV**

These weeks covered the winter holidays.

**Week XVI**

Week sixteen marked the culmination of the project. Students shared their completed products in a variety of oral presentations. This time of sharing afforded students and teachers a time for celebration complete with refreshments. Copies of the research projects were shared with school, business, and community partners for research.
Weeks XVII and XVIII

The last two weeks of round one research were reserved for program evaluation, completion of semester one, and preparation for the second round of student research.

Month V

Week XIXa

Week 19a focused on phase one, task initiation, of the second round of student research. The activities for these two days corresponded to the activities for the first two days of week VIa for round one research. For example, students explored interests for research by talking with others and browsing through the library. They also talked with business, school, and community partners as they began to select and narrow a research topic and establish a partnership for research.

Grade level teams met to discuss progress and to coordinate procedures.

Week XIXb

The last three days of this week mirrored the plans laid out for week VIb. For example, students made their final decisions on topic selection; began reading and gathering sources; and selected three sources to read and discuss with friends, teachers, and librarians.

Classroom mini workshops were planned to remind students of information needed in a reference citation.

Just as this week’s plan for round two research was
identical to the plans for the corresponding week in round one, so did succeeding weeks of round two reflect the plans for the corresponding weeks.

Week XX

Week XX repeated the plans for the corresponding week VII of round one research.

Week XXI

This week corresponded with week VIII of round one research.

Weeks XXII and XXIII

The plans for these weeks coincided with weeks IX and X of the first research round.

Month VI

Week XXIV

This week duplicated the plans for week XI of the first round of research.

Weeks XXV and XXVI

These weeks corresponded to weeks XII and XIII of round one.

Week XXVIII

This week was used for team meetings.

Month VII

Week XXIX

The twenty-ninth week was set aside for spring break.

Week XXX

Week thirty was reserved for team meetings. Team
members looked carefully at the program and made revisions and recommendations for future research projects. Materials for the research handbook were collected. School, business, and community leaders who participated in the program were asked to evaluate the project and make suggestions for future partnerships.

Week XXXI

The teacher-generated post-survey instrument was administered this week.

Month VIII

Weeks XXXII through XXXV

These weeks were dedicated to the collection of materials for the departmental research handbook for grades eleven and twelve. Goals and objectives were finalized; handouts received final revision and evaluation; tutorials were assessed, revised, and edited; media handouts were polished; and guidelines for working with business partners and other community leaders were formulated.

This entire project was conceived and developed for implementation in an effort to more nearly meet the research writing needs and expectations of students in the eleventh and twelfth grades and to better prepare them to participate in society as intelligent and resourceful consumers.
CHAPTER V
RESULTS, DISCUSSION, AND RECOMMENDATIONS

Results

The problem targeted in this practicum was that the research modules for the eleventh and twelfth grades were individually planned by the various teachers, non-sequential in their developmental objectives, and frequently disconnected from the personal lives and goals of the students. Because of this random planning, students were often confused and viewed research as a necessary evil with which they had to cope in order to graduate. They failed to see the significance of research and the process of inquiry as necessary life skills that would better prepare them to be productive citizens, as well as intelligent consumers in the information-gathering and -processing society. The unfathomable amount of information that continues to redouble itself in weeks rather than centuries accounts for the switch in emphasis from a fact and information-centered curriculum to one that focuses on research and exploration. Students must be alerted to this educational paradigm shift and be academically equipped to meet the challenge.

The problem was exacerbated by the fact that research
was taught in isolation from the rest of the curriculum, making it nearly impossible for students to perceive research as an integral aspect of daily living. In addition, topics were teacher-selected, stilted, obscure, and divorced from the students' reality. The research writing modules needed to engage the students in a worthwhile, relevant pursuit of information.

From personal observation and recommendations in the related literature, the writer determined that restructuring the eleventh and twelfth grade research writing modules to implement a sequential, developmental, and personally relevant research program offered the best potential for ameliorating the academic void perpetuated by an outmoded program. As a result, the research units were redesigned to permit students to select their own topics or, at least, to have important input into topic choice; to utilize available technology in the searching and publishing sequences of their papers; and to select means by which research efforts could be applicable in the school and/or business communities, as well as in their own personal lives. To enhance the effectiveness of the revitalized program, classroom activities were designed to integrate research skills into the total English program, and were collected for later publication in a departmental handbook.

The post-test results of the survey are indicated in Figures 11 through 30 on pages 63 through 72. For results
to be easily displayed, a separate graph has been included for both males and females in each track at each grade level, depicting pre- and post-survey results. The first ten graphs compare the pre- and post-survey results for the students' perceived ability to execute 15 steps in the research process (see Appendix B). These ten graphs, illustrating pre- and post-survey percentages appear in the following order: Figures 11 and 12, on page 63, show eleventh grade regular males and females respectively; figures 13 and 14, page 64, eleventh grade honors males and females; figures 15 and 16, page 65, twelfth grade regular males and females; figures 17 and 18, page 66, twelfth grade honors males and females; figures 19 and 20, page 67, twelfth grade advanced placement males and females.

