The curriculum management guide serves as an aid to medical record teachers and other medical record educators. It is designed to provide them with a useful tool to improve student performances by improved administration and management of programs. The guide documents one possible systematic approach to professional and vocational curriculum management. A brief description is given on the original intent, investigation process, expert opinions, and the need for a detailed management model. A lengthy discussion (81 pages) on the curriculum management design presents elements, tables, materials, checklists, and recommendations on the four phases of school/curriculum management: assessment, planning, implementation, and evaluation. In addition, alternative educational approaches to help professional and technical educators in various aspects of curriculum design are included. A work-flow diagram of the four phases of the curriculum management design is included. Correspondence related to the study and a manpower forecasting form are appended. (Author/EC)
ROLES, FUNCTIONS, TRAINING, AND PROFICIENCY TESTS
FOR MEDICAL RECORD PERSONNEL

A GUIDE TO CURRICULUM MANAGEMENT

June, 1975
A GUIDE TO CURRICULUM MANAGEMENT

PREPARED by

FREDRIC A. CLARK

AMRA ROLES AND FUNCTIONS PROJECT

AMERICAN MEDICAL RECORD ASSOCIATION
875 North Michigan Avenue – Suite 1850
John Hancock Center
Chicago, Illinois 60611

The work upon which this publication is based was performed pursuant to contract N01-AH-34096(P) with the Division of Associated Health Professions, Bureau of Health Manpower.

June, 1975
FOREWORD

The following is the Educational Philosophy of the AMRA as approved by the AMRA Executive Board and the AMRA Education and Registration Committee in 1970.

EDUCATIONAL PHILOSOPHY OF THE AMRA

STATEMENT OF PURPOSE:

The purpose of this statement of Educational Philosophy is to emphasize principles which will provide quality education for medical record personnel to enable them to make significant contributions toward the improvement of patient care.

1. Formal educational programs for Medical Record Personnel are best provided by regionally accredited, collegiate educational institutions, combined with clinical instruction in appropriate health care institutions.

2. Clinical instruction and directed experience are integral parts of the total educational program for health professionals.

3. Clinical instruction and directed experience should be awarded credit toward institutional requirements for degrees in the health professions.

4. The AMRA encourages academic arrangements which facilitate horizontal and vertical career mobility for the individual. Educational design should be so developed and integrated at all levels as to allow progression from the lower to the higher levels of achievement within individual professions.

5. The members of the health team who will work together as professionals should learn together. Students in the health sciences should share courses which provide a common background of knowledge of the health field.

6. Formal and informal continuing education is recognized as an essential component of professional development for health personnel. It is the task of the professional organization to advise and encourage employers and employees to participate in and support programs of continuing education.

LAB:mb

Approved - E & R Committee
April 10, 1970
Approved - AMRA: Executive Board
May 15, 1970

8/72
ACAD
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SECTION I
INTRODUCTION

GENERAL

This Curriculum Management Guide was prepared by AMRA as an aid to medical record teachers and other medical record educators.

The emphasis is on the word GUIDE.

* NOTE *

The use of this Guide by medical record educators is NOT a requirement. It does not set forth AMRA or ANA policy, modify existing or future essentials, nor attempt to establish educational models or minimums.

FUNDING SOURCE

The preparation of the Guide was funded by the Division of Associated Health Professions, Bureau of Health Resources Development (BHRD) of the U. S. Department of Health Education and Welfare.

BHRD sees a portion of their role as helping the Allied Health Professions upgrade their education and testing.

ISSUE: PROFICIENCY-TESTING

One of BHRD's published objectives involves the establishment of proficiency testing in the important Allied Health Professions. Medical Records has been identified as one of the affected professions.

The AMRA Roles and Functions Project has investigated the issues and reported no legal alternative to proficiency-testing.
INTEGRITY OF THE MEDICAL RECORD FIELD

The Final Report from the Roles and Functions Project deals directly with protecting the integrity of the professions. The Project reported:

- Acceptable tests must measure job-related competencies.
- Acceptable tests must measure skill and affect competencies, not just knowledge and comprehension competencies.
- Tests must measure competencies at the performance levels appropriate to the various occupational levels.
- Test items must be written which can discriminate between various entry levels.
- Tests must be properly field-tested and validated to assure that only qualified and adequately trained personnel can pass them.

The Project's Final Report also concluded that such tests can probably be constructed, field-tested and validated. Further, BHRD is prepared to commit the financial resources to develop, field-test and validate tests for the MRA and MRT levels.

THE EDUCATIONAL CHALLENGE AHEAD

Whether AMRA adopts or rejects the resultant tests is a matter for the AMRA Executive Board to consider. However, should either AMRA or the Federal Government adopt competency-based proficiency tests, the medical record educators face a new challenge. That is, "Can their new graduates pass a rigorous competency-based test?"
PURPOSE OF THE CURRICULUM MANAGEMENT GUIDE

This Guide is designed to provide medical record educators with a useful tool to improve student performances by improved administration and management of programs. The Guide documents one possible systematic approach to professional and vocational curriculum management. Again note, that the Guide is not to become a "formal requirement" type document. It is only a GUIDE! It does not replace or supplant the AMRA or AMA Essentials or any other formal requirement.

It is hoped the Guide will become a dynamic document, with the profession providing input for regular updating.

ORGANIZATION OF THE GUIDE

The Guide is divided into five sections, as follows:

Section I - Introduction
Section II - Philosophy and Intent of Curriculum Management
Section III - Curriculum Management Design
Section IV - Alternative Educational Models
Section V - Summary

Section III is the most voluminous section containing materials, checklists and recommendations on four phases of school/curriculum management.
SECTION II
INTENT & PHILOSOPHY

GENERAL
This section discusses the original intent, investigation process, expert opinions and the need for a detailed management model.

INTENT
The Project Staff had intended to go into the curriculum design literature and reap the harvest for medical records. Instead of a bountiful harvest, the field was found to be full of rocks and stumps. It took many months just to get a plow through it.

INVESTIGATION
The Project Staff, assisted by the FORE librarian, made multiple efforts to search and identify curriculum design information. The searches included three library and 12 ERIC searches. As a result, 30 books, 40 ERIC reference documents and 216 articles were acquired, reviewed and documented. The goal was to identify themes and specific methods for overall curriculum design.

EXPERT OPINIONS
No consistent theme was found. Experts developed multiple themes such as:

- The Role of Process Evaluation in Program Development.
- How One Set of Programmed Teaching Materials was Developed.
- Strategies in Materials Development.
- The Role of the Curriculum Developer.
- Using Materials as a Focus for Curriculum Development.
- Needs Assessment Uses.
Even definitions of curricula were difficult to synthesize, for they ranged from "Curricula in sum are the rational or systematic approaches of getting people to learn something" to "A set of courses."

The experts either dealt with small practical portions of curriculum management or expounded the theoretical and philosophical aspects of curricula.

It became apparent that the experts were dealing with more than just the process of sequencing courses. They were dealing with management of the "system" used to establish and maintain "a set of courses constituting an area of specialization" (Webster). This system involves more than just faculty and students. It must manage all the factors which directly and indirectly affect student learning.

AMRA's research found that many factors affect learning, and they should all be managed effectively to assure adequate instruction.

NEED FOR A FORMALIZED SYSTEMS MODEL

The need for a systematic approach to curriculum management has been established by research and expert opinion. This systematic approach must include all the basic and necessary items involved, including:

- Needs Assessments
- Advisory Committees
- School Policies
- Accreditation
- Task Analysis
- Manpower Studies
- Behavioral Objectives
• Lesson Plans
• Test Items
• Recruitment/Enrollment
• Classroom Management
• Placement
• Evaluation

Medical record professionals are not specifically trained as school managers. They do have excellent education and experience in administration and supervision. Given a management or systems-based model which provides checklists, forms, suggested procedures, policy questions, and topical comments to guide them, they will be able to effectively manage a professional curriculum.

A formalized Curriculum Management model is needed; however, it should be considered as a comparative model, not an AMRA requirement.
SECTION III
CURRICULUM MANAGEMENT DESIGN

GENERAL

There are as many different ways of approaching a management task as there
are of approaching a design task. Each approach has relative strengths and
weaknesses, and medical record personnel appear to enjoy discussing the
merits of each.

On one point, however, most everyone agrees. That is, a systematic approach,
which considers the various interrelated elements, will eliminate many pro-
blems, expose pending problems, and provide a "roadmap" of how one could
proceed. Therefore, a systems-approach was adopted as the method for the
presentation of a curriculum management design.

The design, as set forth in this Guide, contains four phases. These phases
are designated:

  Phase A - Assessment   "On Your Mark"
  Phase B - Planning     "Get Set"
  Phase C - Implementation "Go!"
  Phase D - Evaluating   "Finish and Measure"

There is a PERT-type diagram included in the back of this Guide. It shows
the items in each Phase and will help follow the work flow. Spread it out
on the desk or tack it up on the wall. Note that the blocks contain
paragraph numbers for easy text reference.
In this Curriculum Management Guide, Assessment is when you:

- Examine the local needs for an educational program.
- Examine your ability to adequately meet that need (and)
- Decide whether or not to commit the resources to develop an adequate program.

The Assessment Phase has eight basic elements, which are:

A.1 Decision to Investigate
A.2 Obtain Institutional Approvals
A.3 Obtain MRA/MRT Essentials
A.4 Establish Advisory Council
A.5 Assess Needs
A.6 Document Assessment Results
A.7 Document Purpose, Rationale, Assumptions, and Values
A.8 Decision to Proceed with Planning Phase

A.1 DECISION TO INVESTIGATE

New programs get their start when someone says, "Hey, why don't we have a medical record program here?" That's a good question, and Assessment is the process used to answer, "why...here?"

It is important to recognize that one should not say, "That's a good idea, put Medical Records in our catalog!" The proper response is, "That's a good idea, let's investigate to prove if it's needed and whether we can develop an adequate course."
A.2 OBTAIN INSTITUTIONAL APPROVALS
Most institutions have some type of approval mechanisms for all new activities. Check with your professional or vocational offices before proceeding. This may save you many heartaches in the future.

A.3 OBTAIN MRA/MRT ESSENTIALS
AMRA publishes the minimum essentials for accreditation of MRA and MRT educational programs. For copies of the current Essentials and a complete data package, write:

Academic Division
American Medical Record Association
Hancock Center – Suite 1850
875 N. Michigan Avenue
Chicago, Illinois 60611

Please give the current Essentials careful review before proceeding. Also, note that these contain minimum requirements, not the expected or average requirements.

A.4 ESTABLISH ADVISORY COUNCIL
An Advisory Committee is a group of people representative of a professional community and an academic community. They can be of expert assistance in assessment activities, as well as in the other phases.

Advisory Committees can function at various levels, such as:

1. All Health/Medical Professional Training (or)
2. All Allied Health Professions Training (or)
3. Medical Record Training (or)
4. Medical Record Technician Training (or)
5. Medical Record Continuing Education Courses
If an Advisory Committee now exists, it can be supplemented by adding medical record personnel from various types of local health care facilities; however, a special purpose, Medical Record Committee is highly recommended.

The AMRA E&R* Committee produced an excellent document entitled, Guidelines for Advisory Committee for MRT and MRA Programs. It contains detailed information on:

- Functions and Responsibilities
- Membership
- Advisory Committee Officers
- Length of Service of Committee Member
- Meetings
- Minutes
- Considerations in Selecting Advisory Committee Members

Request it from AMRA, Academic Division, 875 N. Michigan, Chicago, Illinois 60611.

If an Advisory Committee does not exist, we recommend that one be established as early in the process as possible.

Advisory Committee's tend to contribute in the following areas:

1. Manpower Needs
2. Locally-Required Competencies
3. Job-Specific Tasks
4. Clinical Site Selection
5. Instructional Faculty Recruitment

*Education & Registration
6. Program Promotion/Information Dissemination
7. Student Recruitment
8. Evaluation Assistance
9. Placement Assistance
10. Course Planning Assistance
11. Providing other Classroom Resources (equipment, materials, supplies)

Committees meet periodically (on a continuing basis) to review the program, courses, contents, outcomes and to advise accordingly.

Members are normally selected on the basis of professional interest, availability and recognized leadership in the health and medical record professions.

Samples of various forms are presented in Appendix A. Remember that these are "guides" and should be rewritten to meet the specific local needs. The samples included are:

- Invitation and Return Post Card
- Appointment Announcement
- Meeting Announcement
- Follow-up Letter
- Sample Certificate
- Letter of Appreciation
For additional information on the advisory functions, review
The Role of the Advisory Committee in Occupational Education, Albert
J. Riendez, American Association of Junior Colleges.

Other publications and their authors are:

Samuel M. Burt,
Industry and Vocational-Technical Education,

The Advisory Committee and Vocational
Vocational Association, 1969.

H. M. Hamlin,
Citizen's Committees in the Public Schools,
Danville: Interstate Printers and Publishers, Inc.

Lloyd J. Phipps and Kenneth Knell,
"The How of Successful Citizen Advisory
Committee Operation," Urbana: College of
Education, University of Illinois, 1968.

A. 5 ASSESS NEEDS

This element is where all the salient data is gathered and
analyzed. It contains ten steps:

A.5.1 Check for Competing Schools. Make sure that
there are no existing programs in your area. Efforts
to establish a program which competes with other local
programs may result in failure of both.

