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Handbook for GEM Practicums

Translating Educational Research to Improvement of Educational Practice

Educational Text Series 1988

NOVA UNIVERSITY

Center for the Advancement of Education
NOVA UNIVERSITY
CENTER FOR THE ADVANCEMENT OF EDUCATION
GRADUATE EDUCATION MODULE (GEM) PROGRAMS

HANDBOOK FOR GEM PRACTICUMS
M.S. AND ED.S. PROGRAMS

SIXTH EDITION
January, 1988

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Director of Practicums

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D'Ann Jimmar, Pearline Martin, Abbey Manburg, Murray Heyert, GEM practicum advisors and students.
Nova University
Mission

Nova University's centers and programs share a common mission—to educate students for leadership roles in a variety of professions, such as law, education, psychology, business and public administration, oceanography, and computer and information science. In the Nova University educational continuum, preprofessional training begins as early as The University School, continues through the college level, and culminates in the various centers for professional studies. Through the Nova University Educational Plan, students master appropriate skills and disciplines at each academic level, develop a sense of professional ethics and responsibility, and learn to appreciate the role of the professional as a key individual in society.

"The Nova Plan" stresses the critical relationship between theory and practice; it reinforces and tests the classroom experience through applied research and community service as integral parts of the academic experience. Consistent with its mission, Nova University extends its resources to provide educational opportunities to working professionals nationwide, with faculty teaching at corporate and other locations across the country. Nova also delivers programs through a variety of educational technologies, including telecommunications and... Nova University is committed to the idea that education should not be timebound or placebound. Through its educational offerings, research projects and programs of public service, the University encourages the free exchange of ideas and the search for knowledge that is the cornerstone of the academic tradition.
The GEM Programs

The GEM Programs (Graduate Education Modules) provide opportunities for full-time professionals to pursue master's or educational specialist degrees in 23 major areas. The focus is on the improvement of professional practice and the achievement of career objectives.

This focus is exemplified in the practicum project which involves a substantial application of learning (in the major area of study) to the solution of a critical problems existing in the students' own work settings. GEM students develop practicums in one of the 23 major programs listed below:

- Administration of Children's Programs
- Adult Education
- Bilingual Education
- Computer Application
- Computer Education
- Computer Studies
- Early Childhood
- Early Intervention Programs
- Educational Leadership (Administration K-12)
- Elementary Education
- Emotionally Handicapped
- English
- Gifted Child Education
- Health Education
- Learning Resources
- Mathematics
- Mental Retardation
- Physical Education
- Reading
- Science
- Social Studies
- Specific Learning Disabilities
- Teaching English to Speakers of Other Languages

Nova University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's, educational specialist, and doctoral degrees. Nova University admits students of any race, color, and national or ethnic origin. Nova University is a member of the American Association of Colleges of Teacher Education.
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Foreword

Productive change in education is not brought about by those who are several layers away from learners, but by those who have direct contact with learners. The people with the closest contact (teachers, health educators, principals, and other administrators) work to identify learner-related problems and to implement strategies designed to reduce or eliminate those problems. Too often, educators are given neither the support nor the encouragement they need to document the positive changes that occur within their work environments resulting directly from their efforts.

We, at the Center for the Advancement of Education, feel that the renaissance that is so desperately needed in education will come from dedicated and creative educators who can share their ideas for change with their colleagues within their immediate regions, and beyond regional boundaries, to the state and national levels.

Your final product in the practicum process, the written report, is the vehicle from which other educators can adapt your ideas to their individual environments. Your rewards and benefits, upon completion of the practicum process, are quite clear. Our intent is to extend these benefits to as large a network of your colleagues as possible.

Richard Goldman, Ph.D.
Director,
Center for the Advancement of Education
Introduction

The GEM school-improvement projects, practicums, are steadily being recognized nationally for their substantive contribution to effective schools, classrooms, and communities. Students find the process of developing, implementing, and documenting a research-based project in their work setting a challenging learning experience.

MARY ANN PEREZ developed a practicum project in Phoenix, Arizona. The title was "The Development and Implementation of a Program to Ensure the Continuity of Parent Participation from Head Start to Kindergarten." Since that time Mary Ann has been invited to share her practicum in San Diego, at the National Head Start Conference in Portland, Oregon, and at another national conference in Washington, D.C. Mary Ann was promoted to be a national evaluator of Head Start and will coordinate the grants process for programs in the City of Phoenix.

NANCY BUIST of Martin County, Florida, wrote a practicum report on mainstreaming secondary students and was subsequently invited to work with Florida Diagnostic Learning Resource System, The Council for Exceptional Children (CEC), and the Florida Department of Education--Bureau of Education for Exceptional Students.

MARY ANN DUKE of Sarasota, Florida, prepared a ten-week, step-by-step outline for teachers to implement the creative writing and performance of plays in their local schools. The Department of Curriculum and Instruction for her county has since published her report for use in all the elementary schools.

LEYDA LANDRIAN of Broward County, Florida, developed a project that focused on techniques to activate the right hemisphere of the brain in Limited English Proficient (LEP) students. She was invited to represent Broward at the statewide conference on special education problems, designed for Bilingual Educators and Teachers of English to Speakers of Other Languages.

From Osceola Elementary School, Vero Beach, Florida, RAY LEWIS was recognized by the Commissioner of Education for his practicum on Values Education. He now serves on the State Materials Council K - 8.

And the list goes on ------

As we rejoice in the significant contributions and success of the practical applications of these research projects, let me challenge you to press forward along this path. The way has already been paved for current students to achieve even greater success with their practicum projects and make a significant difference in the education of the nation. Your packet contains a copy of the Outstanding Educational Improvement Projects Vol.IV. Please read and use it.

Carmen E. Dumas, Ed.D.
Director of Practicums
CHAPTER I
The Practicum Project

1.1 What Is a Practicum?
The practicum is an action-research project planned, implemented, and written by each M.S. and Ed.S. student to improve an individual's work setting. The practicum seeks to improve the setting through the introduction of a solution to a significant problem.

1.2 What Are the Major Steps in the Process?
The major steps in the practicum process are as follows:

1. Identifying a problem at work and developing a planning document for its solution -- the practicum proposal.

2. Practicing or implementing and testing the solutions developed in the work setting -- implementation.

3. Reporting or writing an account of the entire process -- the final report.

Each student must look carefully within the major field of study and identify a problem or situation that needs improvement that is present in the work setting. Students may also be proactive and develop projects designed to
meet emergent needs of the work setting. In any situation, however, the student must design a strategy to measure change. This problem should be discussed with peers and instructors and later with the student's assigned practicum advisor to ensure that the problem is significant. The assigned practicum advisor assists the student in compiling a comprehensive review of the literature and shows the student how to select solution strategies geared to remedy the problem. Further coaching is given as the student implements the plan and writes the final report.

1.3 When Does One Begin the Practicum Project?

It is strongly recommended that students begin to discuss the practicum project with the team of instructors who teach the first nine-credit module. During this instructional time, students should discuss with peers and instructors problems they experience in the work setting. These discussions help the student clarify specific problems that have already been solved by other educators and other problems of great significance that need to be researched for immediate solution.

Students begin to prepare for the practicum project after they have completed the first nine-credit module in their major area and have received a recommendation for candidacy from that faculty team.
1.4 How Will One Know What To Do in This Project?

Students who qualify to begin the practicum project must attend a Practicum Orientation Workshop (POW) where a carefully designed series of activities is presented by Nova Faculty. Each Nova Site Administrator will be provided with training materials for students to read before the workshop. At the workshop, students can meet advisors in their major area of study. These professionals will guide the students carefully through the entire process.

After this workshop, students are urged to register for the six-credit practicum, request a local Nova University professional - practicum advisor and begin to put plans in writing. The practicum must be done in the student's major area in order to complete the minimum total of 15 credits required for the degree major (9-credit module and 6-credit practicum).

1.5 May One Use a New Program Assigned by the Principal as the Project?

Decidedly no. The practicum project should deal with a problem of broad interest to the educational community and should have potential for adoption in other settings. It should be innovative and developed by the student. "Canned" programs cannot be copied and presented as the project. Students may use, as part of their project,
programs that have been successfully applied to similar problems. All materials taken from another person's work must be appropriately acknowledged in writing.

1.6 Can Courses Be Taken in Place of the Practicum?

No. The practicum is a degree requirement for all M.S. and Ed.S. candidates.

1.7 What Is the Cost of the Practicum?

The cost of the practicum project is computed at the same rate as other courses offered in the GEM programs. Tuition must be paid at registration. The student is allowed to pay one-half the cost at registration and send the other one-half four weeks later to Nova University. A late fee is assessed and billed to the student if the second payment is not received on time. If the final report is not received in the main office one year after registration for the practicum, an annual maintenance fee of $200 will be charged. Payment of the $200 maintenance fee does not extend the repayment of student loans for those who have received them. Lending institutions may seek repayment of loans even though the practicum may not yet be completed.
1.8 What Are the Significant Steps in this Practicum Activity?

The following is a checklist of the steps students should follow in the process. Each step should be checked off as it is completed.

- After being approved for degree candidacy, attend the Practicum Orientation Workshop (POW).
- Register for the practicum (six credits). Registration may be done at any GEM site or at the CAE office on campus.
- Obtain a practicum advisor and contact advisor upon receipt of Practicum Advisor Form (Appendix A).
- Send the completed Self-Evaluation Survey (Appendix B) to the practicum advisor.
- Select a problem: complete the Practicum Proposal Planning Form (Appendix C) and submit it to the advisor for approval.
- Fill out the Computer Search Form (Appendix D) and mail it to CAE, GEM Practicums Department at Nova University. Allow three to four weeks (15-20 working days) turn-around time for computer searches.
- Discuss the development of the practicum proposal with the advisor.
- Mail a copy of the proposal, after approval from the advisor, to Nova.
- Start implementing the solution strategies and record the progress.
- After approximately 10 weeks of implementation, write the final report following the format as presented in the most recent edition of the Form and Style Manual for Graduate Education Modules (GEM) Programs, Nova University.
- Submit the report to the advisor.
- Send a copy of the approved report to Nova.
1.9 What Is a Summer Super Marks Practicum?

Summer Super Marks practicums are conducted in collaboration with the Family Center and the computer education programs. Students involved in summer practicums are given the guidelines for the specific programs involved. Summer practicums are implemented between June 1st and September 1st each year. The deadline for receipt of applications for this program is March 31st. The implementation for Super Marks and regular computer education practicums varies depending on the and project. Students who work in 12-month programs may participate in summer practicums. This statement means that if the work setting provides for 12 months of regular operations as in hospitals, residential care facilities, juvenile detention centers, or adult education centers, then implementation may be arranged whenever it is appropriate after proposal approval.