The next ten graphs juxtapose the percentages from the pre- and post-surveys, depicting students' perceived success on having met 10 criteria for a successful research project. These ten graphs appear as follows: Figures 21 and 22, page 68, depict results for eleventh grade regular males and females respectively; figures 23 and 24, page 69, eleventh grade honors males and females; figures 25 and 26, page 70, twelfth grade regular males and females; figures 27 and 28, page 71, twelfth grade honors males and females; and figures 29 and 30, page 72, twelfth grade advanced placement males and females.
Figure 11. Eleventh Grade Regular Males Pre- and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.

Figure 12. Eleventh Grade Regular Females Pre- and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.
Figure 13. Eleventh Grade Honors Males Pre- and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.

Figure 14. Eleventh Grade Honors Females Pre-and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.
Figure 15. Twelfth Grade Regular Males Pre- and Post Survey: Perceived Ability to Execute 15 Steps in the Research Process.

Figure 16. Twelfth Grade Regular Females Pre- and Post Survey: Perceived Ability to Execute 15 Steps in the Research Process.
Figure 17. Twelfth Grade Honors Males Pre- and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.

Figure 18. Twelfth Grade Honors Females Pre- and Post Survey: Perceived Ability to Execute 15 Steps in the Research Process.
Figure 19. Twelfth Grade Advanced Placement Males Pre- and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.

Figure 20. Twelfth Grade Advanced Placement Females Pre- and Post-Survey: Perceived Ability to Execute 15 Steps in the Research Process.
Figure 21. Eleventh Grade Regular Males Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.

Figure 22. Eleventh Grade Regular Females Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.
Figure 23. Eleventh Grade Honors Males Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.

Figure 24. Eleventh Grade Honors Females Pre- and Post Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.
Key: Same as Figure 1.

Figure 25. Twelfth Grade Regular Males Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.

Key: Same as Figure 1.

Figure 26. Twelfth Grade Regular Females Pre- and Post Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.
Figure 27. Twelfth Grade Honors Males Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.

Figure 28. Twelfth Grade Honors Females Pre- and Post Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.
Figure 29. Twelfth Grade Advanced Placement Males Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.

Figure 30. Twelfth Grade Advanced Placement Females Pre- and Post-Survey: Perceived Success on Having Met 10 Criteria for a Successful Research Project.
The results indicate some interesting growth in student attitudes toward perceived proficiency in research skills. Data were examined on the basis of observing the movement of students from the A and B skills levels, which represent students' perception of having no skills or limited skills, into the C, D, and E skills levels, which represent students' perceptions of having moderate, adequate, or excellent skills. Any movement toward the E skills level was perceived as positive and accepted as gain in evaluating progress.

Objectives 1 through 10 relate to the students' perceived ability to execute 15 research skills. Objectives 1 and 2 predicted eleventh grade males and females would indicate a mean increase of at least 5% in their ability to execute 15 research skills. The post survey results for males indicated an increase from 77% to 84% at the C D E levels and for females an increase from 78% to 83% at the C D E levels. This reflects a gain of seven percentage points for males and a gain of five percentage points for females. When the results are examined at the D E skills levels alone, the males register a gain from 43% to 53%, an increase of 10 percentage points, and the females move from 50% to 53%.

Objectives 3 and 4 projected a 5% mean increase for eleventh grade honors males and females relevant to the execution of 15 research skills. The actual results
indicated males perceived a 5 percentage point increase at the C D E skills levels, while females perceived a 9 percentage point increase at the C D E skills levels. The strength of perceived growth can be further confirmed by examining the growth percentages at the D E skills levels for males and females. Males show an increase from 56% to 68%, a 12 point increase at the D E levels. Females maintain their 9 point increase even at the D E levels, moving from 68% to 77%.

In objectives 5 and 6, twelfth grade regular males and females were expected to indicate a mean increase of at least 5% in their perceived ability to execute 15 research skills. The statistics reveal an increase at the C D E levels for males, from 79% to 85%, an increase of six percentage points. The females moved from 79% to 89%, an increase of 10 percentage points. At the D E skills levels alone, the males moved from 53% to 54%, and the females moved from 53% to 58%, indicating notable progress toward excellence in their perceived abilities to perform research skills.

Objectives 7 and 8 refer to expectations for twelfth grade honors students. The males experienced only a 1 percentage point gain in their progress at the C D E levels, from 90% to 91%. However, progress at the D E skills levels reflects an increase from 60% to 70%. For the honors students to be moving from the C level toward the D E
levels, or adequate to exceptional skills, is regarded as advancement worthy to accept as having more than met the anticipated gain of 5%. Twelfth grade honors females experienced a 2 percentage point gain at the D E skills levels. However, they lost 3 points moving from 92% to 89% at the C D E levels. An interesting comment by the honors level teacher may account, at least in part, for this situation with the honors females: "The biggest dilemma is deciding between literary research or an open topic - both have merit for the honors students." These students were restricted to a topic concerning a critical focus on the work of a particular British author. On the comments section of the score sheets, many students indicated that they would have preferred more freedom in selecting a research topic.