AMRA maintains a list of currently accredited programs.
Check with the AMRA Academic Division for current
information.
A.5.2 Investigate Availability of Faculty. Make sure that adequate professional resources are available for the program. Identify probable candidates for school director and classroom teachers. If local resources are inadequate, investigate the potential of recruitment from other geographical areas.

A.5.3 Investigate Availability of Clinical Sites. The AMRA Essentials make clinical training a necessary part of both the MRA and MRT programs. Check with local health-care facilities on the possibility of providing directed clinical practice. JCAH accreditation required.

A.5.4 Investigate Student Interest. Are there enough potential students in your geographical area to support a MR program?

To pre-determine number of potential candidates, use the following methods:

a. Survey of high school counselors.

b. Survey of medical record departments.

c. Survey Advisory Council members.

d. Contact state employment office.

If you cannot readily identify an adequate supply of students for the next five class-years, you may either plan an aggressive recruiting campaign or decide not to develop a program.
A.5.5. Investigate Need for Graduates. This activity should answer the question, "Where will our graduates work?" Also, "How many MRT/MRA's will be needed during the next five years?"

Manpower forecasting is "difficult" at best. However, in the attempt to be responsive to the future community needs, educational institutions should undertake forecasts.

Some Suggestions:

- Use Advisory Committee.
- Look at your State Employment office forecasts for the health field.
- Contact your State-Level Division of Vocational and Technical Education for information.
- Regularly review newspaper "want-ads."
- Try surveys of local health-care institutions.

A sample inquiry form has been designed and is included in Appendix A, Page 7. This form is intended to be sent to all health care institutions (hospitals, nursing facilities, ambulatory care facilities, clinics, educational institutions, etc.) in your geographical area. The reduced data should provide an insight into local employment trends in Medical Record practice.

A manpower forecast may be performed on a regular-periodic basis to keep you informed as to changes in the perceived trends.
A.5.6. Check on Availability of Instructional Facilities

Will there be classroom space available for the additional medical record courses? Will these classrooms and laboratories be available during the appropriate time interval?

Check last years classroom utilization. Ask, "Are classrooms becoming less available or more available each year?" Then compare your forecasted facility needs to the forecasted classroom availability. Will there be adequate space for the program in two years? five years? ten years?

* NOTE *

The Essentials require adequate library facilities with medical record program materials.

A.5.7. Check on Availability of Supporting Academic and Health Courses. Check to see if your institution offers any courses which will support a medical record curriculum. The related courses might be part of existing programs, such as other allied health education, nursing, pre-med, or business. A list of possible existing courses would include:

- Anatomy
- Biology
- Bacteriology or Microbiology
- Business Correspondence
- Chemistry
- Data Processing
- Epidemiology
- Legal Aspects
- Mathematics
- Office/Business Machines
- Management
- Statistics
- Typewriting
A.5.8 Estimate Costs. When you do a Needs Assessment, also estimate costs. The net cost data will be needed by your educational administrators when they consider your program. The formula for Net Cost is:

\[
\text{Revenue} - \text{Expenditures} = \text{Net Cost}
\]

A simplified form for estimating costs is shown on the next page.

A.5.9 Investigate Funding. During the Assessment Phase, information on all possible funding sources should be examined. These include grants, contracts, and fund raising campaigns:

- **Grants (Direct Allocation)**
- **Contracts and Grants (Special Purpose)**
  - City
  - County
  - State
  - Regional
  - Federal
  - Foundations
- **Fund Raising Campaigns** (Applicable if you have a foundation established.)

Sources of funding information include:

- **State Level Announcements & Publications**
- **Federal Announcements**
  - Federal Register
  - Commerce Business Daily
  - Special Publications
- **Catalog of Federal Domestic Assistance**
## Fiscal Considerations

### Determining Actual Costs

**Revenue**

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Student Tuition</td>
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</tr>
<tr>
<td>Student Fees</td>
<td></td>
</tr>
<tr>
<td>State Reimbursement</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Revenue Per Student = Total Revenue / Total Students

**Costs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Staff (108%)</td>
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</tr>
<tr>
<td>Equip. Purchase &amp; Installation</td>
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</tr>
<tr>
<td>Equip. Maintenance</td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td></td>
</tr>
<tr>
<td>Facilities Expense</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Cost Per Student = Total Cost / Total Students

Difference Between Revenue/Costs Per Student = Cost Per Student - Revenue Per Student

To be used as a comparison figure against state-wide comparable data, if available.

---

**Figure III - 3. Cost Estimating Form**


Identify Other Community Resources:

What are "Community Resources"? They include:

- Business
- Industries
- Governmental Agencies (Federal, State, Local)
  Such as: CETA, Municipalities, SES, etc.
- Other Health Care Facilities
- Service organizations, such as:
  - Rotary
  - Lions
  - JC's
- PTA's
- Informal Social Clubs
- Chambers of Commerce
- Unions
- Other Schools

Why consider them as resources? Because they can provide:

- Advice on program feasibility
- Advisory Committee Members
- Equipment Donations
- Space Donations
- Classroom support; such as:
  - A. Instructors
  - B. Guest Speakers
  - C. Resource People
- Supplies and material donations
- Employers of completors
- Clinical Experiences
A.6 DOCUMENT "NEEDS ASSESSMENT" RESULTS

COMMENT: "Documentation is the cross which administrators bear"

If you bother to do an "assessment", you should document it.
A simple summary may be adequate. One suggested format follows:

<table>
<thead>
<tr>
<th>AREAS</th>
<th>MAJOR FINDINGS</th>
<th>GO/NO-GO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisory Committee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Resources</td>
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<tr>
<td>Manpower Forecasting</td>
<td></td>
<td></td>
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<tr>
<td>Student Prospects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities/Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Funds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONCLUSION --- GO/NO-GO (circle one)

A.7 DOCUMENT PURPOSE, RATIONALE, ASSUMPTIONS AND VALUES

Document the answers to these questions:

- What is the purpose of the program?
  - What occupational level will be taught?
  - What kinds of institutions use your graduates?
  - How does the program fit into regional "articulation"?
  - Other purposes?
• Why are you providing the training?
  - Improvement of Local Practice?
  - Shortage of Personnel?

• What are the assumptions on which your program is based?
  - Growing Job Market?
  - Increase in Number of Institutions?
  - Changing Job Market?

• What is the "value set" you will try to develop in your students?
  - Service?
  - Technical Accuracy?
  - Position?
  - Professionalism?

A.8 CRITERIA FOR DECISION-MAKING

Before advancing to the Planning Phase, a formal decision should now be made.

First, review these basic questions:
• What are trends?
  - Supply of students
  - Demand for completors
• What is the estimated cost vs income?
• What is the availability of staff?
• What is the availability of facilities, equipment and supplies?
Then, base your judgement on the actual results of the Needs Assessment, as follows:

- **Local Medical Record Personnel:** Did you receive relevant positive or negative feedback?

- **Advisory Committee:** Did they offer a GO/NO-GO recommendation?

- **Community Resources:** Can and will the community support this program?

- **Manpower Forecasting:** Were the results encouraging or discouraging?

- **Student Prospects:** Is there any reason to believe the program would be poorly attended?

- **Facilities & Equipment:** Are they or will they be available?

- **Estimated Costs:** Will we make or lose on this program? (Do not reject program simply because it does not make money!)

- **Available Funds:** Are there other sources of funds which should be developed?

**FINAL DECISION IS:** GO or NO-GO (Based on feasibility)
PHASE B
PLANNING

The Assessment Phase was the "ON YOUR MARK"; the Planning Phase is where you "GET SET".

The Planning Phase has 10 basic elements, which are:

B.1 Obtain Institutional Approvals
B.2 Review Institutional Policies
B.3 Review AMA and AMRA Policy Documents
B.4 Appoint Program Director
B.5 Document Evaluation Design
B.6 Design Curriculum
B.7 Document Facility Plan
B.8 Document Equipment and Supplies Requirements
B.9 Submittal for Necessary Approvals.
B.10 Decision to Proceed

B.1 OBTAIN INSTITUTIONAL APPROVALS

During the Assessment Phase the level of commitment (money, staff, space) by the institution was low. However, during the planning phase a higher level of commitment is required.

Many institutions have a formal approval requirement to be met before key staff can be hired or any formal actions are undertaken. Check with your Division Head or Dean for guidance.
B.2 REVIEW INSTITUTIONAL POLICIES

Be on the lookout for formal and informal policies, requirements, practices and procedures on such things as:

a. Employment Contracts (Affirmative Action Constraints)
b. Space Allocations (Offices and Classrooms)
c. Equipment and Supplies
d. Budget Responsibilities
e. Payroll Responsibilities
f. Teachers-Union Requirements
g. Tenure Policies
h. State-Graduation Requirements
i. Institutional-Graduation Requirements
j. Curriculum Design
k. Course Lists
l. Course Descriptions
m. Textbook Selection (Adoption)
n. Lesson Plans
o. Class Schedules
p. Catalog Requirement
q. Enrollment Procedures
r. Attendance Reporting
s. Evaluation (student and staff)
t. Grading and Grade Reporting

As you hunt for and review these things, remember that schools are not managed as are hospitals. Be prepared for some surprises.
B.3 REVIEW AMA AND AMRA DOCUMENTS

AMRA and the AMA publish various policy statements and guidelines. These should be reviewed again. The key documents include:

a. Essentials of an Accredited Educational Program for the Medical Record Administrator (Medical Record Technician).

b. Guidelines for Essentials of an Accredited Educational Program for Medical Record Administrators.

c. Guidelines for the Development of Medical Record Technician Programs in Junior Colleges.

d. Policies and Procedures for Accreditation of Educational Programs for Medical Record Personnel.

Check to make sure you have current documents. They are revised regularly.

* NOTE *

AMRA also publishes guidelines for MT Transcriptionist/Clerk (post-high school) and high school work study.

B.4 APPOINT PROGRAM DIRECTOR

The proposed Program Director should be identified before any active planning takes place. Remember that the proposed Director must be approved by the AMA if the program is to be accredited. Applications and information may be obtained from: Department of Allied Medical Professions and Services, Division of Medical Education, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

* NOTE *

While not required, the AMRA Academic Division should be notified as to the intent to develop a program and its proposed Director.
B.5 DOCUMENT OVERALL EVALUATION DESIGN

Now is the time to decide how to measure the relative success or failure of the program. It is recognized by most school administrators that the grades given students are not a predictable indicator of the success of a program. Therefore, the onus of program and student-outcome evaluation falls on the Program Director, and it currently appears to fall harder on professional and vocational faculty than on academic faculty.

The Program Director must decide on what evaluation bases data will be gathered and analyzed.

- **Who** will be evaluated:
  - Students? (of course)
  - Faculty?
  - The Program Director?

- **What** will be evaluated:
  - Clinical Sites?
  - Testing Methods?
  - Teaching Methods?
  - Educational Materials?
  - Overall Student Performance?
    - In Classroom?
    - On Site (Clinical)?
    - On AHRA Exam?
    - 5 Years After Graduation?
  - Facilities?
  - Equipment?
  - Supplies?
  - Class Schedules?
  - Class-Unit Sequences?
  - Local Articulation?
  - Student-Support Services?
  - Administrative-Support Services?
How will evaluative data be gathered, reduced and presented?

What will be identified as a result of the evaluation?
- Success Factors?
- Negative Factors?
- Need for Alternative Learning Methods?
- Need for Improved Instructional Materials?
- Need for Faculty Development?
- Need for Improved Testing and Diagnostic Methods?
- Need for Improved Student Services?

All evaluative efforts should be directed toward one objective. That objective should be:

**IMPROVEMENT OF THE TOTAL EDUCATIONAL/TRAINING EXPERIENCE.**

Due consideration should also be given to the measurement of "job-related competencies". The Roles and Functions Project Final Report indicates that competency-based testing is now the only legal way to select and promote personnel. If this be true, then the responsibilities to develop these job-related competencies may rest on the educational institutions.

B.6 CURRICULUM DESIGN

In concept, curriculum design is simple. Only three questions have to be answered. They are:

1. What **THINGS** should each student learn?
2. How will each student learn those **THINGS**?
3. How will the teacher know each student has learned those **THINGS**?

However, as simple as the concept is, the questions are extremely difficult to answer (and in some instances cannot be answered). The process can sometimes be difficult.

**THINGS**: knowledge base, job-specific skills and attitudes.
A systems approach to curriculum design was adopted to present one way of handling the various complexities. Figure B-1 shows a graphic representation of a systems approach to curriculum design.

Figure B-1. Overall Curriculum Design

Figure B-1 shows the various levels which can be worked-through to arrive at a viable curriculum. Note that the steps start with general items and develop into very specific items.
• Job Definition

Step 1 - Define Occupational Cluster
(This will normally be Health or Medical)

Step 2 - Define Occupational Area.
(This will normally be Medical Records)

Step 3 - Establish Job Title
(This will normally be MRT or MRA)

• Task Analysis

Step 4 - Identify "job-specific" knowledges required of the Job Title.

Step 5 - Identify "job-specific" skills (or competencies) required of the Job Title.

Step 6 - Identify "job-specific" affects required of the Job Title.

Step 7 - Select "relevant" knowledge, skills and affect items; prepare behavioral objectives* and test-items for them.

• Lesson Plans:

Step 8 - Arrange the behavioral objectives into institutional units (sections, units, courses, labs, ..., etc.)

Step 9 - Prepare lessons to document how the students will learn to perform the behavioral objectives. Lessons generally indicate the resources (books, worksheets, etc.,) to be used.

