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Career Ladder in Medical Laboratory with Multiple Certifying Agencies

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CAREER LADDER IN MEDICAL LABORATORY WITH MULTIPLE CERTIFYING AGENCIES

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Abstract: The purpose of this article is to review the medical laboratory career ladder. Every health profession has a career ladder which involves education and experience. During the past few decades, workers were in abundance and entry into health occupations was primarily accomplished through education. Presently, there is a shortage of health care workers during an age of increasing health care ***needs.*** Therefore, the time has come to reassess the other avenue of career development, namely experience. Barriers to certification by experience have developed through eligibility requirements established by certifying agencies attempting to ensure public safety during a period of rapid advances in health care knowledge, procedures, skills, and technology. Recommendations for improvement are made.

Most health occupations programs are experiencing declining enrollments. The years of baby-boomers crowding the classrooms are

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over. No longer can educational institutions afford unlimited classes, in various locations, and on flexible schedules. In order to better serve the professions and future students, health occupations professionals must take a close look at the avenues for career mobility in existing career ladders. Thus, this article specifically addresses the clinical laboratory career ladder.

Career Ladder

A career ladder has two types of mobility: (a) vertical and (b) horizontal. Vertical mobility is usually defined as the upward movement of an individual in a chosen career field, although it may also refer to a downward movement. For example, health care practitioners may choose to step down to a position with fewer responsibilities and less stress. Horizontal or lateral mobility refers to an individual's movement between education and employment (experience) (Bortz, 1981). Figure 1 shows the six primary occupational levels on the clinical laboratory technology career ladder in relationship to vertical and horizontal mobility.

Before the advent of medical technology as a science, the only career ladder consisted of on-the-job training coupled with experience (Friedman, 1983). Today, two routes of career mobility exist: (a) education and (b) experience. Many students take the education route directly to the technologist level. With the costs of education increasing, a greater number of students are choosing a combination of education and experience. By obtaining training and certification at one of the lower occupational levels, an individual can earn a living wage while taking the advanced courses. In the meantime, that individual is accruing seniority and experience (Figure 2).