Objectives 9 and 10 indicate an anticipated 5% mean gain for male and female students in twelfth grade advanced placement English. Results show the males losing 8 percentage points at the C D E skills levels, moving from 97% to 89%. At the D E levels they went from 86% to 73%, registering a 13 point decline. In the E range alone, they show an 18 point decrease over the pre-survey figures. It is important to note that the AP population consisted of only seven males for the post-survey, compared to a pre-survey population of fourteen. This low membership renders these figures less reliable in evaluating the real growth of
these students. The AP females register a 1 point growth in the C D E skills area, a 2 point growth in the D E skills, and a 5 point growth at the E only level, moving from 39% to 44%. Although there was a slight loss in population, from 30 to 23, there are enough students to consider the findings indicative of a positive trend for the females. The teacher for this level also stated reluctance to abandon the traditional approach of having the students write a critical paper focusing on a central theme as seen in two works by a single author or one work by each of two authors. Again, students expressed their preference for researching topics of their own choosing, which have more relevance to their personal lives, thus enhancing interest in research. It is important to note that the two groups who experienced difficulty in achieving the expected gains are from the honors and advanced placement students whose teachers felt reluctant to grant the students freedom of choice in research topics.

Figures 21 through 30 illustrate the students' perceived growth from the pre- to the post-survey in their ability to write and publish a successful research project. These ten figures display the statistics relevant to objectives 11 through 20. In each instance, both male and female students are expected to show a mean increase of at least 5% in their perceived success on 10 characteristics of a successful research paper.
Objectives 11 and 12 denote the 5% anticipated mean gain for eleventh grade regular males and females. Although at the C D E levels of success, males show a 2 point loss from 80% to 78%, on closer examination at the higher levels of D E reveals a gain from 45% to 52%. This clear gain of 7 percentage points toward excellence suggests important growth in their confidence to successfully handle research. For the females, the figures reveal a growth from 78% to 84% at the C D E levels, and 2 percentage points of growth at the D E levels. These figures suggest valid gains in research confidence for the eleventh grade regular females.

Progress of eleventh grade honors males and females is predicted in objectives 13 and 14. The males demonstrate an increase from 93% to 95% at the C D E skills levels, and the females show a gain from 94% to 98%. At the D E levels the males denote an increase from 69% to 75%, and the females move from 77% to 80% at the same levels. Concern over this apparent limited growth is diminished by the phenomenal growth by both males and females at the E, or excellence, level. At this level males gain nine percentage points and females gain eight percentage points, both illustrating impressive growth in their confidence to successfully research.

Objectives 15 and 16 refer to the progress of twelfth grade regular male and female students respectively. Males move from 82% to 88% at the C D E levels, showing 6
percentage points of gain. At the D E levels they register a 7 point gain, and at the E level alone they show 3 points gain. Strong progress toward excellence is denoted. For the females there is an increase at the C D E levels from 88% to 93%, at the D E levels from 63% to 65%, and at the E level from 21% to 28%. This five-point gain, the two-point gain, and a seven-point gain illustrate dramatic progress toward excellence for the regular twelfth grade females.

Twelfth grade honors students are the focus of objectives 17 and 18: objective 17 for males and 18 for females. The C D E scores for males remain exactly the same at 92% for pre- and post-survey results. However, exemplary gains are obvious at the D E levels and E level. At the D E level they go from 65% to 78%, registering a phenomenal 13 percentage point increase, with a similarly dramatic increase at the E level, moving upward 12 points from 25% to 37%. Interestingly, the twelfth grade honors females did not express the feelings of research preparedness as did their male counterparts. At the C D E level they lost one percentage point, and at the D E and E levels they regressed four percentage points. One explanation is the possibility that twelfth grade honors females experienced more difficulty than males in overcoming the restraints of teacher-selected research topics.

Objectives 19 and 20 refer to the expected outcomes for the twelfth grade advanced placement students. Objective 19
for males reflects an overall loss: at the C D E levels they go from 99% to 97%, not a notable loss of superior skill; at the D E levels they move from 93% to 80%, an unexpected 13 percentage point decline; and at the E level a small decline from 48% to 46% is indicated. Again it is important to note the small male population (seven) in the AP group and to consider that the results are easily skewed in such a small sample. At the C D E levels, the females, with a population of 23, register a slight decline from 98% to 97%, not significant when noting the five-point gain at the D E levels from 82% to 87%, and a dramatic 9-point gain at the E level, moving from 43% to 52%. The females show a strong trend toward self confidence in achieving excellence in the publication of a research project.

The already high achievement levels of both the honors and advanced placement groups at the twelfth grade level render dramatic gains in their research skills virtually impossible, although, as in most instances, there is room for growth. As these students were also under some constraints of not being able to select their research topics, it would be interesting to observe these groups if they were permitted more freedom in the selection process. There is the possibility they would have been more personally engaged in the research and would have perceived a greater sense of success in executing the 15 research steps and in fulfilling the 10 characteristics of a
successful research paper. In electing to adhere to the older, more traditional research topics, these teachers deviated from an important aspect of the revised research paradigm, which is making the research relevant to the personal lives of the students. However, in so doing, they provided an opportunity for immediate observation and speculation as to what happens when students are constrained in the option to choose, as well as what happens when free reign in topic selection is permitted.

