This paper presents a preliminary human resource development plan for the radiography program sponsored by Lincoln Land Community College (Illinois). The plan is based on the "Essentials and Guidelines of an Accredited Program for the Radiographer," initially adopted in 1944, and most recently revised in 1990, it involves the integration of external forces such as accreditation, demographics, and future trends with the internal human resources of the college. Items relevant to human resources are discussed in terms of outcome assessment. Following a review of the "Essentials and Guidelines" and a description of how they have an impact on the human resource development of a community college sponsoring a radiography program, the process is described. It consists of formulating goals based on institutional purpose, developing procedures upon which to evaluate these institutional goals, and indicating how these evaluations will be used to improve or maintain institutional effectiveness. Groff's (1990) description of human resource development in educational institutions as recruitment, supervision, staff development, and evaluation of personnel is used as an operational definition. This model of the use of human resource planning based on accreditation guidelines for a specific program (radiography) can be used with other programs that require specific accreditation in community colleges, such as nursing, respiratory therapy, medical laboratory technology, and child care services. (Contains 24 references.) (KC)
HUMAN RESOURCE DEVELOPMENT PLANNING
BASED ON ACCREDITATION GUIDELINES

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INTRODUCTION

In 1981 Groff noted a need to match external assessment with internal audit, and Scott (1988) felt that the institutional self-study process (accreditation) was rarely matched with the planning process, though it certainly should be. Groff (1985) has also stated that institutions cannot be "community renewal mechanisms" unless they undertake plans to develop their "critical mass of intellectual capital." In an organization concerned with outcomes, human resource development is integrated into the goals of the institution.

Douglas and colleagues (1985) have described a need for a "multiple role perspective" (MRP), a "multifaceted examination of human resources required when managers attempt to achieve a strategic fit between the external environment and deployment of resources." HRD must be linked to the institutional planning process, though institutions often ignore the role of HRD in planning (Miller, 1989; Simmons and Elsberry, 1988). Schein (1978) has developed a model matching organizational needs and issues to the needs of the individual. This occurs through a variety of matching processes which diagnose areas for improvement, leading to the formulation of strategic plans. Such a synergistic view makes the best combined use of the limited physical and human resources available.

Such recognition and auditing of strategic documents in relation to human capital should lead to improvements in both the institution and individual; for example, Addams and Embley (1988) integrated employee performance appraisal with the strategic plan.

In many cases, successful planning simply consists of asking the right questions. As a site visitor for the accreditation body for the allied health profession of radiography, I have noted that many programs attempt to
indicate program quality without asking basic questions such as "Who are we?," and "What clientele do we serve?" There often is a lack of understanding that offering a quality program requires more than a program that simply meets content standards of the profession. Successful planning in the community college involves integrating external forces such as accreditation, demographics, and future trends with the internal human resources of the college.

This paper will present a preliminary Human Resource Development Plan for the Radiography Program sponsored by Lincoln Land Community College based on the Essentials. Those items relevant to human resources will be presented and discussed in terms of outcome assessment. Following a review of the radiography Essentials and a description of how these Essentials impact on the human resource development of a community college sponsoring a radiography program, this process will be described. It consists of:

1. Formulating goals based on institutional purpose;
2. Developing procedures upon which to evaluate these institutional goals; and
3. Indicating how these evaluations will be used to improve (or maintain) institutional effectiveness.

Groff's (1990) description of human resource development in educational institutions as recruitment, supervision, staff development, and evaluation of personnel, as well as student personnel, will be used here as an operational definition.

This article describes the use of human resource planning based on accreditation guidelines for a specific program (radiography) sponsored by a community college. Although this program has specific needs in the areas of technology, the use of clinical sites and clinical personnel, and overall
human resource planning, this model will work well with the multitude of programs that require specific accreditation in community colleges. These include, but are not limited to, nursing, respiratory therapy, medical laboratory technology, child care services, and so on.

RADIOGRAPHY ACCREDITATION

Programs in radiography are accredited based on the recommendation of the Joint Review Committee on Education in Radiologic Technology by the Committee on Allied Health Education and Accreditation. The Committee is a division of the American Medical Association, and the standards for accrediting educational programs preparing individuals to enter an allied health profession are published as the Essentials. The American College of Radiology, the American Medical Association, and the American Society of Radiologic Technologists cooperatively establish, maintain, and promote these standards.

The Essentials and Guidelines of an Accredited Program for the Radiographer were initially adopted in 1944, and have been revised in 1955, 1969, 1978, 1983, and most recently in 1990. What makes these Essentials different from the previous version is a strong emphasis on outcomes. This emphasis on accountability is not new to education, but reflects a variety of concerns:

1. Demands by the public and the media for a simple and understandable basis for making judgements about educational quality (Parnell, 1990). Federal regulations now require accrediting agencies to "place a greater emphasis on the consistent assessment of student achievement as a principal element in the accreditation process" (Julian, 1989).