Step 10 - Establish an expected time-frame in which the students will learn to perform the behaviors.

*Behavioral Objective: A statement of expected student performance; containing one performance, the resources given the student, and the measure of successful performance.
A flow-diagram depicting the details of curriculum design is shown in Figure B-2. It contains 16 items, which are:

- B.6.1 Review Task Analyses
- B.6.2 Examine Functional Elements
- B.6.3 Prepare Weighted Profile
- B.6.4 Study Weighted Elements
- B.6.5 Review AMA/AMRA Essentials
- B.6.6 Review State and Local Requirements
- B.6.7 Study Local Course Offerings
- B.6.8 Integrate MR Elements and Local Offerings
- B.6.9 Identify Lesson Plan Needs
- B.6.10 List Student Outcomes
- B.6.11 Formulate Instructional Strategy
- B.6.12 Prepare Test Items
- B.6.13 Review Existing Materials
- B.6.14 Finalize All Unit-Lesson Plans
- B.6.15 Update, Scope and Sequence Chart
- B.6.16 Finalize Program Plan

**B.6.1 REVIEW TASK ANALYSES**

The Program Faculty should review all current task analyses on medical record practice. One recent study of interest is:

*18 Years of Change 1957-1975: Functional Changes in Medical Record Practice*, 1975, American Medical Record Association.

Check with the FORE Library for other resources.
Fig. B-2. Details of Curriculum Design (flow diagram)
A summary of task analysis data should be prepared for planning purposes and for orientation of the Advisory Committee.

B.6.2 EXAMINE FUNCTIONAL ELEMENTS

The Roles and Functions Project synthesized a group of 19 items regarding medical record practice and called them functional elements. These functional elements are:

I. Admitting Functions
II. Current Trends in Health Care Delivery
III. Health Information Systems
IV. Classification and Indexing Systems
V. Licensing, Certifying and Accrediting Agencies
VI. Legal Aspects
VII. Management, Principles and Functions of
VIII. Health Care Records; Content, Format, and Documentation of
IX. Medical Staff, Organization and Functions
X. Information Storage & Retrieval
XI. Personnel Administration
XII. Health Statistics, Collection and Display
XIII. Quality Assurance Systems
XIV. Transcription
XV. Typing
XVI. Anatomy and Physiology
XVII. Medical Terminology
XVIII. Medical Science
XIX. Other - Miscellaneous

The Program Faculty should be familiar with these elements and the areas contained. If the elements are not familiar, review the functional areas contained in the Bank of Behavioral Objectives for Medical Record Practice, 1975, American Medical Record Association.

A summary of these elements may have to be prepared for the Advisors. The Advisors may be asked to define the training needs by preparing a weighted profile of the elements.
B.6.3 PREPARE WEIGHTED PROFILE

The Advisory Committee or a larger ad-hoc group should now prepare a profile for each occupational title the school expects to educate.

Figure B-3, on the following page shows the recommended form. The recommended procedure includes 9 steps:

Step 1. Give each Advisor a copy of the form (Figure B-3) and 45 tokens. The tokens can be paper clips, buttons, pennies, ..., anything which will fit in a cell.

Step 2. State to them which occupational title they are to rate.

Step 3. Discuss with them the various elements. Explain what is contained in each element. Use the "Bank" as a resource.

Step 4. Present and discuss summaries of current task analyses.

Step 5. Present and discuss the results of the local needs assessments.

Step 6. Instruct the group members, taking one item at a time and assure that each member has correctly followed the instructions. The instructions are:

(a) "Place one token in the '1' column for each and every element."

(b) "Examine the elements and decide which elements are more important than the others. Then place a token in the '2' column for the more important elements."

* NOTE *

All questions should be answered as they come up. Refer to the Bank, and the prepared summaries as necessary.
<table>
<thead>
<tr>
<th>AREA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I ADMITTING FUNCTIONS</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II CURRENT TRENDS IN HEALTH CARE DELIVERY</td>
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<tr>
<td>III HEALTH INFORMATION SYSTEMS</td>
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<tr>
<td>IV CLASSIFICATION &amp; INDEXING SYSTEMS</td>
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<td>V LICENSING, CERTIFYING &amp; ACCREDITING AGENCIES</td>
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<tr>
<td>VI LEGAL ASPECTS</td>
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<td></td>
<td></td>
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<tr>
<td>VII MANAGEMENT, PRINCIPLES &amp; FUNCTIONS OF</td>
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<td></td>
</tr>
<tr>
<td>VIII HEALTH CARE RECORDS CONTENT, FORMAT &amp; DOCUMENTATION OF</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>IX MEDICAL STAFF, ORGANIZATION &amp; FUNCTIONS</td>
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</tr>
</tbody>
</table>
There have been 18 functional areas identified by the AMRA:

**FUNCTIONS IN MEDICAL RECORD PRACTICE**

**HOW DO YOU RATE THEM FOR**

*(enter job title)*

<table>
<thead>
<tr>
<th>AREA</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X INFORMATION STORAGE &amp; RETRIEVAL</td>
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<td>XI PERSONNEL ADMINISTRATION</td>
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<tr>
<td>XIII QUALITY ASSURANCE SYSTEMS</td>
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<tr>
<td>XIV TRANSCRIPTION</td>
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<td></td>
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</tr>
<tr>
<td>XV TYPING</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>XVI ANATOMY &amp; PHYSIOLOGY</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>XVII MEDICAL TERMINOLOGY</td>
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</tr>
<tr>
<td>XVIII MEDICAL SCIENCE</td>
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</tr>
</tbody>
</table>

*Figure B-3. Sample Profile Form*
(c) "Examine the elements with a token in the '2' column. Decide which of these '2' elements are more important than the other '2'-rated elements and place a token in the '3' column for those more important elements.

* NOTE *

Remember: Rate the elements according to their importance to medical record practice at the occupational levels you intend to teach.

(d) "Examine the elements with a token in the '3' column. Decide which of these are more important than the other '3'-rated elements. Put a token in the '4' column for the more important elements."

(e) "Examine the elements with a token in the '4' column. Decide which of these are more important than the other '4'-rated elements. Put a token in the '5' column for the more important elements."

(f) "You may have run out of tokens in the process, or you may have tokens left over. That's ok but now you must finalize your decisions and follow the rules.

Here are the Rules:

Rule 1 - All 45 tokens must be used.

Rule 2 - At least one element must be rated '5' (more than one element may have '5').

Rule 3 - The lower numbers in a row must all be filled. For instance, you cannot put a token on '5' for an element and leave '1', '2', '3', or '4' empty.

Rule 4 - The tokens may be rearranged any way you want, as long as Rules 1, 2, and 3 are not violated. (You may even remove a '1' from an unimportant element to make it a '0'.)

(g) "When you are satisfied with the placement of your 45 tokens, let me know."

Step 7. Tabulate the ratings from each member for each element.

Make sure the total for each member is 45.
Step 8. Add up the ratings for each element.

Step 9. Prepare a ranked list of the elements and their total scores, placing the highest score on the top. This ranked list shows the Advisor's judgements as to the appropriate functions the program graduates should be able to perform, and their relative weights.

* NOTE *

Most institutions attempt early identification of faculty and require preparation of lesson plans as a pre-condition of hiring. If this be the case, involve classroom faculty in items B.6.4 to B.6.15.

B.6.4. STUDY WEIGHTED ELEMENTS

This "local profile" should now be discussed and studied. It can be compared to a synthesized profile, which was prepared by the Advisory Council to the Roles and Functions Project (1975). These profiles are shown in Figures B-4 and B-5.

Ranked lists are presented in Table B-1. Each element in the profiles is a section in the Bank of Behavioral Objectives for Medical Record Practice, AMRA.

Before proceeding, finalize a weighted-ranked list of the functional elements. This list should reflect specific local needs and will become the design basis for the medical record portion of education.

B.6.5. REVIEW AMA/AMRA ESSENTIALS

Become completely familiar with the requirements for accreditation. Make sure your copy of the Essentials is current.

III-29
PERCENT (OF RRA)

\[ PERCENT = \frac{\text{Function}}{\text{Total Functions}} \times 100 \]

**FUNCTIONAL ELEMENTS IN MEDICAL RECORD PRACTICE**

- ADMITTING FUNCTIONS
- ANATOMY & PHYSIOLOGY
- CLASSIFICATION & INDEXING SYSTEMS
- CURRENT TRENDS
- HEALTH CARE RECORDS
- HEALTH INFO. SYSTEMS
- HEALTH STATISTICS
- INFORMATION STORAGE
- LEGAL
- LIC., CERT., & ACCRED. AGENCIES
- MANAGEMENT
- MEDICAL SCIENCE
- MEDICAL STAFF
- MEDICAL TERMINOLOGY
- OTHER - MISC.
- PERSONNEL ADMINISTRATION
- QUALITY ASSURANCE
- TRANSCRIPTION
- TYPING

**Figure B-4. Synthesized MLA Profile (1975)**

**III-30**

**42**
Figure B-5. Synthesized MRT Profile (1975)
TABLE B-1: National Advisory Council Rankings

<table>
<thead>
<tr>
<th>ELEMENTS: MRA</th>
<th>%</th>
<th>ELEMENTS: NRT</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management, Principles &amp; Functions of</td>
<td>9.7</td>
<td>Health Care Records Content, Format &amp; Documentation of</td>
<td>9.7</td>
</tr>
<tr>
<td>Health Care Records Content, Format &amp; Documentation of</td>
<td>8.6</td>
<td>Information Storage &amp; Retrieval</td>
<td>9.3</td>
</tr>
<tr>
<td>Health Information Systems</td>
<td>8.5</td>
<td>Classification and Indexing Systems</td>
<td>7.8</td>
</tr>
<tr>
<td>Information Storage &amp; Retrieval</td>
<td>8.0</td>
<td>Quality Assurance Systems</td>
<td>6.8</td>
</tr>
<tr>
<td>Quality Assurance Systems</td>
<td>7.8</td>
<td>Health Statistics, Collection and Display</td>
<td>6.4</td>
</tr>
<tr>
<td>Personnel Administration</td>
<td>7.3</td>
<td>Personnel Administration</td>
<td>6.1</td>
</tr>
<tr>
<td>Health Statistics, Collection and Display</td>
<td>6.2</td>
<td>Management, Principles &amp; Functions of</td>
<td>5.8</td>
</tr>
<tr>
<td>Legal Aspects</td>
<td>6.0</td>
<td>Health Information Systems</td>
<td>5.8</td>
</tr>
<tr>
<td>Classification and Indexing Systems</td>
<td>5.7</td>
<td>Medical Terminology</td>
<td>5.7</td>
</tr>
<tr>
<td>Current Trends in Health Care Delivery</td>
<td>5.4</td>
<td>Transcription</td>
<td>5.1</td>
</tr>
<tr>
<td>Licensing, Certifying &amp; Accrediting Agencies</td>
<td>4.7</td>
<td>Legal Aspects</td>
<td>4.6</td>
</tr>
<tr>
<td>Medical Science</td>
<td>4.6</td>
<td>Medical Staff, Organization and Functions</td>
<td>4.3</td>
</tr>
<tr>
<td>Medical Staff, Organization and Functions</td>
<td>4.5</td>
<td>Medical Science</td>
<td>4.3</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>4.0</td>
<td>Licensing, Certifying &amp; Accrediting Agencies</td>
<td>4.0</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology</td>
<td>3.0</td>
<td>Anatomy &amp; Physiology</td>
<td>3.8</td>
</tr>
<tr>
<td>Admitting Functions</td>
<td>3.0</td>
<td>Admitting Functions</td>
<td>3.8</td>
</tr>
<tr>
<td>Transcription</td>
<td>1.6</td>
<td>Current Trends in Health Care Delivery</td>
<td>3.7</td>
</tr>
<tr>
<td>Typing</td>
<td>1.2</td>
<td>Typing</td>
<td>2.9</td>
</tr>
</tbody>
</table>
B.6.6 REVIEW STATE AND LOCAL REQUIREMENTS

Obtain the degree and graduation requirements for your school and your state. Become completely familiar with them.

B.6.7 STUDY LOCAL COURSE OFFERINGS

Review in the course catalogs, the various courses which might support your program. Possibilities were listed and discussed in Phase A, Assessment.

B.6.8 INTEGRATE MR ELEMENTS WITH LOCAL OFFERINGS

Three major items have been reviewed and analyzed. They are:

- Functional elements which must be developed by MR Education
- Existing Courses which Support MR Education
- Academic Requirements for Graduation

Now they must be integrated into a composite, well-reasoned, properly timed and workable sequence. One curriculum designer describes this effort as, "trying to complete a puzzle in which the pieces appear to be purposefully designed not to fit."

The academic graduation requirements must be met; however, if the MR elements are not logically developed and covered as weighted, the professional side of the education will suffer.

The following process is recommended:

Step 1 - Arrange the MR elements into a reasonable sequence, indicating the appropriate weights for each element.

Step 2 - Decide which local professional/technical courses might fit into the above sequence.

Step 3 - Identify academic courses which are needed to complete graduation requirement.
Step 4 - Compare and contrast the elements, existing professional courses and academic courses.

Step 5 - Prepare a preliminary course list for the complete program.

Step 6 - Assign tentative weights to each course.

Step 7 - Prepare a list of probable "instructional units" (topics?) for each course.

Step 8 - Prepare an overall "Scope and Sequence Chart" for all the instructional units. Figure B-5 shows a typical chart format and design.