A limited number of GEM practicum students may also participate in Super Marks experiences at the Family Center between September and January and again between January and May each year.
CHAPTER II

The Practicum Process

2.1 How to Begin

After completing the first nine-credit module of the major area of study and receiving candidacy approval, a student may begin the practicum project. The following tasks must be completed by each student:

1. Check with the local site administrator about the next practicum orientation Workshop (POW) scheduled in the area.

2. Attend a practicum orientation workshop, and then purchase a practicum packet from the site administrator.

3. Register for the six credit practicum at the local site or mail the registration form and tuition payment directly to the CAE Practicums Department at Nova.

Please note that a student may request a specific practicum advisor from among those who have been approved and trained by the Practicums Department, when the student registers for the practicum. The name of the person requested can be written at the top of the registration form. If that person is not available, the Practicums Department will assign someone else.
The Practicums Department will acknowledge receipt of the documents and assign an advisor. It is the advisor's responsibility to approve each phase of practicum work. Therefore, the advisor must be contacted as soon as this assignment is made. The student must complete the Self-Evaluation Survey (Appendix B), fill in the Practicum Proposal Planning Form (Appendix C), and discuss it with or mail it to the advisor. After this form has been approved by the advisor, the information is transferred to the Computer Search Form (Appendix D), ensuring that the ERIC (see Chapter 3) descriptors --words-- are clearly written. This form is then mailed to the Practicums Department and the student may then proceed with the development of the proposal. The student may not proceed with any phase of the practicum project (proposal, implementation, final report) without the knowledge and approval of the practicum advisor.

2.2 Evaluation of the Proposal

From the time of submission of the initial documents, through to the grading of the practicum report, the advisors work with students to facilitate successful completion of the practicum requirements.

When the proposal is ready for evaluation, one copy is sent to the practicum advisor who will inform the student when to send a copy to the GEM Practicums Department. The
A practicum advisor is responsible for evaluating the proposal as the basis for an acceptable practicum. Evaluation is based upon a number of considerations such as the proposal's substantive merit, its design, and its potential for positive impact on students and on the educational process. The advisor may accept a proposal, reject it, or ask for revisions that may be necessary if the proposal is to be accepted. The advisor's evaluation (Appendix E) is communicated to the Practicums Department and a record of that evaluation is entered into the student's file to document progress and support grading.

In reviewing a proposal, the advisor first evaluates the subject on the basis of the criteria in sections 2.3 through 2.7.

2.3 Innovation

The proposed program or practice should be innovative in the setting. Mandated or "off-the-shelf" programs or practices that are already routine in many schools will be rejected. A project in which one simply does an assigned job, without enrichment or creative enhancement, will also be rejected.
2.4 **Scope**

Practicums must be designed to cope with problems of broad interest. It is expected that the solution strategy will offer potential for adoption in other settings.

2.5 **Feasibility**

Proposed projects must demonstrate potential for accomplishing the stated purpose within the time and with the resources available to the practitioner.

2.6 **Goal Enhancement**

Projects should be conceptualized and designed to enhance the major content goals, e.g., to develop motivation or improved self-concept in addition to improved reading skills.

2.7 **Design**

Contents of the proposed practicum and linkage of various components into a logical design will be evaluated by means of the checklist shown in Appendix E. The advisor will note whether the proposal has responded to each of a number of specific questions by indicating for each item "yes," "no," or "unclear." Proposals will be returned for additional work unless all items can be identified as "yes." The advisor will provide written comments, using a Practicum Action Form (Appendix F) advising appropriate revision for those items judged as "no" or "unclear."
The student and the advisor may arrange face-to-face or telephone conferences to discuss any questionable items in the proposal. The advisor's role is to facilitate development of a well-designed proposal that can lead to a successful practicum. When a student has submitted an acceptable proposal, the advisor records approval on the final Proposal Evaluation Checklist (Appendix E) and sends one copy to the student and one to the Director of Practicums for inclusion in the student's file. At this point, the student is ready to start implementation of the proposed solution-strategy. Approval of the proposal by the advisor is required before a student is authorized to begin implementation of the proposed practicum.

2.8 Communication About Practicums Work

Communication about practicum work should be directed to the advisor. When it is necessary to send work to the Practicums Office (for example, the computer search form, the duplicate copy of the proposal and final report), mail must be addressed to:

Director of GEM Practicums
Center for the Advancement of Education
Nova University
3301 College Avenue
Ft. Lauderdale, Florida 33314.

The local advisor will be able to answer most questions that come up in the course of a student's work.
CHAPTER III

The Practicum Proposal

The practicum proposal is a documentation of the planning stages of the practicum process. It outlines the entire problem-solving process. It explains the critical groundwork that has already been undertaken and states what and how the student plans to build on that foundation. A well-written practicum proposal generally provides a good base for implementation and will result in a sound final report.

Most proposals are at least 20 pages long (exclusive of appendices) and should use the format shown in Appendix G. This description of the format includes a number of questions under each major heading. A successful proposal will respond clearly to each of the items presented. The practicum proposal need not be limited to existing problems. It may be proactive, seeking to remedy a potential problem in the workplace. Computer programs, new curricula, and training programs are sometimes developed to meet emergent needs.
In the proposal the student is asked to plan the solution to a real problem -- existing or emergent -- in the work setting. The student must complete all tasks as listed below:

1. Describe the setting and target population.
2. Identify and document the problem.
3. Analyze the causes behind the problem.
4. Research the literature for several possible solutions.
5. Select the most promising and workable solution from feasible alternatives and explain this choice.
6. Forecast the expected outcome.
7. Explain what will be done to implement the selected solution strategy.
8. Describe the evaluation procedure to be used to assess the effectiveness of the solution after completion of the implementation.
9. Describe the plan for continuing, expanding, or transporting the program.

3.1 Major Components of the Proposal

The practicum proposal should contain information in the order presented below. The chapters may be thought of as components of a plan, with all components closely and logically linked.

3.2 CHAPTER I

3.3 Background

First, the context in which the problem occurs must be described, providing information about the people involved and the situation in which they interact. There
is no set formula regarding such information. In some cases the focus will be on the socio-economic characteristics of the community so that the reader will understand background factors that may impinge on the problem, such as lack of parental interest or concern about what children are doing in school. In other cases, data about total school enrollment, class size and teacher-pupil ratios may be essential to an appreciation of a situation in which there is insufficient opportunity for students to receive individual attention. Proposal writers should be very specific about their own positions and regular responsibilities, their relationship to the problem situation, and the degree of control they are likely to have over any changes to be introduced. They must be guided by an imaginary "stranger" who knows nothing about the work situation, but who must know enough about it to understand the problem fully. Although the practicum setting must be fully described, under no circumstance should the school, school system, hospital, or health facility be identified by name. Complying with this limitation is essential.
CHAPTER II

3.4 Identification of the Problem

For the purposes of the practicum proposal, a problem is defined as a discrepancy between what is and what should be -- as described in operational terms. It may be a problem which has been festering for some time. It may reflect a newly emerging set of negatives, or it may even be a foreseeable difficulty, the origins of which can be documented at the point of practicum initiation. The results can be persuasively projected, if precautionary measures are not taken. In the light of this definition, it must be noted that a want, a desire, a yearning, a wish, a hope -- no matter how intense or pervasive -- is not to be equated with a problem. Instead, there must be a discrepancy gap and evidence (not opinion) that such a gap exists. The purpose of the practicum, then, is to close that discrepancy gap. It is important to note that the lack of something (for example, instructional procedures and materials for teaching metric equivalence to fifth graders) is not a problem in the practicum context. In this context, the problem is a discrepancy between the actual and the ideal; the evidence that students are not learning, teachers are frustrated, parents are alienated, etc., documents the problem.
Thus, eleventh-grade students reading at the ninth-grade level, as documented by test scores, constitutes a problem. The discrepancy is between the actual and the expected reading levels; the evidence is in the test scores.

Although, in many cases, one's sense of the problem will have begun with a vague feeling that "something is wrong," by the time a student writes the proposal, he or she should be in a position to be specific, not only about what is wrong, but also about how extensive the problem is. In addition, the writer must be able to cite evidence that supports this view.

Evidence to support the contention that "something" is a problem may take several forms:

1. A list of specific behaviors that have been documented in a structured observation of the work situation. (The observation may have been conducted by the student or by someone else.) The critical term here is "structured." The observation must have been deliberate and conducted systematically and often enough over a period of time to give the data collected some reliability-
2. Tabulated responses to a paper and pencil survey or interview questions-
3. School records of academic performance, attendance, disciplinary referrals, and similar information already at hand-
4. Systematic and recorded observation by staff, parents, or administrators-
5. A system that diagnoses the need for remediation and prescribes remediation strategies.
At this point, the problem must be analyzed by identifying and explaining the causes or underlying reasons for the problem. Here the student must consider the symptoms of the problem previously stated and try to determine why they exist.

It may be necessary to collect additional information about the problem before a satisfactory analysis can be made. Interviewing colleagues, questioning representative parents or other community members, examining school records or committee reports, or perhaps observing school routines may be called for in the effort to establish the core of the problem. Practicum students must move behind the outward indicators of the problem and get beneath the surface to find out what is really wrong.

Students are required to review some of the professional literature relevant to the problem they have identified. Such a review of the literature can be particularly helpful to those who are faced with a problem for which there are no obvious solutions and to those who are faced with an "old" problem for which obvious solutions have failed.

3.5 Sample - Problem Statement

Students should use this example as a guide to writing their problem statement. It should not in any way be
Mathematics is a subject that can be very difficult for the learning disabled child. It is a subject that deals with the abstract. Numerals are abstract representations of concrete objects. Doing calculations with these numerals is even more difficult to grasp. It has been observed that the learning disabled child may not be able to comprehend these operations unless each calculation is returned to the concrete level by using fingers, lines on paper or other counting devices.

This problem exists for the fourth and fifth grade students, who, in this study, perform one and two years below grade level. They have failed to master the fundamentals of addition and subtraction. Given a simple computation, the correct answer can be obtained, but it is just as likely that the answer will be completely wrong and the student will be unaware of the error or why it occurred.

This lack of accuracy carries over to all other computations. In class, multiplication and division are impossible for these students when errors in addition and subtraction occur constantly.

Most children learn to memorize addition and subtraction facts in the second grade but not the learning disabled child. That story is one of frustration from the earliest days in school. This is demonstrated by the target group. Each of the eight members observed was retained at least one year. When failure continued the student was referred for placement in the exceptional child program. Diagnosis for learning disabilities for all of these students occurred in the second and third grades.