Highest overall gains were registered by the eleventh grade regular and honors students and by the twelfth grade regular students. In all three instances, teachers at those levels reported enthusiastically on creative means whereby they had sought to make the research projects more personally relevant to the students' lives than in research projects in years past. Without exception, the teachers had provided more freedom of choice in topic selection; more encouragement to use personal interviews and school and community surveys as major research sources; and greater effort to reach out and involve parents, teachers, university professors, and business leaders as adult research writing partners and research resource persons. Both teachers and students responded positively to efforts to make research a more meaningful pursuit.
Discussion

The students' enhanced perception of their abilities to perform the research skills and to write and publish successful research papers, as a result of a relevant, sequential, and developmental approach to research, reaffirmed the writer's conviction that research must be an integral component of the high school writing curriculum, and that it must be aligned with the students' personal goals and experiences and directly applicable in the home, school, or community. When all, or even some, of these characteristics are present, students generally tend to enjoy the research, become actively involved, and produce high quality finished research products. This approach to research is essential in preparing students to live constructively in the information-gathering and -processing society of today and tomorrow. As Thornburg (1991) expounds, "The goal of education must be the development of lifelong learners" (p. 8). In order for this goal to be realized, students must appreciate and enjoy the pursuit of knowledge; they must know where to find information; and they must know how to access and apply that information to daily living. High school English teachers are strategically situated to accept a central role in preparing students to effectively conduct research and communicate their findings. The need to engage students in worthwhile library and media searches is in line with the findings of
Quible (1991), Perrin (1987), Capossela (1991), and Horning (1991) which stress the need to embed the research skills into the total writing program and make topics relevant to the experience of the students.

Interesting observations regarding the success of the project emerged from a careful reading of the student responses to some of the general opinion questions included on the student survey (see Appendix B). Clearly exceeding references to all other aspects of the research process were the references to the selection of a research topic. In response to the statement, "What I like most about research," numerous students indicated they most liked being able to choose a topic that had some meaning for their own lives. Similar answers were given for the question, "What would make the research experience more meaningful?" Clearly, the most important emphasis from the students' perspective for successful research is the freedom to choose their own research topics. The students' emphasis on the importance of relevant topics specifically reinforces the findings of Benson (1987) who cautions teachers against feeling obliged to follow the research assignments outlined in the curriculum guides. The data gathered in this project appear to uphold this research claim.

Another interesting idea that surfaced in the student comments was the importance of time management in successfully completing a research project. Students
clearly felt the need to develop their own calendars and adhere to them in order to meet deadlines. They felt they would start earlier and stay on target if they could repeat the experience, and urged teachers to give more pep talks and be more stringent regarding deadlines. They also indicated that more time should be devoted to research writing, especially at the rough draft stage, which represented a time of critical "crunch." These are important observations, which are clearly in line with the ideas of Renner (1980) who feels that teaching self-management skills is often neglected at home and at school.

Another interesting student commentary is their frequent mention of the importance of class discussions, small group discussions, and formal oral presentations relevant to their research. They reported having enjoyed the speeches at the same time they learned much information sharing findings with their peers. Several students referred to these experiences as "learning opportunities." The students' recognition of the value of these sharing sessions reflects the findings of Capossela (1991) who advocates this kind of student exchange to build ownership and personal voice.

One very important aspect of the research project for twelfth grade regular students was the adult research writing partnerships that were formed between the seniors and an adult of their choice or an adult with whom they were
matched on the basis of mutual interests. Adult writing partners were recruited from among teachers, parents, and business partners to assist students in searching, writing and editing (see Appendix C). The project proved to be very successful based upon student comments received on the interim reports (see Appendix D) and upon comments from the writing partners on their final project evaluations (see Appendix E). The following quotations reflect the general tenor of responses from students and writing partners: a school principal in Panama Canal wrote, "I think the partnership concept is a fantastic idea. With your permission, I would like to share this with our high school principal." "Yes, I love it!" wrote a high school art teacher. A male student reported, "My reaction to working with my partner is totally positive...It was great; her whole family got involved giving me advice." Another student wrote, "I think it is a neat experience and one that all seniors should learn from." Many other positive comments and an overwhelming percentage of responses agreeing to work with the project again next year further affirm the success of the adult partnership feature. Copies of the research projects were shared with the writing partners as a concluding gesture.

Another particularly engaging research project was conducted with the eleventh grade regular students. They selected social issues that were of personal concern and
researched the treatment of those issues in children's literature. Professionals at the book stores, librarians specializing in children's literature, and university professors served as resource persons for this project. The students compiled their findings and disseminated them to elementary teachers, child care professionals, and other interested parties. Other projects, such as I-Search reports, genealogies, and topics that required personal interviews and surveys in the "real world" also helped achieve the goal of making research relevant and applicable, according to the advocacy of Perrin (1987).