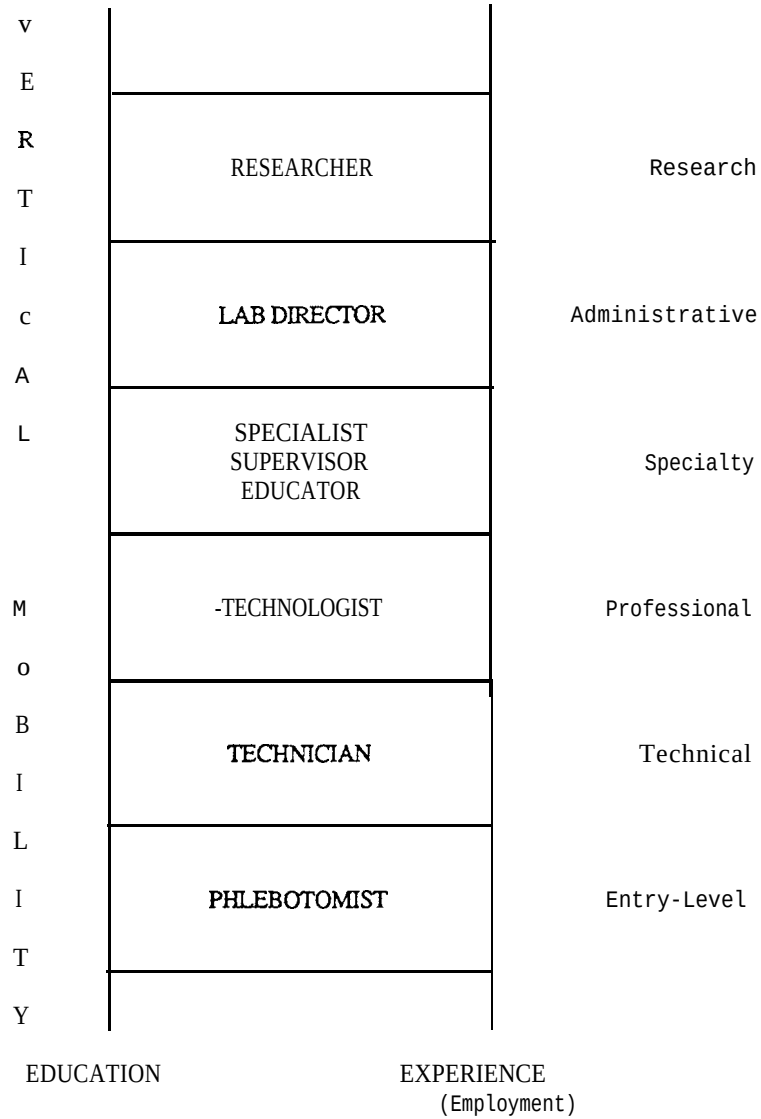


Figure 1. Vertical and horizontal mobility in relation to the laboratory technology career ladder.

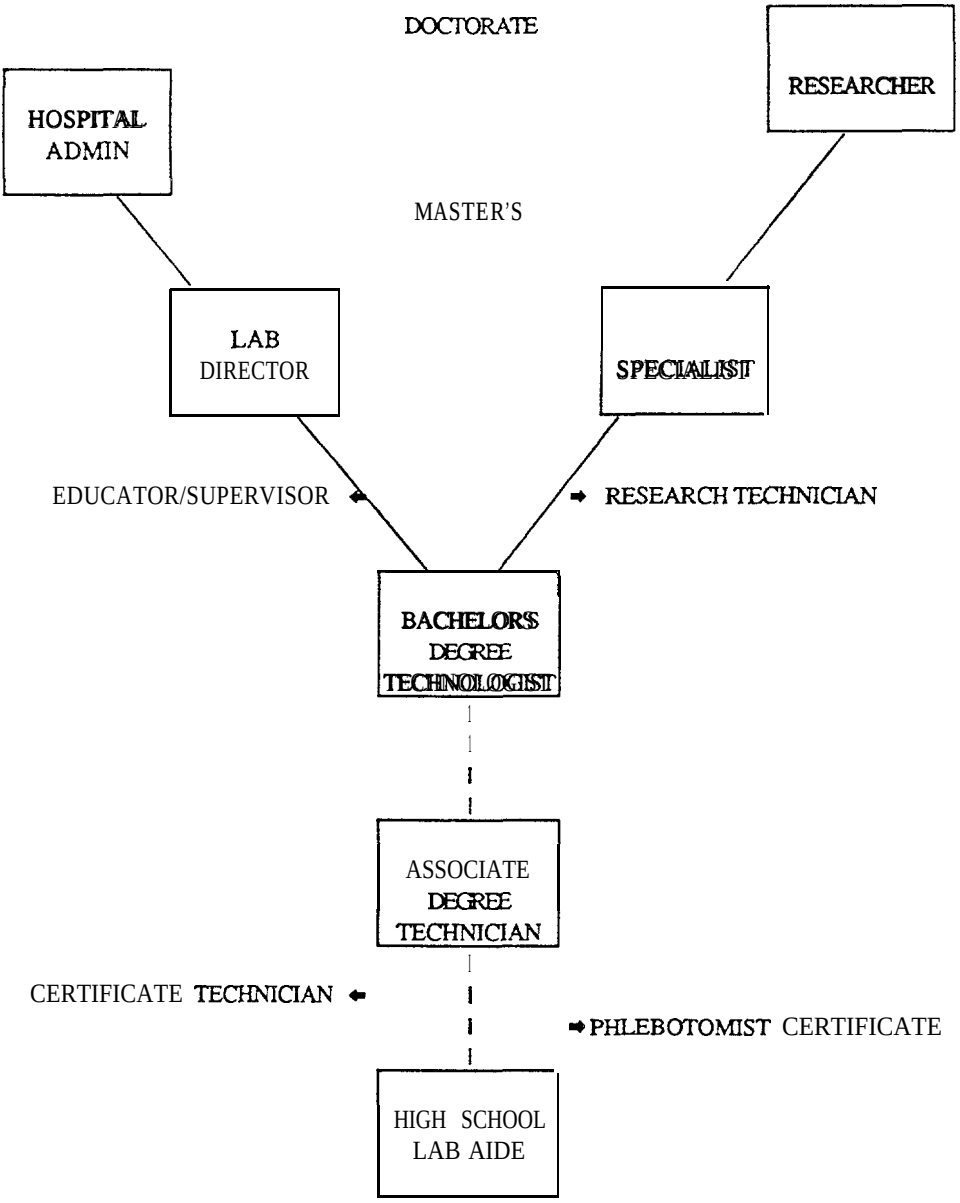


Figure 2. A laboratory technology career ladder developed from a combination of education and experience.