Examination of cumulative records revealed some helpful information about the target group. The data have been summarized in Table 1.
The intelligence test scores of the entire group as measured by using the WISC-R (the Revised Wechsler Intelligence Scale for Children) were in the low normal range. Most of the students showed performance scores that were higher than verbal scores. This test was a clue to some of the LD students' problems and could indicate that a learning approach that utilizes motor activities would be appropriate. The magnitude of the problem was clearly demonstrated by the Stanford Achievement Test scores, which compared the LD students with the general population. Data were recorded for math computation, concepts of numbers and math application. Most scores were in the first and second stanines. One student, whose test scores were in the normal range, exhibited difficulty in the classroom setting with any calculations beyond the most basic addition and subtraction.

Problems encountered by the target group could stem from a wide variety of causes. All had deficit areas for which they should learn to compensate. In many cases, the deficits were both auditory and visual. When a deficit in memory also occurred, the reasons for failure became even more apparent.

It is difficult to assess what part learning disabilities play in this academic failure but the connection certainly influenced early progress. Lerner (1981) states:

For some children, difficulty with numerical relationships begins at an early age. The ability to count, to understand the one-to-one correspondence, to match, to sort, and to compare are dependent upon the child's experiences in manipulating objects. The child with a short attention span, with poor perception, or with poor motor development may not have had appropriate experiences with activities or manipulation experiences that should prepare the child to build understandings of space, form, time, distance and quantity. The child with an arithmetic learning disability may have missed these essential experiences as an infant. (p. 358)

If these students were considered in terms of Piagetian theory, there was strong evidence of delay in stage transition of cognitive development.
Development progresses from preoperational (ages 2 to 7) to concrete operational (ages 7 to 11). Preoperation was characterized by egocentricity. The concepts of reversibility and conservation of materials had not been achieved. The transition to concrete operational may be delayed well beyond age seven. This delay would cause serious problems in comprehension of math concepts but might not have a similar effect on language development. Math instruction, when provided, would have failed because the child was not developmentally at the stage to accept and absorb it.

This project will then seek to solve the problem of the fourth and fifth grade students who are performing one or two years below grade level.***

*** Note: The student's definition of the problem provides the basis for projecting outcomes expected to be achieved through the intervention. Anticipated outcomes must be specified before a student can make strategy decisions. This sequence of steps is logically the equivalent of deciding where to go before deciding how to get there.

3.6

CHAPTER III

Outcome Objectives

In this section or chapter, the task is to state in measurable terms the outcomes that the student plans to achieve by the end of the practicum project. In framing objectives, students must specify how they will measure the degree to which they have achieved the projected outcomes. Each objective includes four basic parts:
1. The time in which the change is expected to occur. ("Over a period of four months....")

2. The event(s) expected to take place. ("...the students in the target group will improve their math...")

3. The amount of improvement expected to occur. ("...by the equivalent of at least one grade level...")

4. The means by which the student will determine that the expected results were actually obtained. ("...as measured by the difference between grade-level equivalent scores on the Math Achievement Test to be administered before and after the implementation of the practicum")

Students are urged to use the practice activity sheets, pages eight, nine, ten, provided for use at the Practicum Orientation Workshop in the POW packet, which each student must purchase.

Results of this sort are called terminal performance objectives -- those things one hopes will be achieved as evidence that the solution truly had positive results. There will always be central, measurable improvements to record by means of operational objectives, such as the illustrative one on mathematics cited above. Practicum plans may also incorporate expectations for affective or attitudinal outcomes as by-products or accompaniments of the more tangible objectives. ("The youngsters will demonstrate more positive attitudes toward listening and
spelling as evidenced by teacher observations of their approach to their work, parent reports of their children's attitude toward homework in these subjects, and their own reports of feeling toward these two study areas.

Indeed, attitudinal change and improvement may be at the center of the projected practicum outcomes. In any case, the statements of objectives in this proposal section should be operationalized and should be related to previous problem statements. That is, the objectives arise from the problem and the symptoms and/or causes of the problem may be directly referred to in the stated objectives.

Objectives must relate directly to the initial description of the problem. If the problem symptoms were documented with reference to test scores or a tabulated summary of observed behaviors, some, if not all, of the practicum objectives should specify improved test scores or changes in observed behaviors. The specified outcomes serve as success criteria against the effectiveness of the solution strategy.
CHAPTER IV

Research and Solution Strategy

Once the anticipated outcomes have been formulated and sorted into priority order, the student must consider the means by which he or she will achieve these objectives. Before students can make wise strategy decisions, they must examine a number of reasonable alternatives. The student should:

1. gather and organize information about available alternatives;
2. discuss these alternatives with the practicum advisor;
3. weigh and select from these alternatives;
4. establish a theoretical, philosophical, or practical case for the selection.

Gathering information about possible strategies can include visits to other facilities, consultation with specialists, discussions with staff, manual searches of books and articles in the library and a search by the Information Retrieval Service (IRS) at Nova. Information collection must include a review of the literature. Not only will these efforts help students avoid duplication, but such efforts will make sure students do not overlook useful strategies. They may also reveal alternatives that have the attraction of economy or that might lend
themselves to effective adaptation to one's own requirement. The information collection section must be at least six pages in length and should reflect a literature search of eight or more sources.

3.9 How to Review the Literature

As students find or receive literature related to the topic, written within the last ten years, they must begin to read and record the methods and results of others who dealt with similar problems. They should record as many methods and results as they find useful, then compare those situations to their own, being careful to note the uniqueness of their particular problem. In reviewing the literature students must state the author and date, what was done, how it was done and what was accomplished.

3.10 Information Retrieval Service (IRS)

The GEM Program of the Center for the Advancement of Education at Nova University shares in the operation of the Information Retrieval Service (IRS). This service provides students, graduates, and staff with resources useful in their study area and research work. The resources include computer searches, Education Resources Information Center (ERIC) microfiche, and consultation services. IRS also provides information regarding local
resource centers and comprehensive document retrieval services.

Prior to writing and submitting a proposal, the student is required to submit an order to Nova University for a computer search of the literature in the subject areas of interest. An order form for this purpose appears in Appendix D. Information Retrieval Service (I.R.S) has access to four online systems. The Dialog Information Retrieval Service from Dialog Information Services, Inc., in California has more than 280 databases available on the system. The databases cover a multitude of subjects and are updated regularly to provide access to the most recently published information. Some databases that are most helpful in obtaining information for the Center for Advancement of Education students and staff include ERIC, Medline, Child Abuse and Neglect, Psyc-info, Sociological Abstracts, Dissertation Abstracts, A-V online, and ABI/Inform. Bibliographic Retrieval Service (BRS) is based in New York. BRS converts their database(s) into a common format for searching. Over 90 databases are available on the BRS system, including ERIC, ECER, and RICE.

The IRS also has access to NEXIS, SpecialNet, and Advocnet. Nexis, a service of Mead Data Central, allows access to information in newspapers, magazines, wire
services, newsletters, and government documents. SpecialNet is a computer-based communication/information system sponsored by the National Association of State Directors of Special Education. Advocnet is a computer-based communication/information system sponsored by the National Center for Research in Vocational Education.

The database that is most often used by the IRS is the ERIC. This database is a nationwide information system devoted to the field of education. ERIC includes topics such as innovative programs and practices, conference proceedings, bibliographies, and curriculum findings. ERIC has 16 clearinghouses, each specializing in a particular area of education and affiliated with an institution that has recognized expertise in that area. The Nova IRS staff may access ERIC through Dialog or BRS.

It is possible to follow up computer searches with free microfiche copies of requested ERIC documents. The Information Retrieval Service has a collection of over 280,000 ERIC microfiche available to participants for their research needs. Each month 1200 to 1500 microfiche are added to update this collection. Each Nova GEM site is equipped with a videotape that was made by the director of IRS to explain Nova's research capability to each student. Ask the Site Administrator about this tape.
3.11 Computer Search Procedure

Students should fill out a computer order form describing the topic and key terms or descriptors, giving a brief narrative containing additional information about the search (see Appendix D), and mailing it to the practicum office. The request form is signed by the Director of Practicums and forwarded to the IRS office. IRS staff review the search strategy and select the appropriate database(s) and make revisions using the appropriate descriptors for the selected database(s). Next, the computer search is conducted online and the offline printout is ordered. When the IRS receives the printout, the director reviews the citations in the printout to be sure the search results match the original request. Then the printout is sent to the student along with forms regarding explanations of the printout, microfiche orders, and article orders.

The computer search printout that the student receives contains the full bibliographic citations of all information related to the requested search. Using the information in the printout, the student can locate complete copies of the most appropriate materials, such as journal articles, doctoral dissertations, and government publications.
Each student may receive 15 copies of ERIC documents from Nova's IRS office without cost. Journal articles may be purchased through the IRS or students may locate them in local or school libraries.

3.12 Solution Strategy

After reading the available professional literature related to the practicum topic, the student selects the strategies that are most applicable to the improvement of the work-related situation. In the proposal the student must state clearly why the strategies identified for implementation were selected. In addition to selecting strategies from the literature, the student should observe other work environments, discuss the problem with other professionals, and design strategies that are uniquely suitable to bring about the change proposed in the project.

Very often educational problems require solutions at several levels. It may be necessary to develop curriculum materials and teaching techniques for using them. It may also be necessary to inform parents of any change to be made and perhaps to solicit their cooperation. It may be essential to make changes in the scheduling of school time, to ask for cooperation of other teachers, to develop
computer software, etc. These elements could all be parts of the strategy that must be outlined in this section of the proposal.

After the literature review, the student should state very clearly the strategies identified to be used as a solution to the problem.

3.13 CHAPTER V

Implementation Plan

The implementation plan describes the action phase of the practicum. The proposal provides a blueprint for implementation. Successful implementation in most cases is achieved without difficulty by simply following the actions and timelines outlined in the implementation plan. Here the student describes the actions foreseen as necessary for carrying out the problem-solving strategy. This section of the proposal should highlight the schedule of the major activities to be undertaken, the student's specific role and responsibility in providing the leadership for practicum execution, an account of involvement with other people who will be necessary for successful practicum implementation, and an indication of how any required clearances or authorizations have been arranged.
The keys here are tasks and time. The tasks should be listed in order of occurrence and there should be a clear indication of the time requirements for major steps. All major steps of the implementation should be covered, from task identification through evaluation of terminal objectives. Provision for monitoring, formative evaluation, and mid-course correction, if needed, should be presented in this section.

As a general guide, your implementation plan should include the following elements:

1. Identification of those tasks that must be performed and their sequence,
2. Identification of people and things needed for the project,
3. Development of timeline,
4. Development of data collection procedures,
5. Establishment of a process for monitoring progress,
6. Provisions for making mid-course corrections if necessary.