Step 9 - Review the provisional curriculum. Modify as necessary until an optimum design has evolved.

Be sure to review the curriculum against the Essentials and the graduation requirements.

Step 10 - Document provisional curriculum.

* NOTE *

A draft of the provisional draft may be sent to the Academic Division, ANSA, for comment and advice.

P.6.9 IDENTIFY LESSON PLAN NEEDS

Two questions should be answered before any lesson plans are developed. They are:

- Which units and courses need lesson plans prepared?
- What should a lesson plan contain?

First, a review of your detailed Scope and Sequence Chart will reveal those courses and units which need new or revised lesson plans. Prepare a list of all those units. It might help if the list was prioritized, so those most important (needed first) would be done first.
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
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<td></td>
<td>1</td>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Figure B-5. Scope and Sequence Summary
Format of the lesson plan is important, for it could dictate the contents. Check with your division to see if any standard or preferred formats exist. A standardized format does have utility, providing for peer-review, transfer of teaching responsibilities, team-teaching, ease of update, etc. However, it also has drawbacks, since each teacher has their own teaching style and probably should prepare their own lesson plans.

Figure B-6 shows three typical formats for lesson plans, each reflecting a discrete teaching style.

- **Format (a):** approaches instruction using the competency-development strategy, where all learning activities and testing are related to pre-prepared behavioral objectives.
  
  *NOTE*

  Based on research findings, the Roles and Functions Project recommends the behavioral-objective approach.

- **Format (b):** reflects a text-book orientation, where learning activities follow a specific author's developmental philosophy.

- **Format (c):** approaches instruction on a day-by-day basis. While normally utilized for lecture methods, it can be modified for other teaching techniques.

  *NOTE*

  Individualized Instruction is discussed in Section IV as an Alternative Educational Model.
(a) Objective-Based Plan (3-column)

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>ACTIVITY</th>
<th>MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Material-Based Plan (4-column)

<table>
<thead>
<tr>
<th>TEXT-REFERENCE</th>
<th>CLASSROOM ACTIVITIES</th>
<th>ASSIGNMENTS</th>
<th>TESTING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

(c) Chronological Presentation (4-column)

<table>
<thead>
<tr>
<th>DAY/WEEK</th>
<th>LECTURE</th>
<th>MATERIAL</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
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<td></td>
</tr>
<tr>
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<td>- Day 5</td>
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</tbody>
</table>

Figure B-6. Lesson Plan Samples
B.6.10 LIST STUDENT OUTCOMES

NECESSITY TO DEFINE COMPETENCIES

As competency-based evaluation in employment and government-regulated institutions becomes more important, it appears the responsibilities of teaching job-related competencies will be placed with the educational community. If this turns out to be so, lesson plans should be developed using job-related and measurable behavioral objectives. It would also appear necessary to develop classroom tests so they actually test for job-related competencies.

Behavioral Objectives

One simplified definition of "behavioral objective" is:

A Statement of a Desired Outcome

That is, "What should the student be able to do after completing each educational experience?"

Most authorities agree that each behavioral objective contain a minimum of two elements, which are:

- A Single Performance, which identifies the one thing to be demonstrated, such as:
  - Recall a specific code?
  - Redesign a form?
  - Identify a new disease trend?
A Measure, which answers questions like:

- What is the required level-of-performance?
- What is the correct response?
- How long to do it?
- How well should it be done?

Good behavioral objectives may be difficult to write; however, adequate definition of expected student outcomes is one of the necessary and essential competencies for educational faculty.

There are several excellent handbooks which will help develop the ability to prepare behavioral objectives. They include:


**Resources**

AMRA has produced a series of resources to help educators develop performance statements. They will include:

- **Bank of Behavioral Objectives**; was produced by the Roles and Functions Project as a developmental resource for test developers, curriculum planner, educational-materials developers, classroom faculty and researchers. It appears to be a formidable document; however, the contained performances are broken down into 19 functional elements. Each element is further subdivided into knowledge and skill functional areas. Within each area, individual performances are provided, along with conditions, measures, references and the minimum level of performance.
Course Outlines; were developed as a guide for classroom faculty. The outlines contain general objectives, student objectives, subject matter outlines, and book and article references.

18 Years of Change:1957-1975, AMRA; was produced to identify the changes in medical record practice between 1957 and 1975. Task statements for the various MR roles are documented.

RECOMMENDED PROCEDURE

It is recommended, as a first step in lesson plan development, the expected student outcomes be listed in three groups:

- Knowledges; things to be recalled or comprehended
- Skills; things to be performed (application, analysis, synthesis, and evaluation)
- Affects; how one should act or react (due to attitude)

The preliminary lists should not be developed on lesson plan forms, for State-level research findings indicate that, for MR practice, affects, skills and knowledge should be weighted equally, implying that each deserves equal attention in the educational process.

There is a position-paper on affect contained in the Final Report of the Roles and Function Project. The paper documents the recommendation that affect, measure and development be directed toward "ethical concerns." It also documents the recommended level-of-performance for each ethical element.
B.6.11 FORMULATE INSTRUCTIONAL STRATEGY

When a completed list of expected student performance is reviewed, one can clearly perceive exactly what the students will learn. The next step is to decide what is the best way to get them to learn.

Questions to be answered include:

- What are the appropriate teacher roles for this unit?
  Teacher roles include:
  - Lecturer
  - Group leader
  - Advisor
  - Group worker
  - Evaluator
  - Editor

- What are the appropriate student roles for the unit?
  Student roles include:
  - Passive listener
  - Active listener
  - Group participant
  - Group leader
  - Writer
  - Reader
  - Presenter
  - Evaluator

- Can students work with students to learn any of the subject matter?
- Can students work individually?
- Can students produce projects on materials which would be of instructional benefit to other students or classes?
- Will the classroom setting have anything to do with the student success?

Figure B-7 presents various traditional elements of education and some current innovations.
<table>
<thead>
<tr>
<th>TRADITIONAL</th>
<th>INNOVATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Based</td>
<td>Competency Based</td>
</tr>
<tr>
<td>Teacher-Centered Schools</td>
<td>Learner-Centered Schools</td>
</tr>
<tr>
<td>Teachers Work with Students</td>
<td>Teachers, Aides, Interns, Volunteers and Students Work with Students</td>
</tr>
<tr>
<td>Graded Organization</td>
<td>Non-Graded Organization</td>
</tr>
<tr>
<td>Class-Oriented Teaching</td>
<td>Individualized Learning</td>
</tr>
<tr>
<td>Single-Aged Grouping</td>
<td>Multi-Aged Grouping</td>
</tr>
<tr>
<td>Self-Contained Classrooms</td>
<td>Learning in the Community</td>
</tr>
<tr>
<td>School-Grounds Centered</td>
<td>Schools Without Walls Orientation</td>
</tr>
<tr>
<td>Building Use - 8:30-3:00</td>
<td>Lighted Schoolhouse Concept</td>
</tr>
<tr>
<td>Nine-Month School</td>
<td>Year-Round School</td>
</tr>
<tr>
<td>Textbook Curriculum</td>
<td>Media-Centered Curriculum</td>
</tr>
<tr>
<td>Traditional Curricular Units</td>
<td>Basic Skills/Vocational/Expressive Arts Units</td>
</tr>
<tr>
<td>Year-Long Courses</td>
<td>Short Term, Mini-Courses</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Affective Orientation</td>
</tr>
<tr>
<td>Failure Oriented</td>
<td>Success Oriented</td>
</tr>
<tr>
<td>Standardized Tests</td>
<td>Competency-Based Testing</td>
</tr>
<tr>
<td>A, B, C, F Grades</td>
<td>Pass-Only, Mastery Learning</td>
</tr>
<tr>
<td>Purpose of Education Undefined</td>
<td>Purpose of Education Defined by MR Community</td>
</tr>
<tr>
<td>General Objectives</td>
<td>Measurable Behavioral Objectives</td>
</tr>
</tbody>
</table>

Figure B-7. Comparison of Strategies
The best known learning processes are:

1. Lecture
2. Lecture-Discussion
3. Audiovisual
4. Demonstration
5. Laboratory
6. OJT (Clinical experience)

Whether a course unit is innovative or traditional is not really important; however, it is important in that the approach be firmly established before any lesson plan is completed.

It is recommended that a statement of instructional strategy be written for each instructional unit.

**B.6.12 PREPARE TEST ITEMS**

Some teachers find themselves (through no fault of their own) in the situation where they are deciding on test items the night before a big test. This should be avoided and test items should be written as part of the lesson plan, before the unit is taught.

There are ten major types of test items which can be written. Figure B-8 contains a table describing them, their uses and limitations.
## TRUE-FALSE

**Scoring Method**

- Score: Rights minus wrongs ($R - W$)

**Best Applications and Purposes**

1. To check technical knowledge
2. To check knowledge of procedure's

**Weaknesses**

1. Difficulty in forming questions
2. Encourages guessing

**Suggestions for Improvement**

1. Use 4 or more responses per question.
2. Confirm that all responses are correct.
3. State the answer clearly.
5. Avoid patterns in placement of correct answers.
6. Provide same number of choices for each question.

## MULTIPLE CHOICE

**Scoring Method**

- Score: $R - W$ ($N = 1$)

**Best Applications and Purposes**

1. To check nomenclature
2. To check functions of parts
3. To check judgment
4. To induce thinking

**Weaknesses**

1. Difficulty in writing questions
2. Difficulty of interpreting best answer

**Suggestions for Improvement**

1. Use 4 or more responses per question.
2. See that all responses are correct.
3. State the answer clearly.
5. Avoid patterns in placement of correct answers.
6. Provide same number of choices for each question.

## MATCHING

**Scoring Method**

- Usually 2 or more points for each pair correctly matched

**Best Applications and Purposes**

1. To check nomenclature
2. To check functions of parts
3. To check judgment
4. To promote thinking

**Weaknesses**

1. Difficulty in avoiding misinterpretation of certain items
2. Requires much "hunt and find"

**Suggestions for Improvement**

1. Provide unmatched columns or a few non-matching pairs.
2. Limit each section to 15 or 20 pairs.
3. Write correct answers in correct order, then mix one column.
4. Keep blanks near end of sentence.
5. Write complete statement and then remove words.
6. Limit the number of blocks in any one sentence.
7. Require correct terms in all responses.

## COMPLETION

**Scoring Method**

- Usually 1 or 2 points for each blank correctly filled in

**Best Applications and Purposes**

1. To check nomenclature
2. To check functions of parts
3. To check judgment
4. To promote thinking

**Weaknesses**

1. Emphasizes memory
2. Stresses speed in reading

**Suggestions for Improvement**

1. Reel blanks near end of sentence.
2. Avoid tell-tales; use "a", "an", "an", "ate"
3. Write complete statement and then remove words.
4. Limit the number of blocks in any one sentence.
5. Require correct terms in all responses.

---

- Lawrence Sorosage
- Michigan State University
<table>
<thead>
<tr>
<th>Type of Test Item</th>
<th>Scoring Method</th>
<th>1. Scoring Criteria</th>
<th>2. Additional Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. IDENTIFICATION</td>
<td>Scoring Method: Usually 1 or more points for each correct identification</td>
<td>1. Requires memory rather than thought</td>
<td>Require correct terms in all responses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. If pictures are used, be sure they are clear</td>
<td></td>
</tr>
<tr>
<td>6. ORDER-ARRANGEMENT</td>
<td>Scoring Method: Varied and difficult; partial credit sometimes given</td>
<td>1. Difficulty in scoring</td>
<td>Write first in correct order, then mix</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Difficulty in stating</td>
<td>Provide clear response, method</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>State problem definitely</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Require that responses follow the procedures taught</td>
</tr>
<tr>
<td>7. ORAL</td>
<td>Scoring Method: Usually 5 or 10 points for each question correctly answered; questions are sometimes &quot;weighted&quot;; partial credit usually given</td>
<td>1. Speaking ability rather than knowledge may influence score</td>
<td>Make questions clear and definite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Lacks objectivity</td>
<td>Have in mind the basic points required in correct answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Easy for learner to &quot;ramble&quot; when answering</td>
<td>Limit score of each question</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Difficult to score</td>
<td>Weight question in scoring</td>
</tr>
<tr>
<td>8. SHORT ANSWER</td>
<td>Scoring Method: Usually 1 or more points per question; partial credit seldom given</td>
<td>1. Requires little writing ability</td>
<td>Form definite, short, concise, clear questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Difficulty in writing definite and concise questions</td>
<td>Avoid suggestive questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. To promote thinking</td>
<td>Avoid suggesting answer to one question by a later one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. To give a thorough check of material covered</td>
<td></td>
</tr>
<tr>
<td>9. ESSAY</td>
<td>Scoring Method: Usually 5 or 10 points for each question correctly answered; questions are sometimes &quot;weighted&quot;; partial credit usually given</td>
<td>1. Time required to score</td>
<td>Limit score of question</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Lacks objectivity</td>
<td>Avoid suggestive questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lacks reliability</td>
<td>Make questions clear and definite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Penalizes the non-writer</td>
<td>Require a rough sketch when possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Poor coverage of area to be tested</td>
<td>Weight question in scoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. PERFORMANCE</td>
<td>Scoring Method: Usually based on journeyman work standards</td>
<td>1. Difficulty in scoring accurately</td>
<td>Develop a definite rating procedure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Difficulty in setting up physical conditions</td>
<td>Be sure learner understands thoroughly</td>
</tr>
</tbody>
</table>

Figure B-8. Ten Types of Test Items
When the test items have been written, perform a simple quality-control check to make sure they measure the appropriate level-of-performance.