2. A new look at "value-added education," (Astin, 1984; McClain, 1984) or "talent development" (Astin, 1990) in the college setting. This asks...
the basic question: What value have we added to an individual’s life as the result of time spent in the college?

3. A down-playing of reputational and/or resource views such as the largest library or the most Ph.D.'s. Instead assessment policy has assumed major importance (Smith, 1989).

4. In health care education outcome measures have been touted as:
   b. Emphasizing the basic skills necessary to the profession.
   c. A method that allows the educator to develop the process of education instead of an external agency.

ANALYSIS OF THE ESSENTIALS IN TERMS OF HUMAN RESOURCES

The Essentials consists of six sections:

I. Sponsorship
II. Resources
III. Curriculum
IV. Students
V. Operational Policies
VI. Continuing Program Evaluation

These will be evaluated section-by-section for potential impact and, if appropriate, how these will be integrated into a HRD Plan.

Sponsorship

This section relates to the accreditation status of the sponsoring institution(s). Accreditation is granted to the institution that assumes primary responsibility for curriculum planning and selection of course
content, coordinates classroom teaching and supervised clinical education, appoints faculty to the program, receives and processes applications for admission. The sponsoring institution is also responsible for assuring that the activities assigned to students in the clinical setting are educational.

Potential Impact:
1. Faculty must be skilled in curriculum planning.
2. Faculty must know the demands of the profession and be familiar with new technology and imaging modalities.
3. Faculty must be skilled classroom teachers.
4. Faculty must be qualified.
5. An individual must be familiar with a fair and equitable admission process.
6. Faculty must be able to determine the educational validity of clinical assignments.

How Does the Program Meet These Requirements?
1. The program faculty have a minimum of 8 years teaching experience and exceed the qualifications listed in the Essentials.
2. The program director is the author of the chapter on "Admissions" in the Handbook for Educational Programs published by the Joint Review Committee.

Resources
This section looks at general resources, personnel, professional development, financial resources, and physical resources. In terms of general resources, the number and breadth of procedures must be sufficient to accommodate student learning needs, with an appropriate instructor/student ratio (1 instructor for each ten students on-site).

The program director is responsible for the organization,
administration, periodic review, continued development and general
effectiveness of the program. This individual also evaluates and makes sure
that clinical education is effective through regular clinical visits. The
director must maintain current knowledge of imaging techniques and educational
methodology through continued professional development.

Clinical instructors must be knowledgeable of program goals,
clinical objectives, and the clinical evaluation system. These same
individuals provide students with appropriate and adequate clinical
instruction and supervision, and evaluate the clinical competence of students.
Continued professional development is also required of clinical instructors to
maintain competency in imaging, instructional, and evaluative techniques.

Didactic faculty must also maintain competence through continued
professional development. There is also a need for clinical staff to
understand the competency-based clinical education plan and be supportive of
the educational process.

In general, professional development should utilize program
outcomes, such as meeting institutional and program goals, preparing competent
radiographers and maintaining professional and teaching competence. Also, it
should be tied into the faculty and curriculum development and evaluation
process.

Potential Impact:

1. Professional development must stress imaging, instructional, and
evaluative techniques as these issues relate to each individual's contribution
to the program.

2. Professional development and qualifications must be
documented.

3. Professional development must relate to outcomes, and tie into
the faculty evaluation and curriculum development process.

4. Professional development of all individuals associated with the program, including the clinical staff, is stressed.

How Does the Program Meet These Requirements?

None of these issues are addressed well by the program. This will be a part of the Human Resource Plan.

Curriculum

This section describes the curriculum and the evaluative process needed. Exit interviews with students should occur. There should be a master plan which outlines the institutional philosophy and goals, the curriculum, course descriptions, a description of the competency-based evaluation, performance objectives for clinical education, graduate competencies, how the three educational domains are evaluated, grading policy, program policies, and outcomes assessment process.

Potential Impact:

1. Evaluation must be stressed.
2. A process for exit interviews should exist.
3. A master plan must be developed.

How Does the Program Meet These Requirements?

Evaluation is a strong part of the program, and the master plan was approved in the last visit. No process for exit interviews exists, and the use of affective evaluation and instruction should be assessed.

Students

This section covers the program description, admissions, evaluation, health services, and guidance. Admissions standards stress qualifications in math and science. Technical standards should provide the student with a knowledge of physical needs.
Faculty must provide counseling to the student, and evaluation must be related to objectives and documented.