During implementation, the student must be careful to write down the events daily so that the final report will reflect all that has been done.
3.14 CHAPTER VI

Evaluation Plan

Properly written objectives include success criteria. Evaluation may involve nothing more complex than measuring results against those criteria. In such cases a pre- and post-test design is required. Recommended evaluation techniques for most practicum requirements are summarized in Appendix H.

3.15 CHAPTER VII

Follow-On

This section outlines plans to make the project available to other educators. Practicum students in the past have produced manuals, encouraged others within their work settings to practice strategies that have worked for them, shared their findings with their administrators, and made presentations at conferences.

3.16 Additional Components

3.17 Cover Sheet

There is a standard cover sheet for all practicum-related documents (see Appendix I). It calls for
information about the student's site, the program the student is in, the observer, the title of the practicum, etc. Each on-site advisor has additional copies. The cover sheet item that occasionally generates some confusion is the following:

Name of Practicum Observer. Before submitting the proposal, each student should identify a professional colleague who will agree to remain informed about the practicum activity throughout its development and execution. This person should occupy some supervisory position within the work place. It is necessary for the practicum observer to sign a confirmation upon the completion of the project. This confirmation will state that the student has performed the acts described in the project. A sample observer form is included in the Appendices (Appendix J). It must be included with the final report.

3.18 Title Page
A sample title page is included in Appendix K.

3.19 Summary
Immediately following the cover sheet of the practicum proposal and before the table of contents, a brief summary (about a half page) of the practicum plan must be included. The summary will describe the problem to be addressed, the target population, the outcome objectives, and a brief explanation of the strategies to be implemented. This summary will facilitate processing by the advisor and the Practicums Office (see sample summary in Appendix L).
3.20 Table of Contents

Although the proposal will be a brief document it should follow the format in Appendix G and include the chapters outlined on the next page. Read Appendix G very carefully in order to avoid omissions and insure proper organization of the material. It will also help the advisor in reading the proposal and making sure all the elements are there and in their proper places. (Note that the major section headings correspond to those of the major components of the proposal.) A sample Table of Contents, as it should appear in the proposal, can be found in Appendix M.
### TABLES OF CONTENTS - COMPARISON

<table>
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<td>Annotated Bibliography</td>
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<td>Dissemination Packet</td>
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#### 3.21 Reference

As noted earlier, students are required to review the literature before undertaking their practicums. The literature consulted should be included in a reference list added to the text of the proposal.
Candidates for the Ed.S. degree are required to provide an Annotated Bibliography as part of the final practicum report (see page 56).

3.22 Appendices

A wide variety of items may be appropriately included in the appendices to a proposal. However, all materials included in the appendices must have been identified and referred to in the main body of the document.

At the very least, the appendices should include copies of any survey forms, interview questions and tests that are related to the documentation of the problem and/or the operational objectives. In instances in which only selected data from problem-defining surveys, interviews, or tests are included in the body of the proposal, it is appropriate to provide complete tabulation of the response/results in the proposal appendices as well.

Appendices should be designated A, B, C, D, etc., as referenced in the body of the proposal or final report, and each should have a title that is identified in the table of contents. The pages of the appendices should be numbered as an extension of the body of the proposal/final report.
NOTE WELL: Tables and figures may be placed appropriately within the final report, next to the text they seek to explain.
CHAPTER IV

Mechanical Issues

4.1 Writing Style

A person's writing style must communicate clearly. In order for the reader to understand, a practicum must be governed by a thesis sentence or controlling idea from which the themes of the individual chapters are developed. Therefore, it is imperative that the initial draft of the manuscript be developed from a plan that outlines the disparate parts of the practicum and provides the framework on which to insert transitions. This will result in an orderly organization and presentation of all ideas.

It is very important to spend some time in the selection of the most appropriate synonyms, pronouns, linking phrases, and economical terms, in order to achieve precision, clarity, and smoothness of expression.

Rereading the paper after a few days of setting it aside can be very helpful. One of the best strategies one can employ to ensure that communication is clear is to get a critical review of the manuscript from several
professional colleagues. The results will be well worth the effort.

4.2 English Usage

It goes almost without saying that correct spelling and English usage are expected in all practicum-related documents. Students are encouraged to have their writing proofread by colleagues or acquaintances who are good at such things. If the local advisor judges that the document contains too many mechanical errors to justify further consideration as graduate-level work, the proposal will be returned for reworking without reference to the quality of reasoning or development of ideas.

4.3 Typing

All practicum documents must be typed according to specifications in the most recent edition of Nova University's Form and Style Manual For Graduate Education Modules Program. Quotations and paraphrased materials should be clearly identified as such and documented appropriately.

4.4 First and Third Persons

In the interests of objectivity and professional detachment, it is common practice in scholarly
publications to avoid using the personal pronouns "I," "we," and "you." Thus, instead of saying "I conclude," the author is expected to say, "The writer or researcher concludes. . ." or something even more indirect. In practicum-related documents, this convention must be observed.

4.5 References

In order to cite an author's work as part of the text, the student must briefly identify the source for the reader and then place all references in the alphabetical reference at the end of the paper. The Form and Style Manual for Graduate Education Modules (GEM) Programs, latest edition, is the required style manual for the practicum. The citation may be done like this: "In a recent study, Smith (1983) described the method used in developing computer programs for gifted youngsters." When the author is not cited in the lead-in, the citation may be done like this: "Another study (Jones, 1987) described the method by using a different target group." Or, "This writer will describe another method (Jones, 1987)."

4.6 Assembly

The materials to be included in the practicum proposal should be assembled in the order indicated in the Table of Contents (see p.36 and Appendix M). Pages can be
stapled in the upper left corner. Elaborate bindings and heavy covers are not to be used.

4.7 Copies

It is imperative to keep a copy of any practicum-related document sent to Nova. What is sent becomes a part of each student's file and all future communication about the document will be conducted under the assumption that students have copies in their possession. The Practicums Department recommends that a student keep the original copy of his or her proposal and submit to the advisor and to the Practicums Department clean photocopies. By having the original in hand when later making required changes or adding information as requested, a student is in a position to "save" those portions of the original that do not require change and to simply "patch in" changes. The patched document may then be photocopied and the copy sent as the revised proposal to the advisor. If done carefully, the cut-and-paste procedure can produce neat and acceptable copies for review and permanent filing at Nova.

4.8 Sexist Language

Sexist language must be eliminated. As language is liberated, it is hoped that men and women will begin to
share more nearly equal, more caring roles. Instead of "The student is worried about his grades," it could be, "The student is worried about grades." Humanity is preferred over mankind, coordinator or leader is preferred over chairman, and so forth. It is also acceptable to use plurals.

4.9 Other Considerations

Students are strongly advised to be very precise when the range of scores being reported is very wide such as from 10 to 70 on an achievement test. An average of the projected scores for the target group should be identified and used as the base score from which the goals are formulated.

Techniques and procedures that relate specifically to one's area of expertise should be clearly defined as soon as the terms occur in the manuscript.

Acronyms and abbreviations that might be idiosyncratic to a particular school system must be clearly spelled out and/or explained. The words represented by initials must be spelled out the first time they appear in the document, followed by the acronym in parenthesis. Thereafter the acronym may be used, not in parentheses.
Note: The mechanical concerns discussed here apply equally to the proposal and the final report. Similar and related questions of editorial style and manuscript mechanics are discussed further in the section on practicum reports, and in the prescribed style manual.
CHAPTER V

The Final Report

The practicum report is the most substantial document possessed by the student at the completion of the degree program. It represents a culmination of the knowledge and skills gained during the courses of study. This document can serve as a testimonial for each student in a job seeking situation and will serve as a resource to other educators nationwide if appropriately done.

The practicum proposal has been outlined in great detail. If these instructions have been carried out, then the student has accomplished more than 50 percent of the practicum task at the completion of the proposal.

5.1 Major Components of the Final Report

5.2 CHAPTER I

Purpose

The first three sections of the proposal -- background, problem statement, and outcome objectives --
may be combined without change to form the first chapter of the final report. Students must be careful to synthesize the material so that it flows smoothly as a cohesive whole. The tense is sometimes changed from future to past.

5.3

CHAPTER II

Research & Solution Strategy

This section of the final report will be the same as the research and solution strategy section of the practicum proposal. In this section, the student may add information discovered on the selected topic after the proposal was written so that if the research section in the proposal numbered six pages, it could very well be eight pages in the final report.

A practicum project is supposed to solve a problem, fulfill a need, or, in some way, improve a part of the educational process at the student's institution. A literature review should relate the strategies that others have employed in similar activities. These need not be identical to what the student intends to do; in fact, they can be very different. The point is that the strategies selected to deal with a problem bear some relationship to
what others have done before, whether they parallel or are in opposition to it. A review of the literature should articulate this relationship.

To continue with the above example, a variety of strategies can be used to improve faculty-administrator relations, depending on the perceived cause of poor relations. For example, if a particular group activity is selected, the literature review should accomplish at least one of the following:

1. Show that the activity has been successfully used in a similar situation.

2. Show evidence that an activity that has been unsuccessful in a previous similar situation can be expected to work this time.

3. Show evidence that an activity that has never been used in similar situations can be expected to work in the present circumstance.

Results Others Have Had in Dealing with Similar Problems

By reviewing the results others have achieved in dealing with similar problems, one can accomplish two things:

1. Provide justification for one's own hoped-for results; and

2. Assess the effectiveness of the strategy others have used.
The importance of these functions is most clearly seen in a situation in which the expected results were not achieved. How does one know whether this failure is due to inappropriate or ineffective methodology or whether the goals themselves were unrealistic? In the review of the literature, one makes assumptions about the methods others have used in similar projects and about the results they have achieved or did not achieve or could have achieved. In part, the practicum is a test of these assumptions.

In other words, a literature review provides justification for the results the student expects to achieve and the strategies and anticipated results, based on other previous experiences. Exemplary strategies observed within a classroom setting or at a professional meeting may also be documented in this chapter, especially if they are to be used as part of the solution strategy. These items would be acknowledged in the reference section as unpublished manuscripts or proceedings of meetings and symposia.

A good literature review will draw on a variety of resources, each relating to only a small part of the practicum. It is then up to the participant to synthesize them and make them into an organized whole. For example, with the practicum on improving faculty relations in a community college, the writer would probably draw from the
resources on group dynamics even though they do not directly relate to educators or education. The same could be true for other components of the practicum project.