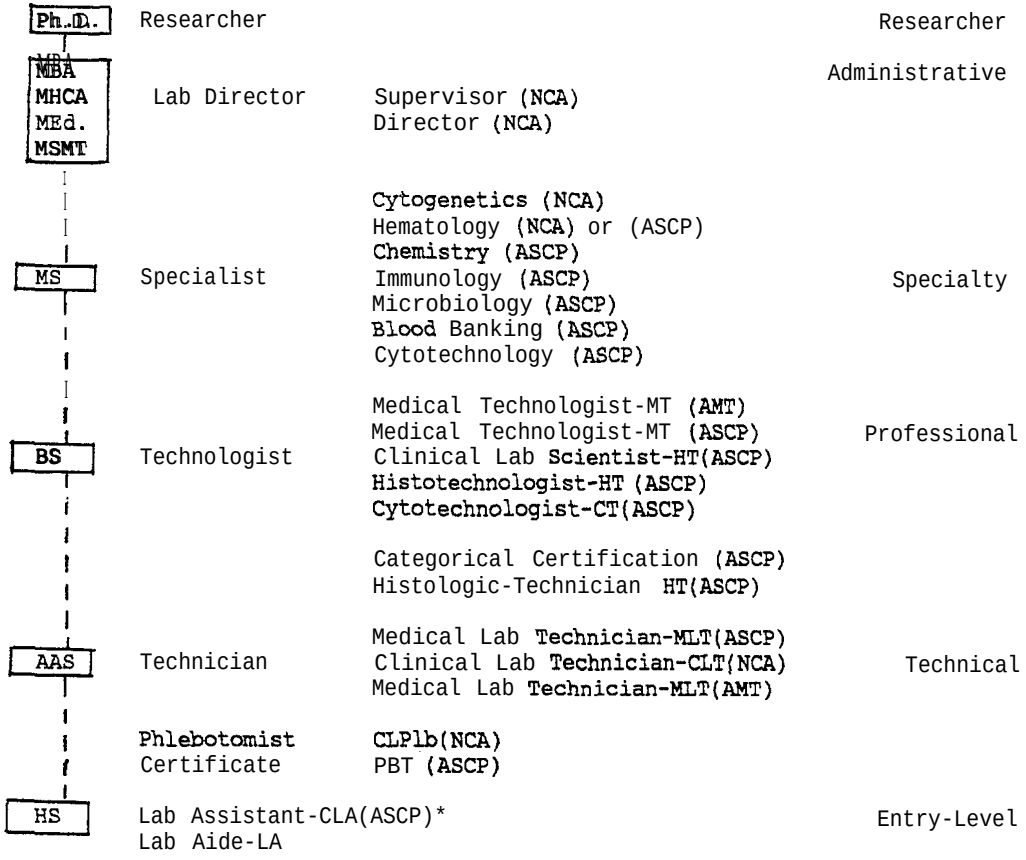
The experience track contains one major hurdle that can only be overcome by 60 (National Certification Agency for Medical Laboratory Personnel, 1986) or more (American Medical Technologists, 1988; American Society of Clinical Pathologists, 1988) science oriented college semester hours or one to two years of specialized training (American Medical Technologists, 1988). That hurdle, technologist certification, represents a major break in upward vertical mobility along the experience half of the career ladder.

Education

The education leg of the career ladder is well known to most laboratory practitioners. A pictorial representation of vertical mobility through education is shown in Figure 3. The six primary occupational levels are represented by degree milestones. Several sub-levels of occupations fall between these milestones. These sub-levels require a combination of education and experience.

Education degree programs provide an organized systematic approach to skill training. Usually this route is considered to be the quickest but most expensive way to climb the career ladder. In some of the subspecialties, though, additional specialty training or experience is required beyond the educational degree.

