**Graduate Degrees in Education**

Secondary school teachers can and should consider doing graduate work and earning at least an M.S. degree. In fact, almost all school districts require an Master’s degree, and many give teachers a certain time frame to complete this degree when they are hired. One major benefit to completing graduate work is a higher salary, all else being equal.

**Master’s Degree Programs**

One has the option of getting one of three types of Master’s degrees, a Master of Science degree (M.S.) or two other degrees with very similar names: a Master of Arts in Teaching degree (MAT) or Master of Education degree (M.Ed.). The latter two may sound like variations of the same thing. However, while both degrees enable teachers to improve their skills and meet state licensing requirements, they focus on two very different aspects of the teaching profession. Details on all three types of Master’s degree appear below.

*Master of Science (M.S.)*

The Master of Science degree is for those who want to enhance one's knowledge of the subject matter that one is teaching. One can get an M.S. degree in Biology, but one could also get degrees in Environmental Science, Molecular Biology, Biotechnology, etc.. Unlike the other options for graduate work described below, the focus here is on bolstering one's scientific knowledge, rather than pedagogy (i.e., teaching skill).

Individuals choosing to obtain a content area degree most often enroll in a “non-thesis” M.S. program, wherein one obtains a degree solely by taking advanced, graduate–level coursework (usually about 30 credits). Non-thesis students do not do a *major* research project, but can become involved in smaller research projects for course credit.

Ambitious individuals that are truly interested in research can do a thesis-based degree. This requires a substantial amount of research and the preparation of a written Master's thesis. Usually teachers do their thesis research during the summer months. Note that if you might ultimately want to teach at the community college, 4-year college or university level, you should strongly consider doing a content area degree.

In contrast with other types of M.S. degrees (see below), a content area degree gives one a better chance of getting promoted within their school, which can mean taking more control over decisions of what is being taught to students (i.e., the biology/science curriculum), and makes it more likely that one will be promoted to department head.

*Master of Arts in Teaching (MAT)*

An MAT degree program centers on practical skills and subject-specific information. A traditional MAT program typically takes two years to complete and may position teachers to earn an initial or advanced state teaching certification.

The first three semesters will likely be devoted to coursework in pedagogical theory and methods and passive classroom observation, and may include study of the specific subject area (e.g., math or biology). If the MAT program is associated with initial certification, during the final semester of the program you typically will be in a classroom full time as student teacher. If the MAT program is associated with advanced certification, coursework is specially designed for working (in-service) teachers to improve their pedagogy. There is typically a capstone project or seminar in the final semester of the program.

*Master of Education (M.Ed.)*

An M.Ed. degree program, in contrast, focuses less on subject-specific practical skills and more on preparing teachers to understand and critically evaluate the practice of education. Although M.Ed. students learn useful approaches to classroom instruction, they also investigate the theory and practice of teaching more broadly.

In addition, specialized Master in Education programs offer concentrated study of specific specialties, including Educational Leadership, Special Education, Technology Education, Mathematics, Reading or Science. Like the MAT, a traditional M.Ed. program typically lasts two years and prepares prospective teachers to meet certification requirements. Additionally, the completion of a thesis or capstone project will depend on the nature of the academic program.

Both MAT and M.Ed. programs offer advantages and disadvantages. Master of Arts in Teaching degree programs are rich in practical, discipline-specific information. This narrow focus represents an advantage for teachers who want to strengthen their subject matter knowledge; yet it is considered a terminal degree, and thus places you at a disadvantage if your educational ambitions extend beyond classroom. In addition, numerous online MAT programs are available. Finally, MATs are excellent options for individuals with bachelor’s degrees in another field, such as chemical engineering or conservation biology, and are looking to switch careers to full-time classroom teaching.

In comparison to MATs, M.Ed. degrees require more theoretical coursework and offer a fuller understanding of the teaching profession as a whole, including an in-depth understanding of the pedagogy or instructional strategies related to the area of concentration. An M.Ed. is the best degree for teachers whose ambitions include service as an instructional or school leader (e.g., principal). In addition, an M.Ed. may be the first stage in educational doctoral programs, enabling interested students to pursue further advanced study at a later date.

*Financial Support When Completing a Master’s Degree*

Students typically receive no financial support from the university they are attending when completing a non-thesis M.S., MAT or M.Ed. degree (students completing a thesis-based M.S. degree may receive partial support).