5.4

CHAPTER III

Methodology

This chapter of the practicum report really gets to the heart of the matter. It is in this chapter that the student will explain with great clarity what was done and how it was accomplished. The use of resources, people, time, space, equipment, and ideas will be documented in a sequence that facilitates easy interpretation of the process. If difficulties were encountered during the process, these will be described here with the resolutions achieved. Seminars, training sessions, field trips, and materials developed and tested will all become part of this chapter.

It is very appropriate to divide this chapter into subsections in order to facilitate a more effective presentation of the facts. Suitably designed tables may be included as part of the text with an accompanying explanation of what the tables represent. The student will need at least six to eight pages in order to explain the methodology with clarity.
In following the proposed plans, the student should aim to make the best possible use of available resources to achieve the objectives outlined in the proposal. Effective implementation may require a more effective utilization of resources, such as a change in resource distribution.

Resources

In considering the use of resources, the writer must be aware that there are many — including people, materials, time, space, and finally, equipment. This variety of resources may include non-traditional uses of people and equipment. Practicum students should visit expositions, fairs, and in-service training workshops and include in the project plan some of the novel ideas gained.

Monitoring

A plan to monitor progress systematically during the implementation phase must be included. This practice will alert the implementor to make mid course corrections: changes in personnel, changes in scheduling of activities, etc. Monitoring may require periodic testing, using standardized or locally developed tests.
Evaluation

While monitoring the progress of the implementation, the writer will be gathering information to analyze in the results chapter. Evaluation refers to a full examination of the degree to which the specified outcome objectives have been achieved. The writer compares data of performance or behavior accumulated before the project began with similar data gathered at the completion of the project. Based on the assessment, which can include observation as well as other objective measures, follow-on decisions can be made (e.g., continuation of the program as it is, modification of it, scrapping it, extending it to other situations).

Evaluation is a valuable tool in demonstrating the merit of a program that can effectively solve a problem. The program might have been rejected if such evidence of its value were not available.

CHAPTER IV

Results

The evaluation of results refers to the full examination of the degree to which the specified outcome objectives have been achieved. In most projects, there is
a preassessment, and after implementation, a post-assessment. Data collected on performance or behavior accumulated before the strategy was applied are compared with similar data gathered at the completion of the project implementation. The results can be expressed very clearly in three or four pages. The evaluation data should give a clear explanation of method and interpretation of measurements used. Evaluation of results should consider the stated objectives as well as intervening variables that might have had negative or positive side effects. The student need not have reached all of the objectives to have completed an exemplary practicum. Frequently, one can learn as much from not reaching one's objectives as from meeting them.
CHAPTER V

Recommendations

The practicum project should not end with evaluation of the results. If the project resulted in alleviation of the problem in the workplace, it is probable that the solutions selected will have implications for other settings. Consequently, the student at this point considers how the program, treatment, or strategy will or can have an on-going effect in a setting that needs it. Projects that have been selected or recommended for schoolwide use should be mentioned in this section, and a letter should be sent to the Practicums Department explaining the event.

In this chapter on recommendations, the student should include the recommended use of resources and training programs and in-service education to expand the applications of a successful project. The recommendations should list those additional objectives that are feasible and realistic for accomplishment with a future time sequence.

Authorship Statement

Each final practicum report submitted for credit must include a signed Authorship Statement similar to the one
in Appendix O. Authorship is reserved for the persons who do the research as well as the writing of a document. Authors are responsible for the factual accuracy of their work and for acknowledging published and unpublished material that has influenced it. A degree granted by Nova University is made on the recommendation of the faculty who assume that work submitted for credit is entirely the student’s own.

5.8 Dissemination Component - Ed.S. Degree

Students who are preparing for an Ed.S. degree must prepare an extra component for the practicum requirement. In brief, the "Dissemination" component of the report is expected to provide the base material from which the Center for the Advancement of Education can prepare a mailing to inform specialists or the general educational community of the work done by the candidate for the solution of an important educational problem. In addition to dissemination of the information in written form, it is Nova's expectation that Ed.S. candidates be willing, when time and circumstances permit, to join with faculty in making direct presentations of their practicum experiences to new candidates, at Practicum Fairs and Practicum Orientation Workshops (POWs). The Dissemination Packet should be treated as an attachment to the practicum.
All Ed.S. students are required to share the results of their practicum implementation with peers at a time and place to be decided by the Practicum Advisors Support Services (PASS) Group. Each practicum advisor is a member of this group and will keep the student informed as to when to participate in the Practicums Fair.

Practicum Dissemination Days - Practicum Pairs -- will be scheduled for the fall or spring of each year. Students selected to participate as presenters at the fair may invite professional colleagues, supervisors and/or friends to share in their achievements.

This extra requirement is called a Dissemination Component. It must be prepared as a separate packet comprising the elements described below:

5.9 Annotated Bibliography

An Annotated Bibliography is a short summary of each citation on the problem-solution area addressed by the practicum. This bibliography is to consist of three to six separate one- to two-page subbibliographies on various phases of the main topic. These may be up-dates of existing bibliographies if current ones do not exist.

Examples:
Annotated Bibliography

Practice Methods in Reading Programs


This article states that involving parents will help students improve reading skills. Parents can reinforce in the home what the student learns at school. It is important for children to feel that parents are interested in what they are doing at school.

Teaching Strategies in Reading Programs


This article points out the importance of content area reading instruction in the reading classroom. Vocabulary and comprehension are important to understanding the subject material.

The Importance of Reading in Education


This book points out several teaching strategies as applied to learning. A chapter on standardized tests deals with interpreting test scores.
5.11 Reproducible Abstract

A duplicate of the abstract of the report must be included, in form suitable for volume reproduction. The abstract should contain information on at least one of the products or processes developed during the practicum, and should be directed toward other educators who may wish to obtain more detailed information on process or product to aid in replication or adaptation to needs in their own schools. A sample abstract can be found in Appendix L.

5.12 Cover Letter

This brief letter to alumni of the program describes the practicum and ways in which alumni might make use of the practicum's process or product.

5.13 Appendices

A copy of materials in the appendices enables a potential user of the practicum to understand the solution strategies used.

5.14 Final Tasks

When the final report has been completed by the student and approved by the advisor, a copy must be sent to the Practicums Office.

The Director of Practicums will read the final report, assign a grade, sign the cover sheet and send
a copy of the cover sheet to the student. A copy will also be sent to the CAE Records Department for the listing of title and grade on the student's transcript.

Evaluation forms (see Appendix P) will be mailed to all students in order to gather their anonymous feelings regarding the entire practicum requirement and process. These forms are to be returned to the Practicums Office in the envelope provided.

Students must remember to contact the Registrar's Office at Nova University to ensure that their files are complete. Transcripts and diplomas will be mailed to students by the Registrar's Office (305-475-7400).
CHAPTER VI

6.1 Educational Leadership (Ed.L.) Practicum Internship

The practicum internship is intended to provide prospective school administrators with an opportunity within the work setting to practice some aspect of problem solving as an administrator. Students majoring in Educational Leadership will follow all the procedures already outlined in the Handbook for GEM Practicums. After registration, the student should discuss with the local building administrator how the practicum internship may be planned so that the student will receive maximum opportunity for practicing at least one administrative skill related to the Florida Educational Leadership Core Knowledge Base listed below:

Communication Skills
Curriculum & Instruction
Educational Finance
Education Law (Compliance)
Leadership Skills
Organizational Management & Development
Technology
Personnel

The building or other supervisor in the work setting will be asked to be the student's observer and mentor during implementation. The supervisor is not involved in
the evaluation of the practicum or the assigning of grades; these tasks are assigned to the practicum advisor and the Director of Practicums at Nova. Each Ed.L. practicum advisor will communicate with the local administrator in the student's work setting to ensure that the internship serves as a positive experience in collaboration for school improvement.
CHAPTER VII

Computer Education and Computer Applications Practicums (CED/CAP)

All of the guidelines laid out in the Practicum Handbook apply to CED/CAP practicum students. While the basic elements of the CED/CAP practicums are the same as for all practicums, CED/CAP students must use the microcomputer in the solution strategy. It is also required that all CED/CAP practicum proposals and reports be prepared with a word processing computer program. The computer component requirements of the practicum for the CED major differ from those for the CAP major.

7.1 Computer Education Majors

CED majors must write an original computer program. Any programming language -- such as BASIC, Pascal, or PILOT -- may be used. A computer program developed for any CED module may be utilized in the practicum if the computer program is applicable to the problem being solved. The computer program must be an integral part of
the solution strategy and must be described in the "Solution Strategy" section of the practicum proposal. The "Methods" chapter of the final report will contain a discussion of how the software was used, and the "Results" chapter will include the effects of the software usage.

Documentation of the computer program must be included in an appendix of the final report. The documentation must contain a flowchart and a listing of the computer program as well as detailed instructions for the computer program's use. A copy of the computer program on a disk must be submitted with the final report.

Because of the extensive time involved in the development of a computer program, CED majors are not expected to spend as much time in the implementation phase of their practicums as are other students. They must, however, try out their programs as they develop them (i.e., "developmental testing"). Records of the changes that are made to the computer program, based on the comments made by "developmental testing" students or colleagues, must be maintained. The completed program must be implemented with a target group of specially selected students.

The advisor will evaluate the computer program and will fill out a CED software evaluation form. This evaluation form is Appendix Q of this handbook.
Students who are CED Hyphenated Majors follow the same guidelines as above, except that the computer program is written for the content area of the major. For example, a Social Studies/CED major will develop a computer program for social studies.

7.2 Computer Applications Majors

Computer Applications students do not need to write an original computer program for the practicum. The CAP student carefully selects an existing computer program or computer programs and designs strategies for using the program(s) to bring about a solution to the practicum problem.
Appendix A

Practicum Advisor Assignment Form

This form gives the advisor's name, address, and telephone number. Students must contact their advisor immediately.
Appendix A

Practicum Action Form

This action:

- Computer Search
- Proposal Review
- Report Review
- Addendum Review
- Personal Meeting
- Phone conference

Comments/Details:

Before selecting a topic for your practicum project, you must be certain that it is in the major area of study for your degree program. Projects unrelated to your major will not be acceptable. If you have any questions, please check with your practicum advisor, practicum office, or student advisor.

You are expected to complete this project 12 months after the registration date. Students who fail to do so will be charged an annual maintenance fee of $200.00.

We have received your:

- Registration
- Tuition

Your advisor is:

You must work with your advisor and complete the computer search form immediately. Your advisor will be your contact person on all matters relating to the planning, execution, and reporting of your practicum.

You must make the initial contact with your advisor, by phone or mail, as soon as you are ready to discuss your work. You may not proceed with any phase of the project without the approval of your advisor.

Please allow 15 working days to hear from our Information Retrieval Service.

If you have submitted a partial payment for your practicum, the balance is due four weeks after the date of the first payment. If your payment is late, there is an additional $25 late fee.