Categorical certification by the Board of Registry is available to individuals who are between the associate and bachelor degrees (American Society of Clinical Pathologists, 1988). Unfortunately, no categorical certification has been established for the individual who is unable to complete the associate degree. Due to family and/or financial problems, many capable students must leave the educational environment for a period of time. Each course successfully completed



*Certification examination is no longer offered.

Figure 3. The education leg of the laboratory technology career ladder with identification of the certificate available at each level.

by a student should build that student's occupational equity. Bortz (1981) defines occupational equity as the resource of employment potential one builds through work and/or study and preparation for employment. The two largest laboratory science certification programs, National Certification Agency (NCA) and the American Society of Clinical Pathologists (ASCP), are designed so that a student must complete all the courses of an educational program in order to obtain technician or technologist certification and, ultimately, a laboratory job (American Society of Clinical Pathologists, 1988; National Certification Agency for Medical Laboratory Personnel, 1986). If categorical certification was available below the technician level to the leaving student, greater job and school satisfaction could be obtained due to horizontal mobility. At a later date, the student could re-enter the educational process to invest further in occupational equity.

Experience

Figure 4 shows the experience leg of the career ladder. Only two positions are available for certification based only on experience: (a) phlebotomist and (b) technician (NCA) (National Certification Agency for Medical Laboratory Personnel, 1986). A MLT(AMT) technician with three years experience is eligible to take the AMT technologist examination. But to be a MLT(AMT), one must have had educational training in a vocational school, Armed Forces program, or college courses. Once a bachelor's degree has been obtained for the technologist certification, all other levels can be attained through experience and examination (NCA and ASCP) (National Certification Agency for Medical Laboratory Personnel, 1986; American Society of

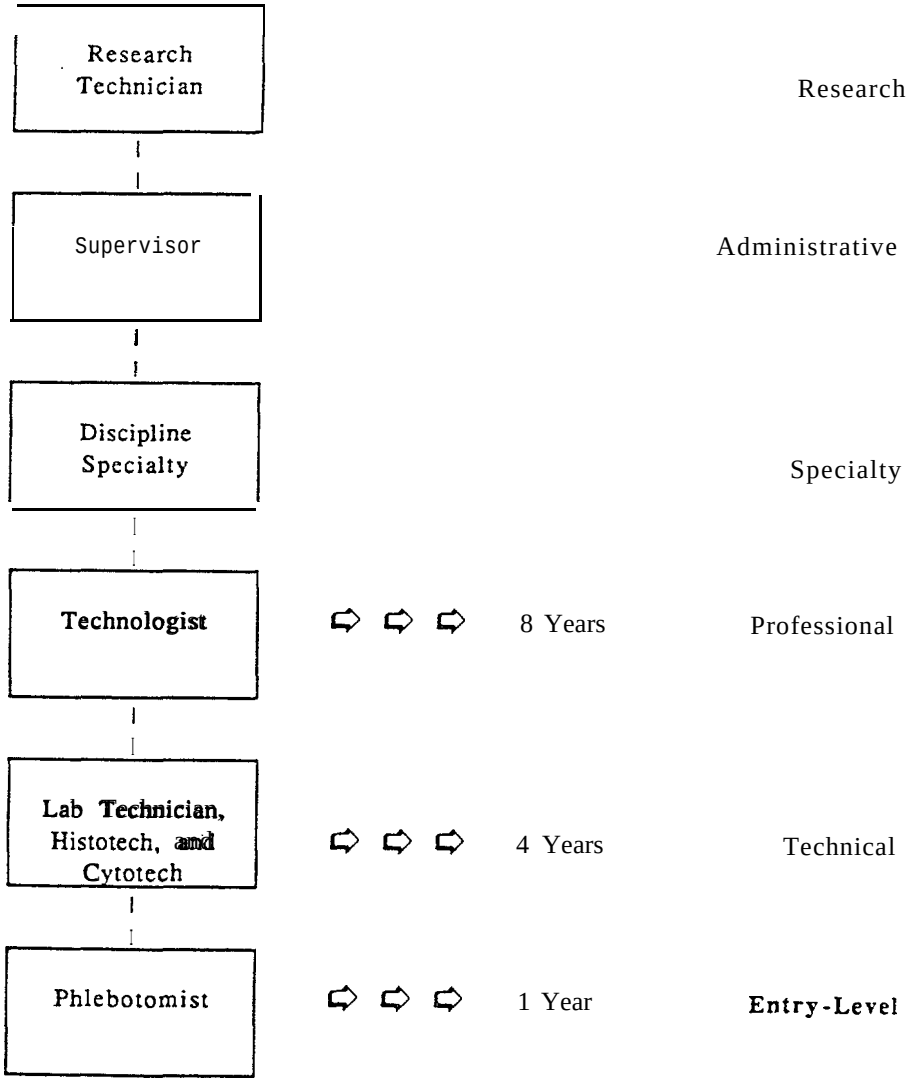


Figure 4. The experience leg of the laboratory technology career ladder.

