

Education

Industry Snapshot

What do you picture when you think about the education industry? A teacher in the classroom with elementary students? A professor at a university teaching biology? Most people have a limited view of what teachers do and what they can teach. In fact, the education industry is made up of many different types of teachers, administrative staff, assistants, and support staff.

- The education industry is comprised of establishments that provide instruction and training on a wide variety of subjects.
- Education careers fall into five areas: elementary and secondary schools, junior colleges, universities and professional schools, business schools, and technical and trade schools (Maryland Department of Labor, Licensing and Regulation).
- Jobs in the education industry account for nearly 9% of Maryland's employment base. About eight out of every ten jobs in education are centered in the public sector where local government is the largest employer (Maryland Department of Labor, Licensing and Regulation).
- There is a general shortage of teachers at all levels and across all disciplines. Shortages are even more critical in specific academic disciplines such as science, technology, engineering, and math, known as the STEM disciplines (Governor's Workforce Investment Board).
- Nearly one quarter of the existing workforce is over age 55 and an additional 27% are age 45-54. This means that 50% of the workforce will retire in five to ten years. Women dominate the sector, accounting for nearly 70% of the workforce (Governor's Workforce Investment Board).

Employment Outlook

The Maryland Department of Labor, Licensing, and Regulation estimates that employment in the education industry will increase 24% between 2004 and 2014.

In Frederick County employment for postsecondary school teachers is expected to increase by 31%, primary, secondary, and special education teachers by 22%, teacher assistants by 23%, middle school teachers by 18%, secondary school teachers by 20%. Frederick County is the seventh largest employer in the state for the education industry (Maryland Department of Labor, Licensing, and Regulation).

Earnings and Employment Outlook

The average earnings for all education careers in Maryland is \$45,170

The median annual earnings in Frederick County for the jobs listed below are:

Art, Drama and Music Teachers, Postsecondary	\$42,150
Mathematical and Science Teachers, Postsecondary	\$46,675
Graduate Teaching Assistants	\$58,475
Kindergarten Teachers, except Special Education	\$48,375
Middle School Teachers, except Special Education	\$53,050
Special Education Teachers	\$52,625
Librarians	\$61,525
Teacher Assistants	\$28,875
(Maryland Department of Labor, Licensing, and Regulation)	

Local Industry Categories/Fields

There are 63 public elementary, middle, and secondary schools in Frederick County and also six other schools such as the Career and Technology Center and the Earth and Space Science Laboratory. Frederick County Public Schools serves over 40,000 students . The current employer of around 2,680 teachers and 5,000 employees overall , Frederick County Public Schools is the single largest employer in Frederick County (www.fcps.com). There are also 14 private schools teaching pre-school through secondary in Frederick County. These schools may have a specific emphasis, such as religion, the arts, or an educational philosophy; other private schools serve special needs or gifted children.

Training and Advancement

The education field involves many different careers all requiring varying degrees of higher education. When working in education, learning becomes an ongoing process. Most teachers and other staff take continuing education classes to help them adapt to new procedures and teaching methods. Below are some examples of training and education needed to succeed in various education careers.

Post Secondary Teachers

The training of postsecondary teachers varies greatly depending on the subject matter and the location of the school. Educational requirements for teachers are generally highest at research universities where a Ph.D. is required of most staff. Four-year colleges and universities usually require candidates for full-time, tenure-track positions, to hold a doctoral degree. However, schools may hire master's degree holders or doctoral candidates for certain disciplines such as the arts or for part-time and temporary jobs. At career and technical institutes, experience and knowledge in a related occupation is the main prerequisite.

Graduate Teaching Assistant

Obtaining a position as a graduate teaching assistant is a good way to gain college teaching experience. Candidates must be enrolled in a graduate school program. In addition, some colleges and universities require teaching assistants to attend classes or take some training prior to being given responsibility for a course.

Training and Advancement, Continued

Preschool, Kindergarten, Elementary, Middle, and Secondary Teachers

The traditional route to becoming a public school teacher involves completing a bachelor's degree from a teacher education program and then obtaining a license. However, most States now offer alternative routes to licensure for those who have a college degree in other fields. Private school teachers do not have to be licensed but still need a bachelor's degree. A bachelor's degree may not be needed by preschool teachers and vocational education teachers, who need experience in their field rather than a specific degree.

Traditional education programs for kindergarten and elementary school teachers include courses designed specifically for those preparing to teach. These courses include mathematics, physical science, social science, music, art, and literature, as well as prescribed professional education courses, such as philosophy of education, psychology of learning, and teaching methods. Most programs require students to perform a student-teaching internship. Teacher education programs are accredited by the National Council for Accreditation of Teacher Education and the Teacher Education Accreditation Council. Graduation from an accredited program is not necessary to become a teacher, but it may make fulfilling licensure requirements easier.

In addition to being knowledgeable about the subjects they teach, teachers must have the ability to communicate, inspire trust and confidence, and motivate students, as well as understand the students' educational and emotional needs.

Teacher Assistants

Many teacher assistants need only a high school diploma and on-the-job training. A college degree or related coursework in child development improves job opportunities, however. They face new Federal requirements as of 2006: assistants must hold a 2-year or higher degree, have a minimum of 2 years of college, or pass a rigorous State or local assessment. A number of colleges offer associate degrees or certificate programs that either prepare graduates to work as teacher assistants or provide additional training for current teacher assistants.

All teacher assistants receive some on-the-job training. Those who tutor and review lessons with students, must learn and understand the class materials and instructional methods used by the teacher. Teacher assistants also must know how to operate audiovisual equipment, keep records, and prepare instructional materials, as well as have adequate computer skills.

Education Administrators

Principals, assistant principals, central office administrators, academic deans, and preschool directors usually have held teaching positions before moving into administration. Some teachers move directly into principal positions; others first become assistant principals, or gain experience in other administrative jobs at either the school or district level in positions such as department head, curriculum specialist, or subject matter advisor. In some cases, administrators move up from related staff jobs such as recruiter, school counselor, librarian, residence hall director, or financial aid or admissions counselor.

In most public schools, principals, assistant principals, and school district administrators need a master's degree in education administration or educational leadership. Some principals and central office administrators have a doctorate or specialized degree in education administration. In private schools, some principals and assistant principals hold only a bachelor's degree, but the majority have a master's or doctoral degree.

Additional Resources



Frederick County Workforce Services

Located at the Business and Employment Center
5340 Spectrum Drive, Suite A
Frederick, MD 21703
301-600-2255
www.frederickworks.com

Frederick County Office of Economic Development

Located at the Business and Employment Center
www.discoverfrederickmd.com

Maryland Department of Labor, Licensing & Reg.

www.dllr.state.md.us

U.S. Department of Labor

Bureau of Labor Statistics Career Guide to Industries
www.bls.gov

O*Net—Occupational Network

www.onetcenter.org

Career One Stop

www.CareerOneStop.org

Career Voyages

www.careervoyages.gov

Find Education Schools

www.alleducationschools.com

Frederick County Public Schools

www.fcps.org

Information on Education Careers

www.careeroverview.com

Education Job Search

www.academiccareers.com