Potential Impact:

1. Admission standards must be based on professionally relevant criteria.

2. Faculty must be qualified to counsel, and know when to refer students to professional counseling.

3. Faculty must be able to relate evaluation to objectives and standards.

**How Does the Program Meet These Requirements?**

The program meets the above requirements well. The program director and the directors of the respiratory therapy program, in conjunction with the Dean of Student Services, have developed an admissions system that meets accreditation criteria and state mandates to choose the "most qualified" applicants.

The program director holds nine graduate hours in counseling, and one faculty member is half complete with an M.A. in counseling. Faculty are qualified through coursework and experience to relate evaluation to objectives and standards.

**Operational Policies**

This section focuses on fair practices and student records. The pregnancy policy of the program must be related to professional standards and fair. A due process procedure must be in place. Records must be maintained in the areas of admission, attendance, evaluation, and radiation monitoring.

Potential Impact:

1. A familiarity with equity in the educational process must exist among individuals associated with the program.
How Does the Program Meet These Requirements?

The program stresses equity with its affiliation with a known student-centered institution, Lincoln Land Community College. The pregnancy policy meets professional criteria, but has recently been re-evaluated to minimize misunderstandings by students of what a pregnancy policy means for the student radiographer.

Continuing Program Evaluation

This section describes the focus of program evaluation (behavioral changes in students as a result of the educational experience) and a prospective description of items that should be assessed in the ongoing evaluation of the program.

Potential Impact:

1. Individuals associated with the program must be familiar with an outcomes assessment approach to accreditation.

How Does the Program Meet These Requirements?

The program director has presented a seminar on outcomes assessment to the Ohio State Society of Radiologic Technologists, and has presented the same presentation to the program faculty and administrators of the radiology department at St. John's. This should be further stressed.

Human Resource Goals

Based on the above, the following goals are set for the program:

1. Future professional development must be related to:
   a. Imaging.
   b. Instructional Techniques.
   c. Evaluative Techniques.

2. Future professional development will be related to, additionally, a combination of:
a. Self-identified personal goals of faculty.

b. Program goals, objectives, and outcomes.

c. The instructor evaluation process - student, peer, and administrative.

3. Professional development must include a mechanism for development of all individuals associated with the program, including administrators and professional staff. They must support the educational process, and understand the competency-based clinical education system.

4. A system for exit interviews must be developed, to include clinical and didactic education. To make the best use of such a system, entry- and first-year interviews should also be performed.

5. The faculty member without experience in counseling should be encouraged to complete at least one graduate-level course in counseling. This is currently a strong concern in the professional community (see, for example, Hatfield (1990), and Poelhuis (1990)). Poelhuis estimates that allied health faculty spend up to twenty percent of their time counseling.

6. The faculty must understand well the value orientation, constraints, and methodology involved in an outcome-oriented, basic skills accreditation environment.

**HUMAN RESOURCE ACTION PLAN**

The following action plan is proposed:

1. All professional development will be evaluated by the program director to see if it meets holistically the three criteria of imaging, instructional, and evaluative techniques. Faculty will be required to participate in at least one activity per year related to each of the above.

2. Faculty must now set personal goals for faculty development each year based on self-identified needs and the relationship of the activity to
program goals.

3. The faculty evaluation process will be used to identify specific needs of faculty for professional development.

4. Clinical staff will receive an inservice, three times per year, related to the program. Continuing education points will be applied for, which will increase the value of the activity to the staff, who must complete twelve points per year to maintain state licensure.

   The following topics will be rotated between faculty:
   a. Competency-based clinical education plan.
   b. Positive attitude toward teaching (under a variety of other, but related names, such as "Student Motivation," "The Role of the Clinical Instructor in Radiography Education," and "What Students Should Know.").
   c. Teaching Skills for Clinical Staff.

   Additionally, all program policy changes will be announced at the regular technologists' meeting, and on a one-time basis, a discussion of the accreditation process and outcomes will be presented (tentatively scheduled for immediately previous to the next site visit).

5. A system for entrance-, first-year-, and exit-interviews will be in place with the next entering class.

6. The faculty member lacking a course in counseling will take this course within a two-year period. Courses in related fields of study, such as management (i.e., courses that relate to human resource development and personnel management) or education will also be acceptable.

7. A regular (yearly) inservice on outcomes and accreditation will be conducted for the faculty. It will also be offered on a one-time basis to the program advisory committee.
USE OF THE PLAN TO IMPROVE OR MAINTAIN INSTITUTIONAL EFFECTIVENESS

A one hundred percent compliance with the plan is expected to improve the effectiveness of the program and meet accreditation essentials and guidelines. Compliance with the above plan will be evaluated on a yearly basis (each June) by the program director, as well as an initial six-month evaluation to chart the progress of the plan. This will be documented, as per accreditation guidelines, in the program Master Plan.
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