Phones: Broward County--475-7474  Dade County--940-6447 ext. 7474
Palm Beach County--732-6600 ext. 7474
All other areas of Florida 1-800-432-5021 ext. 7474
Appendix B

Self-Evaluation Survey

Each student must read the handbook and promptly submit this completed form to the practicum advisor.
Appendix B

NAME OF STUDENT__________________________________________

SOCIAL SECURITY NUMBER____________________________________

Practicum Self-Evaluation Survey

The purpose of this survey is two-fold. First, it will help practicum students focus upon the major components of a successful practicum. Second, it will help advisors identify areas in which a student may need assistance.

Directions: Read the Practicum Handbook first, then attend a Practicum Orientation Workshop (POW). Read the survey and answer as many questions as you can. Check your work and place the page number (in the space provided) from the handbook where the information can be found. This is not a test or a graded activity. Keep your responses brief. Submit this completed form when you attend B part of the Practicum Workshop, or mail it to your advisor.

Handbook
Page

p. ______ Briefly state in your own words why Nova University requires a practicum for master's and specialist's degrees.

p. ______ What is Nova's definition of a practicum?

p. ______ A practicum requires three major steps. The first is writing a proposal, the second is ________________, and the third is ________________.

p. ______ Educational Specialist students have a fourth step which is ________________.

Using your own words, summarize the information that will be described in each of the following chapters of the proposal:

p. ______ a. Background

p. ______ b. Identification of a Problem.

p. ______ c. Outcome Objectives.


p. ______ e. Solution Strategy.
p. f. Implementation (Methodology).

p. g. Evaluation (Results).

p. h. Follow-On (Recommendations).

p. For the purpose of the practicum proposal, a problem is defined as

The following instruments can be used to document the identified problem:

a. 

b. 

c. 

d. 

p. Conducting a review of the literature serves the following purposes:

a. 

b. 

c. 

d. 

p. T or F. You cannot begin your review of the literature until you receive information from your computer search.

p. T or F. Solution strategies can include ideas and information that were gathered from sources other than a review of the literature.

p. Your implementation plan should encompass the following elements:

a. Identification of critical tasks
b. Identification of 
c. Development of a timeline
d. Development of data collection procedures
e. Establishment of a process of 

p. As you implement your plan, be careful to write down daily events so that 

T or F. Statistical analysis is required to demonstrate the effectiveness of your solution strategy.

The Practicum Observer is the person who

The Final Report is the last stage of the practicum process. Chapters from the Proposal are synthesized into the following chapters in the Final Report:

1. Background
2. Problem Identification
3. Outcome Objectives
4. Review of Literature and Solution Strategy
5. Implementation
6. Evaluation
7. Follow-On

T or F. The Form and Style Manual for Graduate Education Modules (GEM) is the required style manual for this practicum.

T or F. My completed proposal must be accepted by my advisor before I begin the implementation phase of the practicum.

If my proposal is not approved by the Practicum Advisor, I will be required to revise it.

Describe four criteria an advisor will use to evaluate the subject of your practicum.

The design of my practicum proposal will be evaluated using the checklist found in Appendix

My final grade will be evaluated on the Practicum Report Evaluation Form found in Appendix
Appendix C

Practicum Proposal Planning Form

Each student must use this form for initial planning of the proposal.
Appendix C

Nova University
Center For The Advancement of Education

Practicum Proposal Planning Form

NAME ____________________________________________

ADDRESS ____________________________________________

PHONE _______ DEGREE ______________________ MAJOR ___________

Information on this planning form will assist you in organizing your ideas and facilitate work with your local advisor in developing an acceptable proposal. It is very useful to complete the form prior to your first conversation or meeting with your advisor.

PROPOSED TITLE

TARGET POPULATION

NATURE OF PROBLEM

DOCUMENTATION OF PROBLEM

SOLUTION STRATEGY

IMPLEMENTATION REQUIREMENTS

EVIDENCE OF EFFECTIVENESS

OTHER APPLICATIONS
Appendix D

Computer Search Order Form

This form is to be completed as soon as you have registered. You must use the Thesaurus of ERIC Descriptors located at the GEM site to assist you.
Sample Appendix D

Nova University
Center For The Advancement of Education
3301 College Avenue
Fort Lauderdale, FL 33314

Computer Search Order Form

Return to:
C.A.E. for
GEM Practicums Dept.
Nova University
3301 College Avenue
Fort Lauderdale, FL 33314

OFFICE USE ONLY
Date Received __________
Data Base(s) _________
Citations ___________
Cost ________________
Vendor ______________

PLEASE PRINT OR TYPE
S.S. # _______________

Name __________________________
Address __________________________
_________________________ ZIP __________
Home Phone _______________________
Business Phone ________________
Occupation ________________________
Level (Elementary, Secondary, etc:)
______________________________

1. Proposed title or search topic:

2. Synonyms, key terms, or descriptors related to the topic:

3. Narrative. Use complete sentences. Be sure to specify educational level, population, and any other delimiting factors. Use back of sheet if needed.

Method of Payment: ______ Charge to CAE/GEM (must be signed by Director of Practicums)

_________________________________  ________________________
Director of Practicums                 Date
Appendix E

Practicum Proposal Evaluation Checklist

This form is used to evaluate the practicum proposal.
<table>
<thead>
<tr>
<th><strong>Background</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The practicum setting has been adequately described.</td>
</tr>
<tr>
<td>2. A connection has been made between elements of the setting and the problem.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Problem</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The problem is clearly identified as a discrepancy between what is and what should be.</td>
</tr>
<tr>
<td>2. The problem is identified in operational terms.</td>
</tr>
<tr>
<td>3. The proposal presents hard evidence that a problem exists and documents its importance.</td>
</tr>
<tr>
<td>4. The population affected, within a specific setting, is clearly identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Objectives</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Desired outcomes, to be achieved through the door's intervention, are stated.</td>
</tr>
<tr>
<td>2. The objectives are shown to be ends, as distinct from means.</td>
</tr>
<tr>
<td>3. The objectives are stated as measurable behavioral outcomes with respect to the group for which they are intended.</td>
</tr>
<tr>
<td>4. The outcomes are shown to be reasonable and realistic for the group intended, within the specified time.</td>
</tr>
<tr>
<td>5. A rationale for specifying these outcomes is presented.</td>
</tr>
<tr>
<td>6. The objectives are measurable in a way that will allow a conclusion, indicating that the treatment has made a difference.</td>
</tr>
<tr>
<td>7. Taking into account the dimensions of the problem, resources, and time factors, the objectives are demonstrated to be worthwhile.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Research on Solution Strategy</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Possible solution strategies have been investigated through research of the literature.</td>
</tr>
<tr>
<td>2. Effective or attempted solutions of the problem at other schools or institutions have been examined.</td>
</tr>
<tr>
<td>3. A theoretical or philosophical frame of reference for the problem and proposed solution have been provided.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Strategy Decision</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In selecting a solution strategy from promising alternatives, the author has considered negative and positive factors of time, cost, material and equipment resources, human resources, and data requirements.</td>
</tr>
<tr>
<td>2. The proposal presents a persuasive rationale for the choice of solution strategy.</td>
</tr>
<tr>
<td>3. The strategy appears soundly based in theory or research evidence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Implementation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implementation tasks are identified in appropriate sequence.</td>
</tr>
<tr>
<td>2. All necessary training or orientation, monitoring activities, measurements, and data collection process and instruments are identified and explained.</td>
</tr>
<tr>
<td>3. Plans are presented for generalizing results from this practicum to other similar or related problems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Writing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Writing style is orderly and clear.</td>
</tr>
<tr>
<td>2. Citations are accurately documented.</td>
</tr>
<tr>
<td>3. Proofreading—grammar and syntax is evident.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Evaluation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evaluation instruments, techniques, methodology, data collection and application are presented and explained.</td>
</tr>
<tr>
<td>2. The proposal makes clear when evaluation will occur.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Follow-On</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Based upon positive evaluation, plans are presented for making the program or practice ongoing in the setting.</td>
</tr>
<tr>
<td>2. Plans are presented for transportation of the practice to other settings where the same or related problems have been identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Comments on Practicum Action Form</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action Decision</strong></td>
</tr>
</tbody>
</table>

| **Advisor** | **Date** |
Appendix F

Practicum Action Form

Advisors use this form for communication with students and the Practicum Office.
Appendix F
Nova University
Center For The Advancement of Education

PRACTICUM ACTION FORM
This action:

- Computer Search
- Proposal Review
- Report Review
- Addendum Review
- Personal Meeting
- Phone conference

Comments/Details:

Student's Name___________________________

Date__________________Nova Staff_________

Site_____________________________________

Decision/Purpose________________________________

Phones: Broward County--475-7474 Dade County--940-6447 ext. 7474
Palm Beach County--732-6600 ext. 7474
All other areas of Florida 1-800-432-5021 ext. 7474
Other states 305-475-7474
Appendix G

Proposal Format

This format describes the contents of the proposal.
Appendix G

Proposal Format

Using approximately twenty typewritten pages, describe your practicum plan. Your proposal must cover each of the enumerated topics, in the sequence shown, with particular attention to the questions under each heading.

I. Background. What is the setting for the practicum? What economic, social, or political factors have a bearing on the problem to be addressed? State your role in the setting.

II. Problem Statement. What is the identified problem? Why is this a problem? What hard evidence do you have that it is a problem and not a "want"? What has happened up to this point? Who has been involved? What commitments have been made?

III. Outcome Objectives. What changes to eliminate or reduce the problem do you expect the practicum to achieve? Upon what target group or groups? Are the objectives measurable? In performance terms? Otherwise verifiable? By what means?

IV. Research and Solution Strategy. What study has been made of the relevant literature? The experience of others? What alternative solutions were studied? What have others done to solve similar problems? Why was the particular strategy chosen? What political, theoretical, time, material cost, legal, and other considerations were involved in the strategy decision? Why is it an appropriate or preferred strategy under the circumstances?

V. Implementation. What activities will be carried out? Who will participate? What role responsibilities will be established? What new or modified tasks or activities will be instituted? What use will be made of human and material resources? What provisions will be made for monitoring progress, mid-course corrections, necessary data collection?

VI. Evaluation Plan. Who will evaluate? What instruments will be used? Over what time span? Will the evaluation method persuasively demonstrate success or failure? Impact on the target group? What pre-testing or interim monitoring must be done? What will success look like?