**Step 1.** Arrange the items into three groups, count the items and enter in a table. See sample below.

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td></td>
</tr>
<tr>
<td>Skill</td>
<td></td>
</tr>
<tr>
<td>Affect</td>
<td></td>
</tr>
</tbody>
</table>

**QUESTION:** Is there equal emphasis on the three groups? Remember that proficiency tests will measure all three.

**Step 2.** Assign applicable educational taxonomy codes for each test item as follows:

(a) For **Knowledge Items**, assign codes 1 and 2 from *Handbook I: Cognitive Domain*.

(b) For **Skill Items**, assign codes 3 to 6 from *Handbook I: Cognitive Domain*.

(c) For **Affect Items**, assign codes 1 to 5 from *Handbook II: Affective Domain*.

**Step 3.** For each group prepare a frequency distribution of the codes. An example for skill items might look like the sample shown on the next page:

* Taxonomy of Educational Objectives; B. S. Bloom, McKay & Co. New York.
QUESTION: Do the test items measure the appropriate level-of-performance? Check the Bank of Behavioral Objectives for the perceived levels.

A major issue in writing valid test items deals with "understandability." For instance, can the students easily understand what they are to perform? Is the vocabulary and reading level appropriate? Will the "poor" reader do poorly on the item because of the reading? If so, the test item measures reading, not subject matter. Valid test items should, as much as possible, measure only the desired performance at a predetermined level-of-performance.

B.6.13 REVIEW EXISTING MATERIALS

There are several excellent resources available to help identify educational materials. Probably the best is entitled, Basic Book List for Medical Record Administrator and Medical Record Technician Programs, AMRA. Revised regularly, it provides complete reference in the following categories:

- Medical Terminology
- Medical Record Science
- Legal Aspects of Medical Record Administration
- Medical and Hospital Mathematics, Statistics and Research Methods
- Organization and Management (Principles, Office, Hospital and Medical Record Department)
- Fundamentals of Medical Science - Anatomy and Physiology
- Data Processing
- History of Medicine and Hospitals
- Periodicals
AMRA also publishes Resource Guides on specific topical subjects, usable by instructors and students. They contain, among other items, a detailed outline and current bibliography.

The Bank of Behavioral Objectives, AMRA, contains many references, generally referring to specific performances.

AMRA publishes a Film Catalog. It was compiled by the E&R Subcommittee on Film Inventory and updated by the AMRA Academic Division.

The major task of this review of Existing Materials is not simply the identification of materials. The major task is evaluating educational materials and relating them to the performances we want the students to develop. As a result, this task (which may have seemed simple) can become monumental. However, without comparing content to need, a faculty member can only follow and teach from a book.

During the review, make notes about specific materials (pages, figures, chapters, etc.) on your List of Student Outcomes. This will document the relation of the materials to the desired content.

When the review has been completed three lists can be produced. They are:

1. Student outcomes for which adequate instructional materials exist.
2. Student outcomes for which inadequate instructional materials exist.
3. Student outcomes for which no instructional materials exist.

Be sure to formalize and maintain the last two lists, for these identify the areas for which materials must be found, adapted, improved or developed.
B.6.14 FINALIZE ALL UNIT-LESSON PLANS

On a unit-by-unit basis, the lesson plans should be completed. This is the stage where the instructional strategy, the proposed student performances, the testing philosophy, the test items and the educational materials all come together to be synthesized into a single, logical, developmental framework.

Major problems at this stage may indicate a need for additional review and analysis. Refer to all the various resources constantly and be prepared to rework the format, lists, test items or instructional strategy if necessary. If there are no adequate instructional materials for part of a unit, specify "Instructor Responsibility" on the lesson plans.

AMRA's Course Outlines can be extremely valuable during this process; however, they should not be used as a substitute for in-depth analysis and synthesis. Remember that any standardized set of outlines cannot reflect specific local needs or needs of a regionalized student body. Only local faculty can respond to those needs.

The AMRA Academic Division has produced a guide entitled, Laboratory for Medical Record Science Students. It documents the suggestions received from MR Program Directors.

A word of caution is appropriate here. Do not let the preliminary course lists, unit breakdowns or the provisional curriculum override good judgement. If, during the process of lesson-plan development, good judgement indicates a need for extensive modification or redesign of the preliminary standards, take the time and rework them.
B.6.15 UPDATE SCOPE AND SEQUENCE CHART

A provisional Scope and Sequence Summary was prepared earlier. Now is the time to update it, as follows:

Step 1. Check each lesson-plan schedule against the provisional chart. Has the time requirement for the unit changed?

Step 2. Check the instructional content of each lesson-plan against the other related lesson-plans. Is the sequence logical?

Step 3. Compare the overall scope and sequence of MR courses with:

a. Academic course schedules
b. Related course schedules
c. Facility schedules (classrooms, labs, and clinical sites)
d. Staff (faculty) schedules
e. Student need conflicts

ANRA has published examples of NRA and MRT programs. These are available through the Academic Division. They can be used to check a program for deficiencies, but shall not be used as standard, pattern or national model.

Step 4. Identify and resolve deficiencies

Step 5. Finalize Scope and Sequence Summary

B.6.16 FINALIZE PROGRAM PLAN

A documented, formalized, composite program plan is highly recommended. As one RRA consultant constantly says in workshops, "If it isn't documented, it wasn't done!" That applies in educational institutions as well as hospitals. If formal standards have been established for
your institution, use them. If not, a program plan might include the following items:

1. Institutional Approval Forms
2. Budget
3. Admission Standards and Policies
4. Final Curriculum
5. Evaluation Strategy
6. Course Descriptions
7. Lesson Plans
8. Educational Materials Requirements
9. Adopted Texts
10. Staffing Plan
11. Facilities, Equipment and Supply Requirement
12. Preliminary Schedule
13. Advisory Committee Input (profile, recommendations, comments, etc.)
14. Clinical-Site Agreements (approved and signed)
15. Materials Deficiency List.

A program plan with all 15 items appears to be quite an undertaking. However, since each of the items must be accomplished in the normal course of development, the only extra task is formal documentation. Experience has proved that the extra effort needed to document progress actually improves future operations and saves time and money.

Do prepare a formal Program Plan.
B.7 DOCUMENT FACILITY PLAN

If facilities were covered in the Program Plan, the documentation need not be duplicated. If not, a review and update of the requirements list compiled during the Assessment Phase will provide a good start.

Then check:

1. Are the planned facilities still available? Make sure the personnel handling allocation of space knows of the intent to hold classes.

2. Are there changes, renovations, additional electric outlets or any other modifications needed in the classrooms or labs? If so, get firm estimate of costs.

3. If off-campus facilities are being considered, gather cost data on:
   a. Rent
   b. Utilities
   c. Maintenance
   d. Special Services (transportation etc.)

Schedule all the necessary work, but do not authorize the work until all the institutional and state-level approvals have been received.

B.8. DOCUMENT EQUIPMENT AND SUPPLIES REQUIREMENTS

If the equipment and supplies were documented in the Program Plan, do not duplicate it. If not, review, update and expand the preliminary lists.

EQUIPMENT

Equipment normally falls into three categories:

- Normal Classroom Equipment (Chairs & desks)
- Standard Instructional AV Equipment (Projectors, screens, etc.)
- Special Equipment (For special labs.)
Equipment Questions:

1. Is the equipment identified as available in the preliminary plan still available?

2. Is the available equipment identified still servicable?

3. Can new equipment still be delivered, installed and operating in time for classes?

4. Have costs changed?

5. Should service and maintenance requirements be checked?

6. Should the new equipment be ordered now?

Be sure to establish a proposed-equipment schedule.

Supply Questions:

1. Are there any special supplies needed?
   - Transcription tapes or belts?
   - Special filing equipment?
   - How about requirements for the MR Lab?

2. Who will pay for the special supplies?
   - Students?
   - Faculty?
   - Institution?

3. Should special supplies be ordered in advance of classes or are they available locally?

Again, do not order special items until the Program has been approved by the institution and the state-level authorities.
B.9 SUBMITTAL FOR NECESSARY APPROVALS

In addition to institutional approvals, there are several local and state-level agencies which may have to review and approve the program. Some are regulatory agencies, and some are funding agencies.

These agencies include:

- State Boards of Higher Education
- State Divisions of Technical and Vocational Education
- Regents
- State Boards of Community (Junior) Colleges

Check with the department or division head about state-level reporting requirements and necessary approvals.

Keep on the lookout for unexpected restrictions on instruction. Right now (June, 1975) there is a "freeze" on all new health occupational education programs in the State of Illinois, pending a state-wide manpower study.

*NOTE*

Program Directors should know of funding sources and the levels of financial support. Keep informed about state funding, local tax contributions, student tuition and fees, and available grants and contracts. Money speaks.
B. 10 DECISION TO PROCEED

Up to now, the Program Director has been dealing with abstracts. Data has been collected, forms have been filled out, plans have been made, the wheels of progress have turned, and approvals have been obtained. However, up to now these activities have had no significant impact on peoples' lives.

The Program Director now has to decide whether to actually implement the program. The decision must be based on an objective analysis of facts. Two major questions must again be asked. They are:

1. Is there a need in this area for medical record education?
2. Can and will the institution provide adequate instruction?

Figure B-9 contains a sample of a Decision Criteria Summary. This form will not make the decision, but it does effectively summarize items of importance.

Decide now: Is it "GO" or is it "NO-GO"? Ask your Advisors for an objective appraisal of your decision.

If you should decide NO-GO, notify the following parties:

1. Advisory Committee
2. Institutional Administrators
3. AMA
4. AMRA
GO/NO-GO DECISION

DECISION CRITERIA

1. NEEDS ASSESSMENT
   A. ADEQUATE SUPPLY OF STUDENTS?
   B. POTENTIAL DEMAND FOR COMPLETERS?
   C. FEASIBLE BASED ON PROJECTED COSTS?
   D. RECOMMENDATION OF ADVISORY COMMITTEE?
   E. ARE ADEQUATE FUNDS AVAILABLE?

2. PLANNING PROCESS:
   A. HAS THE COURSE/PROGRAM BEEN DEVELOPED?
   B. IS THE COURSE READY TO BE CONDUCTED?
   C. HAVE EVALUATION CRITERIA BEEN IDENTIFIED?
   D. HAVE NECESSARY EQUIPMENT, SUPPLIES & FACILITIES BEEN IDENTIFIED?
   E. HAS THE SCHEDULE OF OFFERINGS BEEN DEVELOPED?
   F. HAVE POSSIBLE INSTRUCTORS FOR THE COURSE BEEN IDENTIFIED?

3. RECOMMENDATION
   A. GO
   B. NO/GO

NOTES:

COMMENTS:

FIGURE B-9. DECISION CRITERIA SUMMARY
PHASE C
IMPLEMENTATION

GENERAL

The Assessment Phase was "ON YOUR MARK" and the Planning Phase was "GET READY-SET".

IMPLEMENTATION IS THE GO!

Classroom management of student learning is the single most important activity in education. That's where the action is, and Program Directors must do everything in their power to support the classroom faculty in performance of their functions.

The Implementation Phase contains 14 items, which are:

C. 1 Review Administrative Policies
C. 2 Acquire Facilities, Equipment and Supplies
C. 3 Contract Faculty
C. 4 Start Materials Development
C. 5 Disseminate Program Information
C. 6 Recruit Students
C. 7 Provide Pre-Enrollment Counseling
C. 8 Monitor Student Enrollment
C. 9 Analyze Student Profiles
C. 10 Support Faculty Development
C. 11 Support Classroom Management Activities
C. 12 Apply for Accreditation
C. 13 Provide Job Placement and Referral Services
C. 14 Report for Reimbursement
C.1 REVIEW ADMINISTRATIVE POLICIES

The program will now hire faculty, acquire equipment, order books and schedule space.

During Phase B, Item B.2, formal and informal policies, requirements, practices and procedures were identified. Review all acquired information and ask the Division Head or Dean about new or special forms or requirements on such things as:

- Brochures
- Catalog Listings
- Employment Applications
- Enrollment Forms
- Class Schedule Forms
- Attendance/Dropout Reporting
- Student Transfers
- Cost Reports
- Information Dissemination Restrictions
- State Reimbursement Forms
- Grade Reporting
- Articulation with other schools

C.2 ACQUIRE FACILITIES, EQUIPMENT AND SUPPLIES

"To Arms! To Arms! The Students Are Coming!" *

The students are coming and the program must be ready. The students will need (in addition to a well-prepared, confident, smiling-faced faculty) adequate facilities, equipment and supplies.

All too often one hears, "That new course is in trouble, their books haven't arrived." Or, "I don't know why, but three classes are scheduled for Room 222 at 10:00 A.M." Or worse!

*Apologies to Paul Revere
The Program Director must get all the various needs under control, so the students and faculty can get right to the business of learning.

A minimum check list includes:

1. FACILITIES
   - Are the planned changes complete?
   - Has the instructional staff checked them?
   - Are there any safety standards to check?

2. EQUIPMENT
   - Check on current availability and condition of existing equipment.
   - Follow-up on new equipment:
     - Has it arrived?
     - Has it been installed?
     - Does it work?

3. SPECIAL SUPPLIES
   - Have they arrived?
   - Who handles them?
     - The book store?
     - The teacher?
     - Other agency?
   - Who pays for them?
     - The Institution?
     - The Student?
     - The Faculty?