Teachers made a commendable effort to incorporate the use of all available technology in the research process. During the searching phase in the school media center and in the university library, students used LUIS, DYNIX, the county on-line catalog, Discover, Take Off Video, ProQuest, the on-line guide to periodical literature, Info-Track, Dialog, and the MLA Bibliography on CD Rom. The papers were published using the word processing facilities provided in both the Mac Lab and the IBM Lab. Various word processing and editing software programs were utilized. Tutorials were prepared to assist students with the technology available for both searching and publishing. Success with extensive use of available technology in the research process affirms the claims of Faigley, Cherry, Jolliffe, and Skinner (1985) that computer editing relieves the students of the tedious
The process of revision and of Thornburg (1991) who regards technology as a necessary tool in the research process. The teachers shared activities and strategies that will embed the research skills into the total English program, promote ownership of the research information, and develop a personal voice and fluency in reporting. These ideas have been collected for publication in a departmental handbook when funds are available. The writer inadvertently overlooked the date for submission of a mini grant proposal, which, if funded, would have provided the necessary handbook budget. However, plans are to submit the grant in the fall to possibly secure the financial backing.

Both teacher and student satisfaction with the project is evident from their positive oral and written evaluations. While there are components of the program that need reevaluation, revision, and expansion, most teachers report (see Appendix F) excitement about the progress made in the quality of research products, the forward thrust of the program in tandem with the recent research findings, and the enthusiastic engagement of the students in the research projects. Plans for fall of 1993 include the continuation of the program with the eleventh and twelfth grades and the designing of the modules for the ninth and tenth grade levels for implementation in the winter and spring quarters.

Four drawbacks limited, to some extent, the success of
this project. First, there was the constraint of time, which exacted its toll in two dimensions. The classroom time was so limited and fleeting that it was impossible to provide the time required to try all the favored activities for internalizing the main ideas of the research. More precise advanced planning to begin incorporating these skills earlier in the school term would relieve the problem to a certain extent, as well as support the goal of embedding the research skills into the total English curriculum. The time factor was also a problem for the busy staff members who had to juggle meeting during lunch and after school in order to meet the demands on their time. Closely allied with the time issue is the second drawback to successful implementation of this project, the coincidence of the formulation of the school improvement plan. This district-wide endeavor required staff members to meet several times in their departments to discuss restructuring, as well as to serve on an additional evening committee that met multiple times. Unfortunately, this added demand on teacher hours made it more difficult for teams to find meeting time. In fact, the term "meet" became a negative term, especially in a year when the board refused to offer any teacher salary increases for the third consecutive year. Teacher morale plummeted and required some time before it regenerated. In spite of these constraints, the research teams remained focused and met deadlines in a timely manner.
Two other impediments to the progress of this project were experienced. First was the missed deadline for submitting the mini grant proposal that very likely would have provided much needed funds for the completion of the English Department's research handbook. If this facet of the project had remained on schedule, the books would have been ready for use in the fall implementation. The final drawback was the size and unwieldiness of the project. As English teachers and classes are scattered throughout the campus, paths rarely cross in the course of a day, making communication and coordination of the project difficult.

Recommendations

Five recommendations are appropriate. The implementation of a revised, more student-centered research program can be expensive. Therefore, a source of financial support must be secured before embarking upon such a project. One expensive item in the project is the publication of the departmental research handbook. Even the production of one class set per teacher is costly and also inadequate. Another item that should be budgeted is a small stipend for teachers who are asked to meet repeatedly after hours during the planning stage. Also appropriate would be extra funds for refreshments to make the after-work hours more palatable.

Timing is important. Choose an implementation time
that offers the best opportunity for enthusiasm and cooperation to be at a high level. Avoid times when the faculty is already experiencing stress and undue demands on their after-school time. Avoid periods when major school-wide and district-wide restructuring plans are being developed.

The job of coordinating a project that involves over 400 students and ten teachers, each with five classes, draws heavily on a person's time. The coordinator for a project of this magnitude should have at least two periods of released time to develop and direct the plans, or s/he should be employed only part-time.

During the planning and preparatory period for the program, the importance of the use of "real life" research projects that involve the students in school and community issues and activities should be stressed. Encourage teachers to allow students to select their own research topic within reasonable parameters. Teachers tend to hold tenaciously to traditional topics that involve students in critical literary pursuits, rather than problems that relate to their experiences.

The final recommendation is that the focus of research writing needs more attention at the state and district levels. The trend of the future in education is aptly addressed in a Nineteenth Century quote by the author William Butler Yeats: "Education is not the filling of a
pail, but the lighting of a fire." Yeats's insight echoes an earlier sage Plutarch, who said, "The mind is a fire to be kindled, not a vessel to be filled." The imperative for students to be life-long learners if they expect to adjust to the demands of a technological society certainly targets research expertise as a critical life skill. This basic survival skill needs to be brought to the forefront in research, workshops, and conferences. Curriculum restructuring efforts must consider the central nature of inquiry to any relevant approach to English if educators expect to "light fires" rather than "fill pails."