VII. Possible Follow-On. What are the plans to make the strategy on-going? Available to other classes, grades, schools? Will a manual or handbook be a product of your practicum?
Appendix H

Evaluation Designs

This appendix suggests format and techniques to be used in designing a monitoring system at the proposal stage.
### Appendix H

**Recommended Data Analysis Techniques**

For Selected Evaluation Designs And Objectives*

<table>
<thead>
<tr>
<th>Evaluation of Designs</th>
<th>Example of Objectives Specifying an Evaluation Design</th>
<th>Recommended Data Analysis Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. One Group Pretest/Posttest</td>
<td>Remedial reading students with 80 percent or better attendance will show a mean gain of 4 months in reading comprehension for every 4 months of instruction. Gain will be measured by the CTBS, Level 3 reading comprehension section.</td>
<td>Derive the arithmetic mean - a descriptive statistic (see statistics book or a consultant for the computational formula)</td>
</tr>
<tr>
<td>2. Evaluation Designs Using a Criterion for a Standard</td>
<td>Every student will correctly respond to 75 percent of the items on the Reading Mastery Test given at the completion of Reading Unit A.</td>
<td>Calculate a percentage - a descriptive statistic (see a statistics book or a consultant for the computational formula)</td>
</tr>
<tr>
<td>a. Individual Student Criterion Mastery Design</td>
<td>Prior to February 1988, 80 percent or more of the full-time trainees enrolled in Graphic Arts in September 1987 will complete 12 or more of the instructional components.</td>
<td>Calculate a percentage - a descriptive statistic (see a statistics book or a consultant for the computational formula)</td>
</tr>
</tbody>
</table>

Appendix I

Practicum Cover Sheet

Students must make duplicate copies of the cover sheet, which must accompany the practicum proposal and final report. Failure to include a cover sheet will delay the processing of proposals and reports.
### Appendix I

**NAME OF SITE**
- Bradenton
- Daytona
- Ft. Lauderdale
- Ft. Myers
- Ft. Pierce
- Gainesville
- Jacksonville
- Las Vegas
- Melbourne
- Miami
- Orlando
- Phoenix
- Tallahassee
- Tampa
- West Palm Beach

**TYPE OF DOCUMENT**
- Proposal
- Final Report
- Revision
- Addendum

**DEGREE**
- M.S.
- Ed.S.

**DEGREE MAJOR**

**MAILING ADDRESS**

<table>
<thead>
<tr>
<th>Director of Practicums</th>
<th>Nova University</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF ADVISOR</td>
<td>FOR OFFICE USE</td>
</tr>
<tr>
<td>Nova University Center for the Advancement of Education</td>
<td>Advisor's Signature</td>
</tr>
<tr>
<td>3301 College Avenue</td>
<td>Date</td>
</tr>
<tr>
<td>Ft. Lauderdale, FL 33314</td>
<td>Director Approval</td>
</tr>
</tbody>
</table>

**TOLL-FREE TELEPHONE NUMBERS**

| Broward          | 475-7457             |
| Dade             | 940-6447 ext. 7457   |
| Palm Beach       | 732-6600 ext. 7457   |
| Florida WATS     | 1-800-432-5021 ext. 7457 |

<table>
<thead>
<tr>
<th>Practicum Cover Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF PRACTICUM DOER</td>
</tr>
<tr>
<td>HOME ADDRESS</td>
</tr>
<tr>
<td>S.S. #</td>
</tr>
<tr>
<td>POSITION</td>
</tr>
<tr>
<td>HOME PHONE ( )</td>
</tr>
<tr>
<td>WORK PHONE ( )</td>
</tr>
<tr>
<td>NAME OF BUILDING WHERE PRACTICUM WAS CONDUCTED</td>
</tr>
<tr>
<td>ADDRESS</td>
</tr>
<tr>
<td>POSITION</td>
</tr>
<tr>
<td>PHONE ( )</td>
</tr>
<tr>
<td>PRACTICUM TITLE</td>
</tr>
</tbody>
</table>

**TIMING INFORMATION**

| Date of initiating practicum |
| Date of mailing this document |
| Practicum implementation start-up date |
| Practicum implementation ending date |
Appendix J

Practicum Observer Verification

Each student should ask a professional within the work setting to serve as an observer of the project. A principal is generally the best person in a school setting.
Appendix J
Nova University
Center For The Advancement of Education
3301 College Avenue
Fort Lauderdale, FL 33314
Observer Verification Form

Verification of Practicum Activity

Dear Observer:

Practicum students in Nova's M.S. and Ed.S. programs are asked to provide external verification that the project activities reported in their final practicum documents took place as described. You have been designated an observer to fulfill this confirmation function by the student named below. On this sheet, then, please write a note attesting to your knowledge of the project activity described in the final practicum report to which this will be attached. (Note that you are not asked to evaluate or make judgments about the quality of the project.)

Practicum Title ____________________________________________________

Student's Name __________________________________________________

Program Site __________________________ Date _______________________

Observer's Name _________________________________________________
(please print--------and sign)

Observer's position ______________________ Phone # _________________

Observer's comment on impact of the project (handwritten): ______
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Appendix K

Sample Title Pages For Proposals And Final Reports

Each practicum report must be accompanied by a similar page.
Appendix K

Sample Title Page For Proposal

PLACE TITLE HERE IN CAPITAL LETTERS
USE THIS LINE ALSO FOR TITLE IF REQUIRED

by

Jane L. McIntosh

A Practicum Proposal

Submitted to the Faculty of the Center for the Advancement of Education at Nova University in partial fulfillment of the requirements for the degree of Master of Science (or Educational Specialist).

Month/Year
Appendix K

Sample Title Page For Final Report

PLACE TITLE HERE IN CAPITAL LETTERS
USE THIS LINE ALSO FOR TITLE IF REQUIRED

by

JOHN E. WILSON

A Practicum Report

submitted to the Faculty of the Center for the Advancement of Education at Nova University in partial fulfillment of the requirements for the degree of Master of Science (or Educational Specialist).

The abstract of this report may be placed in a National Database System for reference.

Month/Year
Appendix L

Sample Summary For Proposals And
Sample Abstract For Final Reports.
Appendix L

Sample Summary - Proposal

This proposal describes an attendance program to be developed and implemented by the author to reduce excessive class truancy in an urban middle school. A target group of twelve truants in the sixth grade will be established for the program.

The program will contain four basic strategies for reducing truancy: placement in a self-contained class, parent contact, peer counseling and tutoring, and a buddy system requiring daily check-in. The writer will measure success by comparing statistics pertinent to attendance, grades, and conduct.
Appendix L

Sample Abstract - Final Report

Enhancing Concept Mastery in Science Education through Modality Grouping.
Fischofer, Joan E., 1985: Practicum Report, Nova University, The Center for the Advancement of Education.
Descriptors: Secondary Education/Learning Modalities/Multi-Sensory Learning/Verbal Learning/Aural Learning/Visual Learning/Kinesthetic Perception/Science Education/Learning Style Inventory/Peer Teaching/Science Course Improvement Project/

The high percentage of students receiving below average grades in an average eighth grade science class was addressed by the implementation of learning style strategies. Two screening devices, Learning Style Inventory (Dunn, Dunn, and Price, 1984) and the Barsch Learning Style Inventory (1984), were employed to discern the preferred modalities of the target group students. Learning strategies based upon the students' preferred modalities were implemented to provide more relevant learning experiences. Students were assigned to learning groups using modality preference as placement criteria. Assignments were keyed to the groups' modality preferences. The results indicated increased levels of achievement for the target group as compared to those of two similar eighth grade science classes of this researcher. Students within the target group demonstrated positive affective changes as well. The results of the Learning Style Inventory provide significant information on student preferences. It was concluded that the screening for learning style preference and the subsequent utilization of data can provide a vehicle to facilitate and increase learning and achievement. Appendices include graphic analysis of progress, style instruments, sample assignments, and student data.
Appendix M

Sample Table of Contents For Proposals
And Final Reports
### Sample Table of Contents - Proposals

#### Table of Contents

<table>
<thead>
<tr>
<th>Title Page</th>
<th>..............</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>..............</td>
</tr>
<tr>
<td>Chapters</td>
<td></td>
</tr>
<tr>
<td>I. Background</td>
<td>..............</td>
</tr>
<tr>
<td>II. Problem Statement</td>
<td>..............</td>
</tr>
<tr>
<td>III. Outcome Objectives</td>
<td>..............</td>
</tr>
<tr>
<td>VI. Research and Solution Strategy</td>
<td>..............</td>
</tr>
<tr>
<td>V. Implementation Plan</td>
<td>..............</td>
</tr>
<tr>
<td>VI. Evaluation Plan</td>
<td>..............</td>
</tr>
<tr>
<td>VII. Follow-On</td>
<td>..............</td>
</tr>
<tr>
<td>Reference List</td>
<td>..............</td>
</tr>
<tr>
<td>Bibliography (Optional)</td>
<td>..............</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>Appendix A: (Title)</td>
<td>..............</td>
</tr>
<tr>
<td>Appendix B: (Title)</td>
<td>..............</td>
</tr>
<tr>
<td>Attachments</td>
<td>..............</td>
</tr>
</tbody>
</table>
Appendix M

Sample Table of Contents - Final Report

Table of Contents

Title Page .................................................. Page
Authorship Statement .................................
Abstract ....................................................
Observer's Verification .................................

Chapters

I. Purpose ..................................................
II. Research & Solution Strategy ........................
III. Method .................................................
VI. Results ................................................
V. Recommendations ............................... Page

Reference List .................................................
Bibliography (Optional) .................................

Appendices

Appendix A: (Title) .................................
Appendix B: " ........................................