If the Program Director is prone to panic, now is the proper time. Do not wait until after the students are in class to follow-up these items. Maintain a policy of regular-systematic follow-up.
C.3 CONTRACT FACULTY

If the faculty was pre-identified and involved in lesson-plan development, their contracts can be processed now. Nine month contracts are normally utilized for classroom staff.

If additional faculty is required, proceed quickly to recruit and identify them. Possible recruitment sources include:

- Clinical Site Personnel
- Advisory Council Members
- State MRA Contacts
- Advertising
  - Local Newspapers
  - Nearby Metropolitan Newspapers
  - Medical Record News

Remember that the quality of the instructional staff is the most important factor affecting educational quality. Some experts base the selection criteria on the adopted instructional strategy, for research indicates that faculty members tend to be either lecturers or group leaders, not both. The research also indicates that a "group facilitator" might be an ineffective lecturer. Each person appears to have a unique teaching style.

C.4 START MATERIALS DEVELOPMENT

During the Planning or Assessment Phase, materials development lists were compiled, which identified specific areas of deficiency.

The normal procedure is to identify which materials will be needed first, and concentrate on them. Perhaps the approach to development should be discussed with the faculty (and perhaps the advisors).
Some faculty members approach materials development with glee. However, people have trouble getting started. The Program Director must (again) assume the "help-mate" role. In some cases the "team-teaching" concept can be successfully applied to materials development. Two heads are better than one.

**QUESTION:** Can any required materials be developed by students? This has been successfully attempted in several schools. Results are reported to be excellent.

The important consideration in materials development is really not who does it or what media is utilized. The important question is:

"Will the resultant materials enable the students to easily learn the material."

One way of approaching materials development is reported below:

1. **Step 1** - Identify the specific area within a unit which needs improvement.
2. **Step 2** - List the student behavioral objectives required (which identify exactly what the students should learn).

**Sources:**
- Lesson-Plans
- Bank of Behavioral Objectives

3. **Step 3** - Review the instructional strategy for the unit.
4. **Step 4** - Identify and review related materials.
5. **Step 5** - Decide what presentation method would be the most effective (See B.6.11)
6. **Step 6** - Decide what media is to be used. Remember that more than one media can be used.
7. **Step 7** - Prepare detailed outline or presentation structure.
Step 8 - Search out specific job-related information on the subject. The Bank of Behavioral Objectives contains many references and some samples. Also make inquiries in the better medical record departments. Ask practitioners for help. Existing forms, procedures, policies, etc. may help.

Step 9 - Synthesize the acquired information and existing resources into the detailed outline. Years of acquired experience and background in medical records will be of value to identify the important items.

* NOTE *

Make sure that some valid developmental process is used. The process indicated in the Taxonomy of Educational Objectives is widely accepted.

Step 10 - Prepare the materials. If Audio Visuals are to be prepared, work with the AV Department. Most schools have AV faculty and students available to help produce these.

Step 11 - Field test the materials on a small group of students (five or less). If the students have trouble with the materials, the materials need to be modified.

* NOTE *

As a materials developer, one must maintain a pragmatic position, which can be simply stated:

"The materials must work; the students must learn! If the students do not learn, it is the fault of the materials or the teaching process."

Step 12 - Modify the materials and the learning process until 80% of the students can complete 80% of the objectives, the first time through.
C.5 DISSEMINATE PROGRAM INFORMATION.

As a result of the comprehensive assessment and planning processes undertaken, chances are the actual program will be exemplary. However, without an aggressive public relations effort, no one will ever know. Therefore, a comprehensive dissemination effort must be implemented.

In establishing a dissemination effort, two major questions must be answered. They are:

- What should be sent out?
- Where should it be sent?

DISSEMINATION MATERIALS:

The American Medical Record Association has a Counselor’s Folder for the medical record technician and the medical record administrator programs. The folder contains pre-professional curriculum, the most recent education issue of Medical Record News, and copies of a suggested curriculum. In addition, there are brochures available for distribution to students who may inquire regarding information in these programs.

At the educational institution level, there is also a need for brochures, containing clear and accurate information on admission requirements for the programs.

AMRA produces a "Tabletop" display which contains brochures on various aspects of the medical record profession.

A Tape-Slide Presentation of the medical record profession is also available.
DISSEMINATION STRATEGY

The Counselor Folders should, of course, be sent to secondary-level counselors. In addition, the folders should be sent to the:

- Counseling Offices
- State Employment Offices
- Advisory Committee Members
- Local Health Care Institutions
  - RRA's and ART's
  - Director of Inservice Education
  - Administrators

Make sure the Course Catalog contains accurate and readable information on the MR Program.

Do not forget to provide information to the institutional Public Relations Office. They regularly prepare news releases on events occurring in the school.

If the institution maintains a Speakers Bureau, make sure some MR Program Staff are listed.

When the catalog or the brochures are revised, be sure to provide updated information to those who already have counselor folders.
C.6  RECRUIT STUDENTS

Direct recruitment from two sources will produce the most immediate results. These two sources are:

- Local Educational Institutions
  - High Schools
  - Area Career Centers
  - Junior or Community Colleges
- Local Health Care Facilities
  - Hospitals
  - Nursing Facilities
  - Health Maintenance Organizations
  - Clinics

Direct recruitment means contacting and cultivating the sources of students. The ways of cultivating sources:

EDUCATIONAL SOURCES:

1. Work with the Admissions Office to organize an orientation session for counselors and health education coordinators.
2. Invite health education coordinators to visit school and Advisory Committee Meetings.
3. Participate in "Career Days" or "Career Showcases" in local schools.
4. Provide tabletop displays, brochures, etc.
5. Offer to coordinate and conduct "Medical Record" field trips to a local hospital and other facilities.

*NOTE *

Medical Record Department

A local school is planning a field trip to your institution, a visit to Medical Records would not do the field any harm.
6. Offer to speak to high school students about medical record opportunities. If asked, be sure to talk about all occupational titles, not just ART and RRA.

7. Offer personal counseling services to any interested person.

The above items deal with local schools. Counseling packages should also be sent to every secondary-level school in outlying areas. Include a personal offer to help in every package.

**HEALTH CARE SOURCES:**

1. On a regular basis, inform the local medical record department supervisors of local educational opportunities in medical records.

2. Offer educational and vocational counseling to all members of the health care-field.

3. Provide information on scholarships and student loan programs.

**C.7 PROVIDE PRE-ENROLLMENT COUNSELING**

There should be early and appropriate counseling available for all prospective MR students.

There should be written policies, directing interested students to the Program Director for discussion of the career field, and for advisement on the career for the individual. It is considered particularly
important that junior college program students have a chance to talk to a Program Director prior to admission.

Prospective students should be encouraged to work in a medical record department as an employee or a volunteer. This will provide them with valuable insights into this type of professional career.

Applicants with physical handicaps should be aware of possible limitations, particularly in areas of administration and supervision, as well as in selected technical areas. Blindness, deafness, and other conditions might become limiting. It is important, however, that such an applicant be seen, not only by the counselors in the college admissions office, but by the MR Program Director. Following such an interview, recommendations should be documented by the Program Director. The admissions office and the applicant should be made aware of the recommendations.

In addition to the general admissions committee for the institution, an admissions committee for the medical record program is highly recommended. If there is an admission committee for the division of health sciences, the medical record program should be represented on that committee.

Pretesting applicants for the medical record program should be undertaken in the same manner as pretesting for other allied health programs. Consideration should be given to administering the admission test for allied health professions published by the Physiological Corporation of New York City. It is also possible to obtain a medical record program test from the Physiological Corporation.
Consideration might be given to a minimum specific grade point average as a condition of admission.

C.8 MONITOR STUDENT ENROLLMENT

Keep track of the enrollment. Monitor the process. Find out why students who seemed interested did not complete the enrollment process. Many students run into administrative problems which cause them to go elsewhere. Try to identify and eliminate problems which would reduce enrollment.

C.9 ANALYZE STUDENT PROFILES

As soon as enrollment data is available, review the successful applicants. Assemble profiles which will show the similarities and differences in the students. Items to watch:

**Reading Level:** Produce a frequency distribution of the student by reading grade level. Are they normally grouped? Single mode or bi-modal? Small range?

Question: Does the MR educational material match their reading level?

**Math Level:** Produce frequency distribution analyzes needs vs educational materials.

Question: Is remedial work required?

**Affect Level:** Rate new enrollees using a 1-5 scale (see Taxonomy of Educational Objectives, Handbook II).

Question: Is affective development required of the group, or do they already "value" the accepted MR ethical code?
Other Items:

- Writing ability
- Age
- Sex
- Physical condition (especially eyes and ears)
- Bearing and dress
- Financial stress
- Study habits

This data should be formalized for use in Staff Development Sessions (in-service training) and during materials development.

C.10 SUPPORT FACULTY DEVELOPMENT

In-service training for faculty should be a part of every educational system. Many institutions make in-service attendance mandatory by including it in the employment contracts.

The universal problem faced by all vocational and professional educational staff is that they were educated and trained to do "professional" type things. Managing student learning is a much different situation. They generally do not need help on technical items, but they do need help on items such as:

- Orientation to the Educational Community
- Teaching-Learning Processes
- Psychology of Learning
- Developmental Bases
- Affective Development
- Materials (and media)
- Teacher Roles
- Testing and Evaluation
- Reporting Requirements

If it will help the situation, one can remember that many graduates from teacher colleges need help on these items too.
One approach to in-service training starts with a faculty review of the above items. The items are prioritized based on each individual's need. The faculty can then be divided according to area of need. Workshops, team-teaching, or micro-teaching sessions can be scheduled.

If a member of the faculty wants to work on one of the "Alternatives" presented in Section IV, or if they are involved in materials development, those activities can be considered as in-service training.

* NOTE *

In regard to special or unique materials development for medical records, check to see if continuing education credits will be granted.

The Program Director should not attempt to provide all the in-service training. Use of consultant resources is recommended: If the institution has a school of education, ask for their support. Also ask the AV department and other institutional resources to participate.
C.11 SUPPORT CLASSROOM MANAGEMENT ACTIVITIES

LEARNING ACTIVITIES: at last! Remember that here is where LEARNING takes place. All the preceding and following activities have only one purpose; to enable students to learn.

NOTE

* TO TEACHERS *

Always remember that student learning is the overall objective. With the requirements for materials review, staff meetings, attendance and dropout reporting, equipment problems, AV scheduling, conflicting student body activities, student personal problems, test writing, papers to be reviewed and graded, etc., etc., etc., it is easy to forget that the school's purpose is students.

Keep asking yourself, "will today's classroom activities help the students become better medical record practitioners?"

Surprising as it may seem, some faculty members consider the classroom or lecture hall "off-limits" to Program Directors and other administrators. Should this be the case? In any case, the Program Director should provide as much support of the actual learning situation as humanly possible.

EVALUATION ACTIVITIES: should be an integral part of the education process. The best classroom evaluation designs provide immediate evaluative feedback to the students. Thus feedback should answer the question, "How am I doing?"

There are research results indicating that tests are effective learning/teaching tools, as long as they do not become too threatening to students.

Make sure all test items meet the criteria set forth in B.6.12.

Be sure to compare the student performance on tests with the expected outcomes documented in the lesson plans.
If it is apparent that the students cannot perform the test items, evaluate the materials and the instructional process.

C.12 APPLY FOR ACCREDITATION

An application for program accreditation can be obtained from: American Medical Association, Department of Allied Health Professions and Services, 535 North Dearborn Street, Chicago, Illinois 60610.

The educational institution should review the current Essentials and Self-Evaluation at this time. They are available through the AMRA Academic Division.

The application should be filed approximately three months before the first class begins the final year of study. The AMA will refer the application to AMRA to schedule a joint AMA-AMRA Accreditation Survey. The Accreditation Survey will be scheduled and conducted when the first class is in their final year.

C.13 PROVIDE JOB PLACEMENT AND REFERRAL SERVICES

A state-wide survey of vocational education in the State of Illinois (1974) asked students, faculty, and administrators to rate different types of student services. Of all the student services rated, job placement and job referrals were rated lowest. The survey report went on to indicate that the faculty and administrators shared the option that they should do more, but they lacked knowledge of the job market.

Medical record educators do not share that problem with other educators. Most medical record educators have been in the job market. They have searched, recruited, screened, selected, and hired extensively. They know the score.
With this practical knowledge, they are prepared to share the "whys" and "hows" of how to get and retain a desirable professional position.

Faculty, as part of course content, can provide:

- **Orientation to Job Market**
  - Entry-level opportunities,
  - Current status of market
  - Available resources for employment search

- **How to Look for a Position**
  - Resume
  - Broadcast letters
  - Follow up
  - Interviews
  - References

- **How to Change Positions**

The Program Director and the faculty should provide the necessary motivation and support to assure every qualified graduate entry-level employment.

Individual job placement counseling should be given to every individual with special interest. The medical record field needs qualified researchers, materials developers, educators, specialized consultants, computer specialists, legislative specialists, personnel with foreign language capabilities, ... the list can go on and on. School faculty stand in a position where thoughtful referral of outstanding personnel can shape the future of the medical record profession.