**Dissemination**

The outcomes of this practicum have been briefly reviewed with the principal and administrative staff in the local school setting. As they were embroiled in getting summer school launched, there was not time for a full presentation. However, plans are in place for a detailed discussion using charts and statistics to apprise these leaders of the findings revealed through this study. In the fall, during pre-planning time, a departmental meeting will be devoted to exploring the findings relevant to each grade level group. Charts and graphs representing before- and after-implementation results will be studied in order to chart directions for the second year of implementation. As several teachers from across the curriculum were involved
with the program as research writing partners, they will be invited to share the finding.

The writer has been invited by Dr. Ben Nelms, editor of the English Journal, to present this practicum at the 1993 summer workshop of the Florida Writing Project. Also, this writer is currently working with the District Language Arts Coordinator in planning a similar presentation for teachers within the local school district. Further, as a result of being a research partner with one student, a principal of a school in Panama asked and was given permission to replicate the concept of research writing partners in her high school.

Additionally, the restructured research plan for the upper high school levels will be expanded and shared with teachers in the ninth and tenth grades. Together these professionals will redesign the research modules for the lower high school grade levels for later implementation in the second nine-week period. This broader application of the revised approach to research writing will afford an opportunity to polish the research calendar, define the skills to be stressed at the various levels, and expand the collection of teaching techniques and strategies for inclusion in the departmental research handbook.

It is anticipated that the efforts expended in this project will bear fruit far into the future as educators continue to give priority consideration to life-related research in developing English curricula.
References


APPENDICES
APPENDIX A

RESEARCH PROJECT TEACHER SURVEY
Research Project
Teacher Survey

Name________________________________________ Class and Level_______

1. Explain the nature of your research assignment. Include the topic, the requirements, the format, handouts (attach examples, please), use of other libraries, group work, etc. Please write on a separate sheet and attach.

2. What ideas can you suggest for implementation in an effort to improve our program?

3. Please suggest any procedures that would make sharing media services more equitable and efficient.

4. What do you regard as the most important area of focus in the research program?

5. What is our weakest area? How can we effect improvement?

6. Explain or describe your wildest dream with regard to the research paper.

7. Describe how you envision the research process in the year 2000 and beyond.

8. Describe the best method to use in sharing ideas and reaching consensus in planning our research program.

9. Describe the best method to use in implementing our research program.
10. To what extent will you be available to participate in this project to revise and strengthen the research phase of our eleventh and twelfth grade programs?

I definitely want to participate and will make every effort to attend meetings. ___

I am interested in the project and will come if convenient. ___

I want to be notified of meeting and kept abreast of progress, but I probably will not be available for meetings. ___

I will be unable to participate. ___

11. Please give your three choices of time for your grade level to be in the media center for research. (1)___ (2)___ (3)___

12. What needs to be included in the handbook that is to evolve from this project?

13. Finally, I would like to have you respond to the student survey which is being administered to all eleventh and twelfth grade students. Please answer by viewing your body of students as a composite and responding accordingly. The most relevant section is Roman Numeral III, questions 26-36, dealing with criteria. If you complete the entire survey, write answers to questions 20-25 and 30-41 in the comment section of the Scantron Form.

Thank you for your support, cooperation, and professional in-put.

Nancy Kirkland
APPENDIX B

ELEVENTH AND TWELFTH GRADE SURVEY OF PERCEIVED RESEARCH KNOWLEDGE
Eleventh and Twelfth Grade Survey of Perceived Research Knowledge

1. Grade: 11  A, 12  B

Introduction

Mastering research skills is an important component in becoming a lifelong learner. Identifying, gathering, analyzing, synthesizing and articulating data will be essential tasks for success in the information-gathering society of the twenty-first century. The purpose of this survey is to determine your evaluation of the current approach to the research process. This feedback will enable the English department to refine its approach to research and make the process a more relevant part of your high school education.

I. The following is a list of skills and experiences that are typical in the research effort. You are to rate yourself on your ability to do these steps of the research process. Bubble the appropriate letter that best describes your evaluation based on a scale of one to five, with A being the weakest response and E being the strongest. If the suggested item was not an option in your research project, leave the item blank. If you wish to comment on a feature of the research project that is not listed, use the "comments" section on the Scantron form.

Scale:  

A = I do not know how to do this. (no skills)  
B = I can do this, but it is difficult. (limited skills)  
C = I can do this step well enough to pass. (moderate skills)  
D = I can do this step well. (adequate skills)  
E = I excel in performing this step. (exceptional skills)
5. Selecting and narrowing a topic
6. Locating sources in the Media Center (bibliography cards)
7. Reading and gathering information (notecards)
8. Conducting surveys and/or interviews
9. Formulating a parallel topic outline
10. Developing an appropriate thesis
11. Writing the body (combining ideas from various sources into paragraphs, incorporating quotes, paraphrasing author's ideas into your own words)
12. Inserting in-text notes
13. Compiling a Works Cited list
14. Conforming to M.L.A. format
15. Revising and editing
16. Working with other class members
17. Following the steps and keeping on schedule
18. Sharing the information as a speech before the class
19. Wordprocessing
20. Other: Bubble E. Then go to "comment" section. Number item 20, and write your response. If you do not wish to respond, bubble E and go on to the next section.