**Doctoral Degree Programs**

Like Master’s programs in education there is also a choice in doctoral degree programs. A Doctor of Education (Ed.D.) and Doctor of Philosophy (Ph.D.) may sound like variations of the same, but in fact are very different in terms of their nature and focus. While both programs typically involve advanced study of educational problems and issues, the Ed.D. degree takes a more practical approach, while a Ph.D. takes a more theoretical one. Regardless of the degree program, Ed.D. and Ph.D. programs both typically require three or more years of classroom teaching experience for initial admission to the program. Students in both programs can also expect about three years of advanced graduate coursework and they will conduct a *major* capstone research study that results in a written dissertation.

Like doctoral programs in pure science and math fields, it is common for students to be enrolled full-time and receive some sort of stipend in the form a teaching or research assistantship and/or tuition remission or reduction. And similar to doctoral programs in other fields, you can expect to complete your degree in 4-6 years, depending on the nature of the program and the type of dissertation research you pursue.

*Doctor of Education (Ed.D.)*

An Ed.D. degree has a primary focus on educational administration and scholarly practice within the profession of K-12 teaching. Academic Ed.D. programs typically offer more courses related to educational administration and policy, rather than theory or research. It is a practical degree intended for professionals who will remain in K-12 education, as school, district, or state educational leaders or administrators.

In general. Ed.D. students typically focus their dissertation research more narrowly on particular educational practices and policies that affect state or regional or local school systems. After graduation, individuals with Ed.D. degrees may be qualified for promotion as a school or district level administrator. This is not to say that those with an Ed.D degree cannot work in university settings – many do, and they often train future teachers and school administrators. However, the focus of the degree is the practical, rather than theoretical, aspects of K-12 education. Because of the nature of an Ed.D. program, many working teachers and administrators can pursue this degree part time while remaining in their current professional positions.

*Doctor of Philosophy (Ph.D.)*

A Ph.D. degree traditionally focuses on educational theory, research design and methods, and broad areas of scholarship. In a Ph.D. program of study, students typically focus on one “content” area, such as science or math education, curriculum studies, educational leadership. This means the student will take advanced coursework that focuses on current theory in their field of emphasis while also taking a broad array of courses in different qualitative and quantitative research methodologies used in educational research. In general, the focus of a Ph.D. degree program is to prepare individuals to engage in scholarship about the theory of education.

Individuals who earn a Ph.D. typically work in university settings or at educational research centers. Their work at the university may or may not involve preparing future K-12 teachers for classroom practice, but their work almost always involves educational research and scholarship of some kind. They are more likely to engage in research focused on national or international trends in education or large-scale practices in their field. Students in Ph.D. programs are typically enrolled full-time.

**Masters or Doctorate or Both?**

Most K-12 teachers earn an Master’s degree. Earning a doctorate will result in a higher salary in most school districts. However, a doctorate is generally recommended only: 1) if you are aspiring to an administrative position in a school district, such as Supervisor of Science Education, Supervisor of Curriculum and Instruction, Principal, etc. (Ed.D. degree) or 2) if you are considering teaching at the college or university level in the future (Ph.D. degree).

In many school districts, a teacher can earn the same salary as someone holding a Ph.D. if they have “M.S.+30” status; i.e., they have an M.S. degree and 30 additional university credits at the graduate level.

**When To Do Your Graduate Work: Things to Consider**

There are several good reasons to wait until one has a full-time teaching position before starting a graduate degree program. First, this may be better financially because most school districts will pay all or part of the tuition costs for active teachers. Second, instructors of many graduate level classes, especially those dealing with pedagogical issues, will assume that you have had some classroom teaching experience. Much of the course content will draw on those experiences, and you may be asked by your instructors to pilot test or practice teaching methodologies and research methods with your students.

Also, if one is thinking of completing a graduate degree *before* searching for a teaching position, keep in mind that one will be competing for positions with those holding only a B.S. degree. People with M.S. degrees must be paid higher salaries, so it will be less costly for a school system to hire the person with a B.S. than M.S. degree, all else being equal. In other words, one may not get the job because one has too much education and therefore is too costly to employ.

On the other hand, entering a graduate program while you are still a beginning teacher can be stressful, as you will be juggling a full-time job with graduate classes in the evenings. Thus, there may be advantages to completing a graduate degree before you begin your job search, if this situation would be financially feasible for you.