**C.14 REPORT FOR REIMBURSEMENT**

Where does the institution get funds for your program? A Program Director should know. Ask your financial manager about the various sources of support. Possible sources include:

- Student tuition and fee
- Regular state reimbursement for education
- Regular state reimbursement for vocational education
- Special reimbursement for health education
- Special reimbursement for special impact areas
  - high unemployment
  - high minority
- Contracts and/or grants

The Program Director should know about funding for two reasons:

First, if a Program Director understands the reimbursement formulas and reporting requirements, the resultant reports may better document the reimbursement claims to increase institutional revenue.

Then, one should know if the program is a major contributor to school revenue. A major contributor may be able to acquire additional staff, facilities, supplies, and materials to improve instruction.

In summary, if a program does not correctly apply for reimbursement, reimbursement is not made. Make sure applications for all available funds are processed correctly.

Allocated or reimbursement funds? --- Use them or lose them!
Before reading the material in this phase, study a copy of the AMA/AMRA Analytical Self-Evaluation of an Educational Program for Medical Record Administrators (or Technicians). This document provides for comprehensive structure and process evaluations. The evaluation design follows the Essentials exactly. It lists specific questions to be asked and offers suggestions for measurement of each requirement.

The following material does not, in any way, affect the Essentials. The Essentials are the accreditation requirements and compliance is absolutely necessary.

GENERAL

You have completed the first race. The Program has been through:

- "ON YOUR MARK" (Assessment)
- "GET SET" (Planning)
- "GO" (Implementation)

Now that a good race has been run, it is time to examine:

- HOW FAST YOU RAN (and)
- HOW FAR YOU WENT (and)
- IF YOU RAN IN THE RIGHT DIRECTION

Phase D; the Evaluation Phase contains seven items, which are:

D.1 Review Evaluative Criteria

D.2 Identify Evaluative Questions

D.3 Identify Evaluative Bases
D.4 Gather Evaluative Data
- Faculty
- Student
- Employee
- Fiscal

D.5 Reduce and Analyze Evaluative Data

D.6 Prepare Evaluation Report

D.7 Document Action Plan

As stated in the Planning Phase, the only acceptable rationale for this type of evaluation is:

**Improvement of the Learning Experience**

D.1 REVIEW EVALUATIVE CRITERIA

In the planning item B.5, the preliminary evaluative design was established and documented. Dust it off and view the starting conceptions about how the program should be evaluated. Now, in the light of day, update and revise the criteria.

D.2 IDENTIFY EVALUATIVE QUESTIONS

There are some basic questions about the program and its courses which evaluation may answer. Typical questions include:

- Should we expand or reduce existing courses?
- What courses need curricular reform?
- What new courses are required?
- Are we effectively using our resources?
- What can be done to improve the program and student services?

Discuss these "common sense" questions at staff and Advisory Committee meetings. Arrive at the basic "need-to-know" for the program. A prioritized list of questions can become the basis for the evaluative effort.
D.3 IDENTIFY EVALUATIVE BASES

What will be the logical-theoretical framework for the evaluation?

Traditionalists in evaluation have indicated that there are only three bases for evaluation. They involve:

- Evaluation of Structures
- Evaluation of Processes
- Evaluation of Outcomes

However, recent work on the problems of outcome evaluation have expanded these bases to include:

- Structure (what, where, when, who)
- Content (courses, units: why)
- Process (how instruction is given)
- Output (how many behavioral objectives were covered)
- Outcome (did the student progress; how much)
- Benefits (do educational experiences benefit medical record practice)

The Analytic Self-Evaluation format provides an exemplary example of evaluation of structures and a strong approach to content and process evaluation.

Since the Self-Evaluation offers such a good design for structure and process evaluation, it is unnecessary to discuss them further.

The evaluation methodologies applicable to outcomes deal with:

- Instructional Progress
- Student Progress
- Impact

Evaluation methodologies should also provide data on educational materials and testing.

D.4 GATHER EVALUATIVE DATA

Outcome evaluative data should be gathered from more than one source.
Various sources include:

- Faculty
- Student
- Graduate

Other sources to consider include the clinical-site personnel, employees of graduates and fiscal inputs.

**FACULTY INPUT**

Instructor evaluative input might include their perceptions on:

1. Administrative Support
2. Facilities, Equipment and Supplies
3. Educational Materials (identification of deficiencies?)
4. Student Readiness
5. Class vs Student Progress
6. Staff In-Service Sessions
7. Recommendations

* NOTE *

The manner in which faculty evaluative data is received and used by the Director will probably affect how the faculty handles the student input.

**STUDENT INPUT**

Data should be collected from students.

* NOTE *

Efforts to measure teacher effectiveness through student input have failed. There appears to be varying correlations between student learning and the popularity of teachers.
Students can effectively provide input on their perceptions on:

1. Personal Development of
   - Technical Skills
   - Human Relations
   - Problem Solving
2. Facilities and Equipment
3. Schedules
4. Educational Materials and Media
5. Learning Processes (what works best for her)
6. Recommendations

Student data should be collected, reduced and reported by the applicable faculty member. The Program Director should only see the faculty summary report.

GRADUATE INPUT

Perform a follow-up survey of graduates to test the relevancy of the education. Ask questions such as:

- Did your education prepare you for the technical tasks in medical record practice? If not, what other education is required?
- Did your education prepare you to handle the human relation problems encountered on the job? If not, what type of human relation problems did you encounter? What education can be developed to develop human relations?
- Did your education develop problem-solving capabilities which are needed in medical record practice? If not, what should be added?

Actively solicit comments and suggestions from your graduates, for they are the best source of relevancy information.

D.5 REDUCE AND ANALYZE EVALUATIVE DATA

Reduce and compare the evaluative data to the "common-sense" evaluative questions formulated earlier. Can the questions be answered? If not, search for additional input, revise reduction methodology and rework the analyses.
Simplify the evaluative data into ranked lists, frequency distributions or graphs. It's always easier to see trends and results if the data is graphically presented.

Remember, the purpose of evaluation is program improvement. Can one identify problems and synthesize solutions from the data? If so, the reduction and analysis was successful. If not, redesign the evaluative data collection, reduction methodologies, and try again next time.

**D.6 PREPARE EVALUATIVE REPORT.**

A summary report of the program should be documented. Remember, "If it isn't documented, it wasn't done?"

Document the results of the Analytical Self-Evaluation. In addition report how well the race was run. Did the students progress? How much?

* NOTE *

A quote from Dr. Vernon E. Weckwerth of Minnesota Systems Research, Inc.:

"Are we merely counting how many times the bird flaps (it's) wings, without asking, did the bird fly?"

The evaluation report should document:

- What evaluations were performed
- What was found
- The major problems
- The priorities.

**D.7 DOCUMENT ACTION PLANS FOR NEXT YEAR.**

An evaluation without Action Plans is useless and can sometimes be destructive.
Formulate Action Plans which will approach and solve the identified problems. The Action Plans should be discussed with the faculty and the Advisory Committee before the detailed procedures are finalized.

* AGAIN *

THE MOTIVE OR GOAL

is always

IMPROVEMENT IN EDUCATION
SECTION IV
ALTERNATIVE EDUCATIONAL MODELS

GENERAL

Education has been bombarded by the "isms" and innovations. Behind almost every new idea is a pure intent. That is, Improvement of the quality and relevance of education. This section of the Guide is devoted to the examination of some of these innovations. While some are widely accepted and others are controversial, all should be understood.

The FABLE on the next page sets the tone for this section.

The educational innovations discussed in alphabetical order, include:

- Accountability
- Cooperative Education
- Competency-Based Education
- Differentiated Staffing
- Individualized Instruction
- Modularization
- Students as Instructional Resources
- Team Teaching
** FABLE **

At "Hypothetical Health-Care Place", every patient receives the same treatment at the same time, no matter what be their problem. The people who run the Place reported that:

- 33% of the patients did not respond to the treatment but recovered anyway.
- 33% responded well and recovered.
- 33% got worse and "dropped-out".

(Apparently 1% of the records were lost.)

One day a n-party* payer survey team examined the records. When they questioned the results, the Place people got mad and said:

"It is too much work to develop a special treatment for each person".

"We are understaffed".

"You can lead a horse to water, but you can't make it drink".

"Only God can make a flower grow".

The payer team was glad to hear about the 1/3 that got better. They were even willing to approve 1/3 of the budget. As a result, 2/3 of the people who were employed at the Place, no longer had to worry about non-drinking horses or flowers.

MORAL: If you don't treat people right, you may not be able to treat them at all.

QUESTION

Are our students better off than patients at any "Place"?

* n-party = tax
ACCOUNTABILITY

The Accountability Model is a school-management model by which the quality of student education is guaranteed by making the faculty and administrators "accountable" for the progress of students. It is currently in favor with Boards of Trustees, Junior College Boards and governmental agencies because it answers the question, "What are we getting for our educational dollar?" On the other hand, Accountability is in disfavor with faculty (and especially teachers' unions) for, in order to be held accountable, all parties (faculty, administrators, board members, etc.) have to agree on what student-educational progress is, and then on how to objectively measure it.

Apparently, if educational goals and expected student outcomes could be agreed on, and if objective measurement techniques were developed, accountability might become a reality. In light of existing problems, accountability is not now a viable alternative; however, if the trend toward competency-based education continues and adequate proficiency tests are developed, true accountability may become possible.

Some references on Accountability include:


Burgett, Russell E., "Accountability: Just the Teacher?" School and Community, LVIII, No. 4 (1971), 30-31. Suggests that learners be held accountable for many aspects of their progress or lack of it. Implies greater involvement of students in planning and evaluating.


COOPERATIVE EDUCATION

It is generally agreed that clinical training (OJT) is useful and necessary. Cooperative Education takes OJT one step further and allows students to work (usually for pay) in a job-related setting and receive academic credit for the work experience.

The U.S. Office of Education has been quoted as saying that Cooperative Education provides a viable bridge between the educational community and the business community. The trend toward "co-op" appears to be gaining momentum, for the Office of Education FY 1976 Budget contains funds for advancement of collegiate-level co-op programs.

Program Directors should be aware of a potential problem in combining the clinical training requirement with Cooperative Education. In several reported cases, the employing medical record department (which is now paying for useful labor) places the student in one job-slot and leaves the student there. The quandary is:

FROM THE SCHOOLS VIEW: If the student only does one task or job, is this adequate clinical training? Should credit be allowed for this?

FROM THE INSTITUTIONS VIEW: If the student actually receives "directed practice" from the RRA, is the student a productive employee? Should the institution pay a student for this?

If the problems can be worked out so that the student receives directed-practice, the medical record department gets productive work, and the student receives financial support, Cooperative Education appears to be viable.

Program Directors: Be sure the RRA and supervisors at the clinical-co-op sites understand and accept the purpose and intent of directed-practice.
COMPETENCY-BASED EDUCATION

Historically, education programs had been knowledge-based; the assumption being that knowledge is an adequate predictor of actual performance. In addition, it was assumed that experience would be acquired after a knowledge-base had been acquired, and the sum of knowledge and experience would assure a performance capability.

Competency-Based Education is a new instructional strategy which deals with directly developing performance capabilities in students. Interestingly enough, the current competency-based movement involves training of teachers.

The most difficult task in instituting competency-based education is not, "How can we develop competencies in students?", but "What are the competencies which should be developed?"

Some educators have taken issue with competency-based education. They are concerned that some important competencies (attitude, problem-solving ability, human relations, etc.) can not be defined.
DIFFERENTIATED STAFFING

Differentiated staffing is a method used to assign teaching tasks to faculty members. The aim is to improve student learning by appropriate matching of teaching-role to teacher-type. Using differentiated staffing, teachers will concentrate on those teaching activities which they can do best, such as:

- Presenting a lecture
- Reviewing materials with a small group
- Coordinating learning experiences
- Counseling an individual student

Generally, routine or non-teaching tasks are assigned to laboratory assistants, teacher aides, maintenance and clerical staff or aides.

(Remember, students can teach students too.)

Teacher roles and responsibilities are structured under differentiated staffing. The more experienced faculty members function as master teachers or program leaders and assume added responsibility for such things as program development, not generally expected of the new teacher. The experienced faculty becomes an effective teaching resource, able to devote full time to the problems of student learning.
INDIVIDUALIZED INSTRUCTION

Individualized instruction is any learning process which provides each student with learning experiences based on individual needs. Each student is an individual who brings a unique set of needs, skills and motivations to the school. Individualized instruction is an instructional method in which each student works alone (or in small groups) on learning activities designed to meet his specific needs and use his developed skills.

One of the major features is the faculty-role change from teacher/lecturer to one of learning coordinator.

Individualization in the classroom can be instituted a number of different ways, including:

- PSI (Personalized System of Instruction) as set forth by Fred Keller:*  
- Modularization of materials
- Cooperatively Planned Units
- Use of Programmed Instructional (PI) materials

Many medical record school faculty have successfully used Developing Individualized Instructional Material by Johnson and Johnson, Westinghouse Learning Corp., to help them operationalize the concept.

One way of instituting individualization is to say, "Stop the World—we WILL INDIVIDUALIZE!", and then spend four to six staff years to:

1. Prepare a continuum of behavioral objectives for every unit of instruction.

2. Prepare a list of activities which individual students could do to meet each objective. Include all materials (books, articles, film strips, tapes, films, etc.) available to students.

3. Assemble formal modules for each unit of instruction for each course.

However, the stop-the-world philosophy will inhibit the educational process for a few years and condition the faculty to develop materials rather than manage student learning.