II. The following list identifies criteria characteristic of a successful research project. Indicate the extent to which you feel you met these criteria. Again, you will bubble the appropriate letter:

A = I did not meet this standard. (no competency)
B = I was somewhat successful with this standard. (limited competency)
C = I did an acceptable job with this standard. (moderate competency)
D = I was good at this standard. (adequate competency)
E = I excelled at this standard. (excellent competency)
| 21. | The title reveals the subject and thrust of the paper. A B C D E |
|     | A B C D E |
| 22. | The paper conforms to M.L.A. format.                     |
| 23. | The paper is neatly presented on standard white paper observing prescribed margins. |
|     | A B C D E |
| 24. | The paper follows a formal topic outline presented in correct outline form. |
|     | A B C D E |
| 25. | A clear thesis is stated in the introduction.             |
| 26. | The body of the paper develops the thesis using supporting details. |
|     | A B C D E |
| 27. | The language is mature, creative, precise, and representative of the student's personal style. |
|     | A B C D E |
| 28. | Sentence structure and paragraph development evidence an ability to assimilate, analyze, organize, and present in an original manner information gathered from a variety of sources. |
|     | A B C D E |
| 29. | The topic, selected by the student, is relevant to the student's own interests and goals. |
| 30. | The paper reflects a general, conversant knowledge of the subject matter. |
|     | A B C D E |

III. Respond appropriately to the following questions:

31. Of the following items, bubble the letter you regard as the most important goal of research?
   
A. To teach you to use technology
B. To teach you to synthesize information and make judgments
C. To help prepare you to succeed in higher education
D. To prepare you to handle information in the work place
E. To help you become a lifelong learner
32. Bubble the letter to indicate other classes in which you have written a research paper. A. Science, B. Social Studies, C. Math, D. Science and Social Studies, E. Other.

33. Bubble the letter beside the grade level in which you did an English research paper (you gathered and documented data from several sources in a multi-page report). A. Grade 9, B. Grade 10, C. Grade 11, D. Grade 12, E. Grades 10 and 11.

34. What do you wish your English class had covered to better prepare you for research projects? Respond in the "comment" section.

35. If you could do your research project over, what would you do differently? Respond in the "comment" section.

36. What would make the research experience more meaningful? Respond in the "comment" section.

IV. The following items cannot be answered on the bubble sheet. Therefore, you need to bubble E on the scantron for items 37 through 40. Then in the "comment" section write your answers to items 37-41. For help with your answers, you may wish to refer to the list of research skills given in items 5-19 on page 2.

37. What I like most about research

38. What I like least about research

39. The research skill that will be most valuable to me

40. The skill/experience that gave me the most trouble

41. The skill/experience that gave me the least trouble
APPENDIX C

LETTER TO BUSINESS PARTNERS
To: Business Partners, Business and Community Leaders, Teachers, Parents and Interested Adults
From: Nancy Kirkland - 12th grade Senior English Teacher
Regarding: Research Partners

Every year seniors are required to construct an intensive research paper which has historically been on an English related topic. This year in an attempt to make the research papers more relevant for students, we are permitting them to have some choice in their selection of a research topic. I would like to enlist your help as a "senior research partner." A "research partner" will act as an interested adult who is willing to listen, question, and discuss a topic with a senior student as the student develops a research project (paper) that will be of mutual interest and benefit. Have the student research something you really need or want to know. You will receive a copy of the finished research paper.

Please read over the following guidelines and suggestions. If you are willing to assist in this project, please complete the enclosed information form and return it to Nancy Kirkland or Mary Warren by October 25.

Thank you for your willingness to share your time and expertise with our students.

RESEARCH OBJECTIVE:
Student will select, define, explore, and research a specific topic. The student will write an in-depth research paper that will have direct, immediate application for the partner and/or student. We want students to view research as a practical life skill that is beneficial to most everyone.

RESPONSIBILITIES OF RESEARCH MENTOR:
1. Assist student in defining research questions.
2. Suggest resources (must have at least 5: magazines, books, films, microfiche, interviews, etc.).
3. Offer suggestions, ask questions to help the student reach a more in-depth understanding of the topic.
4. Dialogue with the student. This will help him/her to internalize the material and write a better paper.
5. Inspire students to work to potential.
6. Encourage students to stay on schedule and strive for excellence.
7. Complete an evaluation on the success of the project.
8. Optional - you may choose to read, help edit, and make suggestions for improving the paper.

**NOTE** THE STUDENT IS HELD RESPONSIBLE FOR MECHANICS AND THE QUALITY OF THE PAPER!!! YOU CAN ASSIST IN ANY WAY THAT IS COMFORTABLE FOR YOU, EXCEPT TO ACTUALLY WRITE THE PAPER. YOU ARE ONLY TO ASSIST AND ENCOURAGE AS AN INTERESTED ADULT.

TIME REQUIRED:
The time will vary according to individual schedules. Telephone contacts will be appropriate and adequate, but personal meetings may be arranged between the partner and the student and his/her parents.