Clinical Pathologists, 1988). From this information, the argument could be made that an individual does not need a degree for any employment level other than the professional level. In fact, the bachelor's degree may be in any field as long as the appropriate biological or physical sciences are included (NCA and ASCP)(National Certification Agency for Medical Laboratory Personnel, 1986; American Society of Clinical Pathologists, 1988).

One more look at the career ladder reveals that an individual may reach the top with no actual educational training in the clinical laboratory sciences. This may be accomplished by obtaining a graduate degree in the biological or chemical sciences. These individuals are often hired as supervisors and/or researchers and, sometimes, as educators.

The most fertile area for recruitment and often the most overlooked is the secondary school (Neibauer, 1980). Even though college recruiters heavily court high school seniors, very few of these students *are* familiar with medical technology. Many of the vocational-technical professions have developed a large, well-informed recruitment pool by establishing cooperative education programs at the secondary level. The state of Illinois is in the final planning stages of a four-year sequential program for health occupations students in the ninth through the twelfth grades. The program has been planned for students to be taught certain basic skills such as medical terminology, nutrition, safety, and others in grades nine through ten. Students enrolled in eleventh and twelfth grades choosing the medical laboratory program will learn the skills of a laboratory aide or a phlebotomist (Illinois State Board of Education, 1989). The strong bonds

established within the profession through such a program can attract more, and better prepared, recruits especially for the technical level programs. The technologist programs should ultimately benefit since many technicians pursue further education (Rolen-Mark & Castleberry, 1986) .

Clinical Laboratory Technology

In terms of numbers of practitioners certified, three certifying agencies dominate in the clinical laboratory arena. The NCA is operated by peer professionals in medical technology (National Certification Agency for Medical Laboratory Personnel, 1986). Another important group is the Board of Registry of the ASCP which represents physicians who are responsible for clinical laboratories (American Society of Clinical Pathologists, 1988). The third agency is the American Medical Technologists (ANT) which was the first national registry operated by laboratory practitioners and accepting Armed Forces medical laboratory training for certification eligibility (American Medical Technologists, 1988).

These groups, in reality, have designated the career ladder for laboratory professionals by means of certification eligibility requirements. The only two certification levels common for all three agencies are the technician and technologist levels. AMT, ASCP, and NCA generally will not recognize each other's credentials when reviewing an applicant for higher skill level certification. As a result, many practitioners hold certification credentials from two or more agencies at a variety of skill levels. To complicate the situation, until recently, the federal government offered a medical laboratory proficiency examination through the Department of Health and

Human Services (HHS) (Office of Personnel Management System, 1986). Therefore, an individual could meet competency requirements at the technologist level through HHS, but only be certified as a technician.

Many hospitals recognize the proficiency credentials as well as the variety of certification credentials. A closer examination of both legs of the career ladder as impacted by certification requirements is needed. (The impact of proficiency credentials will be phased out with attrition.)

Summary

A career ladder, in general, is composed of two legs: (a) education and (b) experience. As in most professions, the clinical laboratory education leg has been well developed. The experience leg, though, requires some education in order to advance beyond the technician level. Due to a variety of reasons, many students are opting for a combination of the two by moving both vertically and horizontally up the career ladder. Categorical certification below the technician level would allow an individual to invest in occupational equity early in the training effort. An emphasis in the allied health occupations at the secondary level should improve recruitment efforts, as well as general occupational awareness.

The major factors that can produce change from within the profession are:

1. Establishment of categorical certification between the entry and technical level.
2. Establishment of a singular credentialing system or, at least, reciprocity among certification agencies.
3. Establishment of secondary medical laboratory cooperative education programs.

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