Attachments .................................................
Dissemination Packet (Ed.S. only) ........ Page
Appendix N

Practicum Report Evaluation Form

This form is used by the practicum advisor to rate the student's final report.
Appendix N
Practicum Report Evaluation Form

Name __________________________________________ Site ____________________________

Advisor __________________________ Grade __________________________

Grades are determined by averaging the circled ratings below and converting to letter grades as follows:

- 4.5 to 5 = A (Excellent)
- 4 to 4.4 = B (Good)
- 3 to 3.9 = C (Weak)
- below 3 = F

Recommended for National Database System: Yes ___ No ___

POW/Fair Presentation Yes ___ No ___

<table>
<thead>
<tr>
<th>Design and Execution</th>
<th>Low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The practicum setting has been adequately described.</td>
<td>1 2 3 4 5</td>
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<tr>
<td>2. The completed project conforms to the proposal.</td>
<td>1 2 3 4 5</td>
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<td>3. The problem is identified in operational terms.</td>
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<td>4. The problem statement is supported by appropriate data.</td>
<td>1 2 3 4 5</td>
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<td>5. Objectives are clearly related to the problem.</td>
<td>1 2 3 4 5</td>
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<td>6. Objectives are stated in measurable performance terms.</td>
<td>1 2 3 4 5</td>
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<td>7. The literature review is appropriate.</td>
<td>1 2 3 4 5</td>
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<td>8. The range of research reviewed is adequate.</td>
<td>1 2 3 4 5</td>
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<td>9. Solutions strategy are based on research.</td>
<td>1 2 3 4 5</td>
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<td>10. Strategy decisions have been explained.</td>
<td>1 2 3 4 5</td>
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<td>11. The strategy is soundly based on theory, research evidence, or accepted practice.</td>
<td>1 2 3 4 5</td>
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<td>12. The solution strategy is innovative in the setting.</td>
<td>1 2 3 4 5</td>
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<td>13. Implementation is clearly presented with examples.</td>
<td>1 2 3 4 5</td>
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<td>14. Changes in implementation have been explained.</td>
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<td>15. Evaluation methods are valid and convincing.</td>
<td>1 2 3 4 5</td>
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<td>16. Evaluation is provided for each stated objective.</td>
<td>1 2 3 4 5</td>
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<td>17. The success criteria were used in evaluating results.</td>
<td>1 2 3 4 5</td>
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<td>18. Results are presented clearly.</td>
<td>1 2 3 4 5</td>
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<td>19. Conclusions drawn from results are sound.</td>
<td>1 2 3 4 5</td>
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<td>20. Recommendations are clearly formulated.</td>
<td>1 2 3 4 5</td>
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<td>21. The scope of the project is appropriate to work at graduate level.</td>
<td>1 2 3 4 5</td>
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<td>22. The execution of the project is appropriate to work at the graduate level.</td>
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<td>23. Flowchart for CED project is appropriate and included.</td>
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Manuscript

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<th>24. General writing style</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>29. Figures &amp; Tables</th>
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<th>2</th>
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<th>4</th>
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<td>25. Sentence structure</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<td>30. Reference List</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>26. Standard English</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>31. Style Manual is</td>
<td>1</td>
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<td>3</td>
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<td>5</td>
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<tr>
<td>27. Abstract</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>32. Appendix</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>28. Table of Contents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>33. Annotated bibliography</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</table>

Dissemination Component (for Ed.S. Practicums only—a separate packet)

| 33. Annotated bibliography | 1 | 2 | 3 | 4 | 5 |
| 34. Reproducible abstract  | 1 | 2 | 3 | 4 | 5 |
| 35. Dissemination cover letter to professional colleagues | 1 | 2 | 3 | 4 | 5 |
| 36. Samples of implementation materials in appendix | 1 | 2 | 3 | 4 | 5 |
Appendix 0

Authorship Statement

Each final practicum report must include a signed authorship statement
Appendix O

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my work, presented here, will earn similar respect.

Signed

Mary Brooks
Appendix P

Practicum Evaluation Form

Each student is requested to evaluate the practicum process on this form. It should be returned to the Practicums Office.
### APPENDIX P

#### PRACTICUM EVALUATION FORM

**INSTRUCTIONAL SITE**
**DATE**

**NAME OF ADVISOR**
**DEGREE**

**MAJOR**

Please respond to the items below by penciling in the letter that most closely represents your feelings. You are encouraged to use the comment section to add information on the reverse side.

- A - Strongly Agree
- B - Agree
- C - Unsure
- D - Disagree
- E - Strongly Disagree

**USING NO. 2 PENCIL ONLY**

#### THE PRACTICUM PROJECT

1. A - B - C - D - E  
   I feel that I selected a significant job-related problem for my practicum.

2. A - B - C - D - E  
   The information I received from the computer search was helpful in refining my solution strategy and writing the proposal and final report.

3. A - B - C - D - E  
   I had difficulty identifying an appropriate problem for my practicum project.

4. A - B - C - D - E  
   The practicum self-evaluation survey helped me to understand the handbook.

5. A - B - C - D - E  
   It was difficult to develop measurable objectives.

6. A - B - C - D - E  
   Developing ways to evaluate the effectiveness of my solution strategy was one of the greater challenges for me.

7. A - B - C - D - E  
   I was apprehensive about the practicum requirement before initiating the process.

8. A - B - C - D - E  
   If you agreed with item 6: Once I began the practicum process and worked with my advisor, my apprehension lessened.

9. A - B - C - D - E  
   The practicum is a useful part of my graduate program.

10. A - B - C - D - E  
    I feel that the amount of time and effort necessary to complete the practicum is appropriate at the graduate level.

11. A - B - C - D - E  
    The practicum has taught me a new and useful way to solve problems using recent research.

12. A - B - C - D - E  
    I shared my practicum solution and results with colleagues in education.

13. A - B - C - D - E  
    Other educators have adopted or adapted my practicum ideas.

#### THE FACULTY

14. A - B - C - D - E  
    I learned some useful skills while developing computer software for my practicum. (computer majors only)

15. A - B - C - D - E  
    The Practicum Orientation Workshop was informative and helpful as I began the process.

16. A - B - C - D - E  
    The Practicum Handbook was a useful guide in preparing my report.

17. A - B - C - D - E  
    The Central Office Staff has been available and helpful to me.

18. A - B - C - D - E  
    My advisor was helpful in explaining requirements and in providing useful feedback.

19. A - B - C - D - E  
    My advisor responded promptly when I submitted my work.

20. A - B - C - D - E  
    I sensed that my advisor cared about the problems I worked on, that he/she was interested in the content, purpose and usefulness of my project.

21. A - B - C - D - E  
    My advisor treated me courteously, as one professional to another.

22. A - B - C - D - E  
    Although the practicum is an independent effort, I have felt supported by the Nova staff throughout my work.

23. A - B - C - D - E  
    My advisor was very helpful in the development of the computer software for my practicum. (computer majors only)

24. A - B - C - D - E  
    I met my advisor to discuss my work before submitting the final report.

Please list additional comments on the back →
Appendix Q

Software Evaluation Form

Each Computer Education practicum must be accompanied by a completed evaluation form in the appendices.
Appendix Q

Software Evaluation

1. Title, Publisher, Copyright Date:

2. Type
   Tutorial ________ Drill and Practice ________
   Game ________ Simulation ________
   Combination ________ Test/Diagnosis ________
   Administrative ________ Other ________

3. User
   Preschool ________ Elementary ________
   Jr. High ________ Sr. High ________
   College ________ Adult ________
   Comments: __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

4. Cost
   1. Initial cost of the program __________________________
   2. Replacement policy (yes) ________ (no) ________
      Cost for replacement __________________________
   3. Hardware requirements: 32K ________ 48K ________ 64K ________
      Single drive ________ Double drive ________
      Printer (yes) ________ (no) ________
      Color (yes) ________ (no) ________
      Special Hardware Required: (yes) ________ (no) ________
   COMMENTS: __________________________________________
5. Does the program reach the target population for which it was designed? Yes ______ No ______ N/A ______________

6. Are the instructions well organized, useful, and easy to understand? Yes ______ No ______ N/A ______________

7. Does the material require extensive preparation or training on the user's part? Yes ______ No ______ N/A ______________

8. Does the program provide for user self-pacing? Yes ______ No ______ N/A ______________

9. Is the content presented clearly? Yes _____ No ______ N/A ______________

10. Is the program organized and presented in a sequential manner and in appropriate developmental steps? Yes____ No____ N/A ______________

11. Can the user exit the program at any time? Yes____ No____ N/A ______________

12. Does the user need typing skills to use the program? Yes ______ No ______ N/A ______________

13. Can a student use the program without supervision? Yes _____ No _____ N/A ______________

14. Is a printout of student performance available, if desired? Yes ______ No ______ N/A ______________

15. Is the screen presentation pleasing to the eye? Yes____ No____ N/A ______________

16. Does the speed of presentation match individual learning styles? Yes ______ No ______ N/A ______________

17. Is the size of the print clear and well spaced? Yes ______ No ______ N/A ______________

18. Are the use of graphics, sound, and color appropriate? Yes _____ No _____ N/A ______________

Documentation

1. Does the material require the purchase of accompanying printed material? Yes ______ No ______ N/A ______________

2. Does the material provide direct instruction? Yes ______ No ______ N/A ______________

3. Is the material self-sufficient? Yes ______ No ______ N/A ______________

4. Is the size of the print clear and well placed? Yes ______ No ______ N/A ______________
5. Are the materials packaged so they can be easily and safely stored? Yes ______ No ________ N/A ________

6. Is there a glossary of terminology provided? Yes ________ No __________ N/A __________

7. Does the documentation contain a section on trouble-shooting? Yes ________ No __________ N/A __________

8. Can you use the program without constantly referring to documentation? Yes ________ No __________ N/A __________

9. Is the documentation organized and presented in a sequential manner and in appropriate developmental steps? Yes ________ No __________ N/A __________

10. Does the publisher provide for a preview of the courseware? Yes ________ No __________ N/A __________

**Content**

1. Is the courseware simple to use? Yes ________ No ________ N/A ________

2. Is the courseware content accurate? Yes_____ No ____ N/A _____

3. Are the courseware commands consistent? Yes ________ No __________ N/A ________

4. Is the material appropriate for the age group? Yes ________ No __________ N/A ________

5. Does the material provide a variety of built-in reinforcements? Yes ________ No __________ N/A ________

6. Does the content require previous learning or experiential background? Yes ________ No __________ N/A ________

7. Is the material presented on a meaningful and appropriate language level? Yes ________ No __________ N/A ________

8. Is the coursework free of sex bias and stereotyping? Yes ________ No __________ N/A ________

9. Does the program provide the user the opportunity for review? Yes ________ No __________ N/A ________

10. Can the user modify the instructional material? Yes ________ No __________ N/A ________

11. Is the software adaptable to different instructional strategies? Yes ________ No __________ N/A ________
12. Is the software compatible with your classroom presentation?
   Yes ___________ No ___________ N/A ___________

13. Does the program contain a data management system (recordkeeping)?
   Yes ___________ No ___________ N/A ___________

14. Is the software student-proof? Yes _____ No _____ N/A _____

15. Does the program allow the student adequate time to complete
    learning segments? Yes ___________ No ___________ N/A ___________

16. Is the program designed to alert the teacher to a student who is
    experiencing difficulty with the content? Yes ___________ No ___________
    N/A ___________

17. Is the content relevant to the instructional needs of the student?
   Yes ___________ No ___________ N/A ___________

18. Does the program work as publisher claims? Yes ___________
    No ___________ N/A ___________

Evaluator's Recommendations:

Additional Comments:

Evaluation Summary

Please circle appropriate number with 5 being highest

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<thead>
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<th>Performance</th>
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<td>Error Handling</td>
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<td>Appropriateness</td>
<td>1 2 3 4 5</td>
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