TOPICS
Anything that is researchable that would be beneficial to you and/or your business or that is of personal interest to you is a suitable topic.
TOPIC IDEAS: Anything that is researchable. The possibilities are limitless!
- The history of golf
- Techniques to improve your golf score
- Methods of reducing the crime rate
- A topic relevant to a literary publication, book, character, magazine
- Possibilities/probabilities of life on other planets
- How to decide on a college major
- Traffic control or traffic planning
- Journalistic topics
- Educational issues
- Technical or medical issues
- Social or political issues or questions
- Topics related to hobbies or the arts...and on and on...

TIME LINE:
- This is the project for the 3rd nine-week grading period; however, the grade will be counted for the 4th nine-week grading period.
- Final papers are due the first week in April, or as announced in class.

**Dates will vary as classes will be staggered for use of media facilities. Students will have a calendar for due dates. Check points will be required for the various steps in the process of research.

NOTE: Parents may not serve as research partners for their own children.

Cut off and return to (Sample) Ms. Nancy Kirkland
Project High School
Anytown, USA

Name ____________________________ Position/Title ____________________________

Street Address ____________________________

City/State/Zip ____________________________

Phone(work) ____________________________ (Home) ____________________________

Best time to contact ____________________________

Number of students with whom you are willing to work ____________________________

Name of student with whom you wish to work (optional) ____________________________

Possible topics of interest:
APPENDIX D

SENIOR RESEARCH PROJECT
STUDENT REPORTS
1. Describe your research writing partner.
   A. Check the appropriate boxes relevant to your partner.
      1. Male
      2. Age Range: College age
                     Graduate School
                     Young professional adult
                     Middle aged professional adult
                     Older professional adult (retired)

   B. In a paragraph describe other characteristics and
      interests that you appreciate about your writing partner.

2. Discuss your acquaintance with your partner. (Is this a
   person you just met or is this a long-time friend?)

3. Describe ways in which your partner has been helpful.

4. How do you plan to use your partner's assistance and
   expertise over the next few weeks?

5. How many contacts have you made with your writing partner?
   A. Phone calls
   B. Personal conversations
Name __________________________

Senior Research Project
Student Report #2

Name of Research Partner __________________________
Occupation of Partner __________________________

1. Describe the extent to which you and your partner have collaborated on your paper.

2. Discuss your reaction to working with your partner.

3. How many contacts have you made with your writing partner?
   Total number up to this time ______.
   A. Phone calls _____
   B. Personal conversations _____

4. What suggestions can you make at this point that would improve the effectiveness of the writing partner feature of the research project?

Signature __________________________
Date __________________________
April 1, 1993

Dear Writing Partner:

Thank you for your contribution to the success of the research writing project. The concept of writing partners is a new idea, which we are implementing for the first time this year. As with most new programs, there is room for improvement. We wish to modify and refine the program for next year based upon feedback from our findings, student input, and your comments.

Please assist us in evaluating and revising the program for maximum benefit to the students by answering the questions on the reverse side and returning this report to Nancy C. Kirkland, Buchholz High School, 5510 NW 27th Avenue, Gainesville, FL 32605. If you wish, you may have your partner deliver the report to me, or you may return it to my school mailbox.

Again, thank you for your participation and helpful feedback.

Sincerely,

Nancy C. Kirkland
RESEARCH PROJECT

Writing Partner's Evaluation Report

1. Give your writing partner's name

2. Give the topic of your partner's research.

3. Summarize your participation in the research project from topic selection through the editorial process.

4. Discuss the strengths of the partnership idea in the research process.

5. What are the major weaknesses of the program?

6. Suggest ways to improve the effectiveness of the writing partner concept.

7. Would you be willing to serve as a writing partner again next year? _____

Signature________________________________
Date____________________________________

Please print:
Name______________________________
Address____________________________
Phone: Home________ Business________
APPENDIX F
THE DEPARTMENTAL RESEARCH WRITING PROJECT
POST IMPLEMENTATION REPORT
The Departmental Research Writing Project
Post Implementation Report

As the year concludes, so does the initial step in our plan to redesign our departmental research writing module. Thank you for the professional, cooperative approach you have taken in implementing the eleventh and twelfth grade phases. I sincerely hope that the results will show that we have made the research project more relevant to the lives and goals of our students.

In order for me to authenticate the results of our project, will you please respond to the items below relevant to your specific approaches:

1. Describe the approach you took in making the research efforts more practical for the students and directly applicable to the needs of the school and/or business communities. Include comments on procedures that worked well and ones that need improvement.

2. Explain how you used technology in the research process both in the searching phase in the media center and libraries and in the publication process. Mention any new procedures or software programs you included.

3. Describe any classroom activities and strategies used to incorporate the research skills into the total English curriculum for eleventh and twelfth grades. If you would like these activities to be a part of the department handbook, please write them up to your satisfaction and they will be included under your name.

4. Comment on your feelings about the research project. Were you pleased? What would you do differently? What were the students' reactions? Were you pleased with the quality of the papers?

Thank you for your responses and for all the energy you have expended in the interest of making this project successful.

Sincerely,

Nancy Kirkland