As an alternative, a step-by-step approach can be adopted. First, identify the single unit of instruction or subject area which gives the students and faculty the most trouble. Then start the development process on that specific unit or area. As the trouble spots are handled on a one-by-one basis, the curriculum will become individualized.
MODULARIZATION

The variable class schedule, flexible schedule, and modular schedule indicate some type of student cycling over a varying time period. Modular scheduling can refer to actual class schedules, or to facilities, students, units of instruction, or to time. Modular scheduling encourages the efficient use of facilities, students, faculty and time. The following definitions can help clear up these terms:

- **Module of time.** A module in time-reference means: "so many minutes = a module." For instance, if there were 20 minutes to a module, a six-hour day would contain 30 modules.

- **Modular facilities.** Class spaces are adjusted to fit everyday varied needs. Many times inner classroom partitions are used so they may be opened or closed as required.

- **Modular scheduling.** Cycling of students over a varying period. The students do not necessarily meet daily, but meet for several days per week for the number of time modules which equals the required time. For instance, if a student must spend 300 minutes in Medical Terminology each week, five 20-minute modules, three days per week may be scheduled. Modular scheduling can adapt to block scheduling, which may be essential for laboratory sessions.

- **Modular unit of instruction.** Breaking down a course into smaller packages or units. In individualized instruction, as a student completes one unit or module of instruction, a test is taken. If passed, the next module can be started.
STUDENTS AS AN INSTRUCTIONAL RESOURCE

TRUE OR FALSE: Since students come to school to learn, it is unfeasible (or unfair) to use them as educational resources.

True?

Perhaps not, say some contemporary educational researchers. In Changing Education: Alternatives from Educational Research, Prentice-Hall, Inc., it is postulated that there are many different roles suitable for students. Two roles of interest are:

- The student as an instructional system manager
- The student as a materials developer

STUDENT-MANAGED INSTRUCTION

Given an adequate instructional system to manage, each student should be able to function alone or in a group environment. A student who manages well, could assume an interactive-teaching role. Research has indicated that these interactive roles provide superior learning experiences. The responsibility of the faculty is to provide a manageable instructional system, adequate orientation, and follow-up counseling.

STUDENT-DEVELOPED MATERIALS

During a state-level-funded Career Education Project, the Peoria, Illinois High School Seniors were taught how to prepare notebooks on various careers of their choice. The initial products were, shall we say, not professional. However, they were put in the Library and used the next year as resource materials by the new Seniors. At the end of the three-year project, Peoria had an excellent collection of career education materials. They were classroom "text" materials and they were developed by students.
Can this operational philosophy be used to develop new materials for medical record education? Sr. Mary Eugene Ramey's students developed a Medical Terminology program for Nursing Facility Medical Record Personnel. It is excellent; good enough for AMRA to publish. Could medical record students go one step further and develop individualized instructional materials for future medical record students? Try it and see.
TEAM TEACHING

Team teaching generally means the cooperative management of a group of students by several faculty members (usually three or four). Each faculty member brings special technical competencies and interests to the program. The team can be considered as a number of specialists, each taking an area of speciality and providing leadership for planning and teaching in that area. The team shares the responsibility for planning, developing, implementing, and evaluating a course, set of courses or a complete program.
SECTION V
SUMMARY

There are literally dozens of excellent resources available to help professional and technical educators in various aspects of curriculum design. In medical records alone, there are over 10 miscellaneous references available from AMRA. The past efforts have approached specific problem areas. A review of the existing literature indicated that an overall system-model was needed.

This document provides one example of a systems approach to Curriculum Management. The system adopted contained four phases:

- Phase I - Assessment
- Phase II - Planning
- Phase III - Implementation
- Phase IV - Evaluation

In addition, alternative educational approaches were presented.

As this system is used, other improved systems-based models will evolve, which may make this approach obsolete. That is as it should be. If this document initiates development of other formalized curriculum management systems for Medical Records, it will have served its purpose.
APPENDIX

SAMPLE DOCUMENTS

ADVISORY COMMITTEE LETTERS

- Invitation and Return Postcard 1
- Appointment Announcement 2
- Meeting Announcement 3
- Follow-up Letter 4
- Sample Certificate 5
- Letter of Appreciation 6

MANPOWER FORECASTING FORM 7

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June 30, 1975

Ms. M. R. News, RRA
Manager, Medical Records Dept.
Good Health Care Institution
Acute Avenue
Hometown, Kansas

Dear Ms. News:

(Name of School) has established a Medical Record Advisory Committee to advise us concerning education programs that are needed in the community. The committee will meet periodically on a continuing basis to review the total medical record education curriculum and to advise on new requirements and priorities. Usually, this committee is concerned with problems pertaining to the development and evaluation of the medical record curriculum and not with a specific course or program.

Because of your extensive experience in the health care industry and your recognized leadership and interest in our school, we would like you to serve on this Advisory Committee.

Realizing that you have a very busy schedule, we are tentatively planning on holding only four group meetings during the coming year. The dates, times, and places for these meetings can, of course, be decided by the total committee at the organizational meeting which will be held (date) at _____ P.M. in the ______(Room) of the ______(Location) Building.

Please return the enclosed self-addressed card if you are able to serve on the committee.

If you have any questions regarding the function or purpose of the advisory committee, please do not hesitate to call me at ______(phone)_____. I am looking forward to seeing you at the organizational meeting.

Sincerely,

Director, Medical Record Education

<table>
<thead>
<tr>
<th>Will you be able to serve on the Advisory Committee?</th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>If yes, will you be able to attend the organizational meeting?</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>
June 30, 1975

Ms. M.R. News, RRA
Manager, Medical Records Dept.
Good Health Care Institution
Acute Avenue
Hometown, Kansas

Dear Ms. News:

On behalf of our (Board of Trustees), I take great pleasure in welcoming you as a member of our working team. Your willingness to serve on the Medical Record Education Advisory Committee for the 1975-76 school year is appreciated and your contribution is viewed as an essential part of building quality education programs at our school.

Your interest and experience in the field of medical records and in our school makes you a valuable addition to our advisory function. Not only is this an opportunity to contribute your talent to the school, but to our entire health care community as well.

Thank you again for offering your time and efforts.

Sincerely,

I.M. Important
President
MEETING. ANNOUNCEMENT

(Letterhead)

June 30, 1975

Dr. Harold Law
Diagnostic-Depot
Illinois State Penitentiary
415 Woodruff Road
Hometown, Illinois 60001

Dear Dr. Law:

Pursuant to our telephone conversation earlier this week, I am writing to confirm your willingness to serve as a member of our Medical Records Advisory Committee. The first meeting of this committee will be held at the school on (date), at (time). This will be a luncheon meeting.

The meeting location will be the (Location) of the (Name) Building. Enclosed you will find two maps; one to aid you in locating the campus, the other shows the parking area and meeting location circled in red.

The meeting agenda is enclosed. Also enclosed you will find a copy of our proposed degree program, as well as an advisory committee handbook. These materials will form the basis of our discussions.

I thank you again for your participation in this program. The school is proud to have you as a part of the Medical Record Education Advisory Committee.

If you are unable to attend our first meeting, please let me know.

Sincerely,

Director, Medical Record Education

encl: maps
agenda
proposed program
advisory committee handbook
June __, 197__

Ms. M.R. News, RRA
Manager, Medical Records
Good Health Care Institution
Acute Avenue
Hometown, Kansas

Dear Ms. News:

Enclosed is a copy of the minutes of our June __, 197__ Medical Record Education Advisory Committee Meeting. We are sorry you missed it and hope you will be able to attend the next one.

Some of the members of this committee are having difficulty attending the daytime meetings. Would you complete the enclosed postcard and return it to indicate your intent to serve. Also indicate the best day of the week and time for you to attend our meetings.

Sincerely,

Director, Medical Record Education
Certificate of Appreciation

This is to certify that

is awarded this certificate for Outstanding Service to the Institution

DATE

PRESIDENT

CHAIRMAN, GOVERNING BOARD

Director of Medical Record Education
June____, ____

Dr. M.C. Practioner
Good Health Care Institution
Acute Avenue
Hometown, Kansas

Dear Dr. Practioner:

The Board of Trustees of (Name of School) appreciates the important role which Ms. M.R. News has played in assisting with the development of the Medical Record Educational Program at our school. Her role as Chairman of the Advisory Committee was a very demanding position and required frequent meetings with the school administrative staff and with others of our community. Her enthusiasm and leadership qualities and unending devotion toward Medical Record education has helped to develop two new courses in addition to evaluating the existing program.

We of the Board of Trustees are most grateful for the service of Ms. News on our Medical Record Education Advisory Committee.

Sincerely,

I.M. Portant, Chairman
Board of Trustees

cc: M.R. News
File
The purpose of this questionnaire is to gather regional data on current and forecasted manpower needs in medical record practice. Our school will use the information for planning purposes only. All information will be held confidential.

Please fill it out by (Date) and return in the enclosed, self-addressed envelop. If there are any questions, feel free to call (Name) at (phone #).

1. Institution Name
2. Address
3. Person Completing Form
4. Title
5. Telephone
6. No. of Medical Records Employees

<table>
<thead>
<tr>
<th>TITLE</th>
<th>Average Number on Payroll</th>
<th>Annual Number of Employees</th>
<th>Expected Employment (1975-80)</th>
<th>Present Supply of Qualified Applicants</th>
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<tbody>
<tr>
<td>RLA/OSA</td>
<td></td>
<td></td>
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<tr>
<td>ART/MT</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Supervisory Personnel</td>
<td></td>
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<td></td>
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<tr>
<td>(No Formal HS Education)</td>
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<td></td>
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<tr>
<td>Tumor Registry Personnel</td>
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<td></td>
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<tr>
<td>Transcriptionist</td>
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<tr>
<td>Medical Record Clerk</td>
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<tr>
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</tr>
<tr>
<td>Admitting Clerk</td>
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<td></td>
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</tr>
<tr>
<td>Basic Clerk</td>
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</tr>
</tbody>
</table>

COMMENTS:

NOTES ON CURRENT TRENDS:
ASSESSMENT

DECISION TO INVESTIGATE (A.1)

- OBTAIN INSTITUTIONAL APPROVALS (A.2)
- OBTAIN MRA/MRT ESSENTIALS (A.3)
- ESTABLISH ADVISORY COUNCIL (A.4)

ASSESS NEEDS (A.5)

DOCUMENT ASSESSMENT RESULTS (A.6)

DOCUMENT PURPOSE, RATIONALE, ASSUMPTIONS, & VALUES (A.7)

A.5 NEEDS ASSESSMENT

- CHECK FOR COMPETING SCHOOLS (A.5.1)
- INVESTIGATE / DETERMINE AVAILABILITY OF FACILITIES (A.5.2)
- ESTIMATE AVAILABILITY OF CLINICAL SITES (A.5.3)
- INVESTIGATE STUDENT INTEREST (A.5.4)
- DETERMINE STUDENT INTEREST FOR CANDIDATES (A.5.5)
- CHECK ON AVAILABILITY OF FACILITIES (A.5.6)
- CHECK ON AVAILABILITY OF SUPPORTING COURSES (A.5.7)
- ESTIMATE COSTS (A.5.8)
- INVESTIGATE FUNDING (A.5.9)
- IDENTIFY INSTITUTING RESOURCES (A.5.10)
DECISION TO PROCEED

(A.8)

OBTAIN INSTITUTIONAL APPROVALS

(B.1)

REVIEW INSTITUTIONAL POLICIES

(B.2)

APPOINT PROGRAM DIRECTOR

(B.4)

DOCUMENT EVALUATION DESIGN

(B.5)

REVIEW AMA & AMRA POLICIES

(B.3)

DESIGN CURRICULUM

(B.6)

OBTAIN INSTITUTIONAL PROGRAM APPROVALS, DIRECTOR (BA)

(B.4)

EXAMINE FUNCTIONAL ELEMENTS

(B.6.1)

REVIEW TASK ANALYSES

(B.6.1.1)

PREPARE STATEMENT OF PURPOSE

(B.6.3)

STUDY WEIGHTED OUTCOMES

(B.6.4)

PREPARE STATE AND LOCAL REQUIREMENTS

(B.6.6)

STUDY LOCAL COURSE OFFERINGS

(B.6.7)

FORMULATE INSTRUCTIONAL STRATEGY

(B.6.11)

PREPARE TEST ITEMS

(B.6.12)

REVIEW ESSENTIALS

(B.6.12.1)

EXAMINE ESSENTIALS

(B.6.2)

STUDY LOCAL OFFERINGS

(B.6.12)

PREPARE STATEMENT OF PURPOSE

(B.6.12.3)

STUDY WEIGHTED OUTCOMES

(B.6.12.4)

PREPARE STATE AND LOCAL REQUIREMENTS

(B.6.12.6)

STUDY LOCAL COURSE OFFERINGS

(B.6.12.7)

FORMULATE INSTRUCTIONAL STRATEGY

(B.6.12.11)

PREPARE TEST ITEMS

(B.6.12.12)
IDENTIFY EVALUATIVE QUESTIONS
(D.2)

IDENTIFY EVALUATIVE BASES
(D.3)

GATHER EVALUATIVE DATA
(D.4)

REDUCE & ANALYZE EVALUATIVE DATA
(D.5)

PREPARE EVALUATION REPORT
(D.6)

DOCUMENT ACTION PLAN
(D.7)

FEEDBACK TO IMPROVE INSTRUCTION

OBTAIN & STUDY THE AMA/AMRA TECHNICAL SELF-EVALUATION

Prepared by FRÉDRIC A. CLARK
AMRA—June, 1975