Student Example

Ms. Teacher

Class Title

MLA Date

Middle School Math Education

As the world becomes increasingly dependent on technology, the demand for those with the ability to apply math principles continues to expand. To fulfill this demand, the need for people to provide this knowledge becomes continually important, leading the math education field to be an integral part of current society. Because of this prominence, math teaching is an appealing profession for those that seek secure employment, and it is ideal for those wanting an environment where they can interact with others. Working with children, at any level, requires one to have the patience and dedication to assist students on their educational journeys. At the lower secondary level, math education presents a unique opportunity for teachers to help children begin to specialize the skills that they need to have later success in the STEM field. Considering the career outlook, educational requirements, job expectations, and new developments associated with middle school math education, it is a rewarding career for those interested in investing into the future of a technology-driven globe.

The promising job outlook and comfortable salary are motivating factors that compel individuals to choose middle school math teaching as a career. According to the U.S. Bureau of Labor Statistics' *Occupational Outlook Handbook* (*OOH*), "employment of middle school teachers is projected to grow 8 percent from 2016 to 2026" because of the expected rise in the number of middle school students and the number of teachers retiring ("Job Outlook"). This

growth of employment makes being a math teacher a wise choice because of the abundance of opportunities for those beginning their professional careers. Furthermore, once securing employment, as outlined by the *OOH*, teachers can expect to earn between $38,540 and $91,670 annually, with $57,720 being the median wage in 2017 ("Pay"). Along with this annual wage, *Teacher Certificates*' article "Salaries and Benefits" states that Georgia teachers are required to be part of the Teachers Retirement System, a system in which teachers supply portions of their salaries and then receive monthly payments after retiring. The article goes on to explain that the requirement for retirement is "completion of 30 years of service at any age or completion of 10 years of service at age 60 or older," and that the average monthly payment to retirees is $2,750. These statistics exemplify the fact that, despite the moderate salary, teaching is a profession that provides benefits that expand over the rest of one's lifetime. Moreover, secondary math education gives individuals many options for employment while providing reasonable compensation, making it an attractive career field.

To ensure quality education for students, becoming a middle math teacher requires one to receive a college degree and complete a certification process. The *OOH*'s "How to Become a Teacher" explains that throughout the nation, the basic tasks one has to complete before becoming a teacher include earning a bachelor's degree in the desired subject, participating in supervised teaching experience, passing a background check, and taking a teaching certification test. This means that the most direct route for aspiring middle school math teachers is to obtain a degree in mathematics at a college that has a teacher preparation program. This training ensures that math teachers are prepared to handle the task of operating a classroom. As described by *Teachers Certification Degrees'* article "Certification," the Georgia Department of Education

has recently instituted a "four-tier certification process" that teachers complete to earn varying levels of certification. Additionally, "Certification" states that to start teaching, one must obtain a Pre Service certificate and an Induction certificate, which require a bachelor's degree, a student teaching experience, and the passing of an assessment test. After employment, an educator can advance his or her career with a Professional teaching certificate or a National Board for Professional Teaching Standard certificate that one becomes eligible for after three and five years of service, respectively ("Certification"). This certification process presents clear guidelines for those pursuing the middle school math education field and allows for advancement in the profession. This thorough process is an effective system that gives math educators the confidence and qualifications necessary to begin instructing a classroom.

Once beginning one's teaching career, there are a number of tasks that are required to be carried out each day and opportunities for growth in the field. *Teacher Certification Degrees'* "Career Guide" explains that apart from creating lesson plans and assignments for one's classroom, a math teacher needs to work "to promote students' critical thinking skills and ability to use math in everyday life." This shows that math teachers directly improve students' math abilities and their reasoning skills by working with them each day. Watching students grow throughout the course of a school year because of these efforts in the classroom is one of the most rewarding aspects of teaching. Furthermore, "Career Guide" describes that in order to cater to students with varying math abilities, it is important for math teachers to differentiate activities between students and to "translate mathematical knowledge to learners at all levels of understanding." This means that math teachers are presented with new challenges each day and must continually work to revise teaching methods to accommodate the needs of different

students. In order to effectively accomplish these tasks, it is advised that math teachers consider taking continuing education courses and pursuing advanced degrees "to retain a high working knowledge of mathematical theory" ("Career Guide"). This demonstrates that when teachers improve themselves, they are better prepared to complete their classroom duties and can provide a heightened math educational experience for the students. Therefore, middle school math teachers that work diligently to complete their responsibilities not only promote success among their students but also are left with a feeling of gratification for themselves.

Currently, one of the most prominent issues in the math educational field is the role of technology in the classroom and the task of preparing students to be able to use this technology in future careers. In Gina Picha's article "Effective Technology Use in Math Class," she asserts that "incorporating technology in mathematics classrooms enables educators to craft powerful learning experiences that support problem solving and flexible thinking" but warns against using technology to replace teaching. For this reason, math teachers have to work to create a balance by taking advantage of modern technologies but still providing in-person instruction to solidify the knowledge in the minds of the students. Equally important, Richard K. Miller's "Building on Math and Science" states that new technologies add to "the rising complexity of problems the world will face in the next century," and that individuals with new skill sets, "built on a solid foundation of technological knowledge," will be necessary to provide solutions (54, 56). This demonstrates the fact that since the world is continually adopting new technologies, abilities to be able to operate these devices is necessary for the new generation of students to possess. Especially with the growing STEM field, middle school math teachers need to begin preparing students to be equipped with the skills to be able to fill these jobs. Consequently, it is necessary

for middle school math teachers to incorporate technology in the classroom not only to add enrichment to assignments but more importantly to provide students with abilities that they can use in careers later in life.

Despite the demanding task of working with children, middle school math education is a fulfilling career that aids in the advancement of society. This field presents a growing number of career opportunities; therefore, it gives a person the stability necessary to have an accomplished life for themselves. In regards to responsibilities, the training program is only the initiation into the continuous process of adopting new techniques and strategies that are needed to help improve the level of education in the classroom. This adaptability extends to the necessity of math teachers to mold their classrooms to accompany changes in the expanding STEM field and the introduction of new technologies. Overall, math teachers have the crucial responsibility to guide the new generation of students into success in this world of seemingly endless innovations.

Works Cited

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