

# Success Initiatives of Mathematics Educators as Inspired by Taylor Swift's Commencement Address at New York University

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**Abstract:** *The landscape of mathematics education is shifting towards fostering positive student mindsets and resilience, highlighting the influence of math anxiety and negative self-beliefs on academic achievement. Despite existing research emphasizing these challenges, there is a call to investigate successful initiatives utilized by educators and recognize the importance of embracing learning from errors. Taylor Swift, in her commencement speech at New York University, promotes the idea of a "catch and release" method, urging educators in mathematics education to release negativity, welcome fresh prospects, and cultivate growth mindsets in educational settings. This study explored and analyzed Taylor Swift's Commencement Address at New York University via discourse analysis. Findings revealed five (5) emerging themes, namely; (1) The Power of Support and Gratitude; (2) Embracing Life's Imperfections; (3) Passion and Persistence in Pursuit of Dreams; (4) Adapting to Change and Taking Ownership; and (5) Finding Strength in Resilience. An emerging framework was also crafted based on the intersectionality of the five (5) key themes. Successful mathematics educators create supportive environments that embrace mistakes and ignite a passion for learning. This not only fosters their professional growth but equips students with essential skills to thrive in an ever-changing world. The study recommends building a support network, creating a safe learning space for mistakes, finding and sharing passion for math, embracing new ideas, and developing resilience.*

**Keywords— Success Initiatives; Mathematics Educators; Taylor Swift's Commencement Address; Discourse Analysis**

## 1. INTRODUCTION

The landscape of mathematics education is constantly evolving, with a growing emphasis on fostering positive student mindsets and resilience. Current research in mathematics education highlights the detrimental effects of math anxiety and negative self-beliefs on student achievement. However, existing literature often focuses on broad strategies and interventions, leaving a gap in understanding the specific success initiatives employed by educators on the ground (Ramirez et al., 2016). Furthermore, the current body of research tends to frame failure as something that can be solved, neglecting the potential value of learning from mistakes as radically advocated by Taylor Swift.

Taylor Swift's commencement address at New York University has sparked interest among educators, particularly in the field of mathematics education. This study takes inspiration from Taylor Swift's 2022 commencement address at New York University. In her speech, Swift emphasized the concept of "catch and release"—learning to let go of negativity and focus on fostering new opportunities. This concept resonates deeply with the challenges educators face in cultivating a growth mindset within mathematics classrooms.

The existing literature in mathematics education often focuses on pedagogical strategies, curriculum development, and student engagement (Luzano, 2024). However, there is a gap in understanding how external influences, such as motivational speeches like Swift's, can impact the teaching practices and professional development of mathematics educators (Gresalfi & Cobb, 2011).

One of the key problems in the current research landscape is the limited exploration of unconventional sources of inspiration for educators. Swift's commencement address offers a unique blend of personal anecdotes, life lessons, and motivational insights that have the potential to resonate with mathematics educators facing challenges in their teaching careers (Tramonti, 2022). By overlooking the potential impact of such speeches on professional development, existing literature may miss out on valuable opportunities for growth and innovation in mathematics education (Zambo, R. & Zambo, D., 2008).

This study holds significance in highlighting the relevance of non-traditional sources of inspiration in the professional development of mathematics educators (Luzano & Ubalde, 2023). By analyzing how educators interpret and apply the lessons from Swift's address in their teaching practices, this research aims to enrich the existing discourse on success initiatives in mathematics education and contribute to a more holistic understanding of the factors that influence educator motivation, resilience, and effectiveness in the field of mathematics (Oliveras, A. & Oliveras, M., 2016).

Mathematics educators find specific examples from Taylor Swift's commencement address at NYU that resonate with them. Swift's message about "catch and release" reverberates with educators as it encourages individuals to decide what to hold onto and what to let go, a concept that can be applied to teaching strategies and curriculum choices. Additionally, Swift's emphasis on learning from mistakes and embracing failure as part of the human experience is particularly relevant to educators, highlighting the importance of resilience and a growth mindset in the face of challenges.

Furthermore, Swift's reflection on the support system that shapes individuals, emphasizing the role of mentors, friends, and experiences, is a key takeaway for educators in understanding the impact of relationships and guidance on professional development. Lastly, Swift's encouragement for individuals to take risks and be resilient aligns with the challenges educators face in adapting to new teaching methods and approaches, fostering a culture of innovation and continuous improvement in mathematics education. Thus, this research aims to uncover novel approaches to enhancing educator success and well-being via the transformative power of Swift's inspirational speech.

## 2. METHODS

This study employed discourse analysis (Traynor, 1997), a qualitative method that explores the functions and underlying meanings of language within context. In this study, the researcher analyzed Taylor Swift's Commencement Address at New York University in 2022 by putting the meaning in mathematics educators' context. This study examined a spoken discourse to uncover how language is used to express meaning and understand the dynamics of the practices in mathematics education.

This study utilized discourse analysis to reveal the nuances and deeper layers of meaning in the speech of Taylor Swift. This method goes beyond mere linguistic analysis because it provides valuable insights into mathematics education dynamics, beliefs, values, and assumptions.

In conducting discourse analysis, researchers follow a structured approach that includes defining research questions, selecting appropriate material for analysis, gathering contextual information, analyzing content for themes and patterns, and drawing conclusions based on the broader context established earlier. This method allows for a deeper understanding of texts and conversations, offering insights that may not be immediately apparent.

While discourse analysis can be complex and time-intensive, requiring a deep understanding of linguistic and social theories, its versatility and adaptability make it a valuable tool across various disciplines like linguistics, sociology, anthropology, psychology, and cultural studies. By examining language within its context and considering the social aspects of communication, discourse analysis provides researchers with a comprehensive framework to explore and interpret language use in real-life situations.

## 3. RESULTS AND DISCUSSION

### Success Initiatives of Mathematics Educators as Inspired by Taylor Swift's Commencement Address at NYU

#### Theme 1: The Power of Support and Gratitude

*"Not a single one of us here today has done it alone. We are each a patchwork quilt of those who have loved us, those who have believed in our futures...I hope you'll find your own*

*way to express your gratitude for all the steps and missteps that have led us to this common destination."* [Taylor Swift]

Mathematics educators often attribute their success to the support they've received from colleagues, mentors, and students. They recognize the importance of a supportive network in navigating challenges and achieving their goals. Expressing gratitude for those who have contributed to their professional development fosters a sense of community and inspires others to support each other within the field of mathematics education (Ruthven, 2014).

The path of a successful mathematics educator is rarely a solo journey. The following are the key factors why their success hinges on a supportive network.

- a) *Challenges in Mathematics Education.* Teaching math can be demanding. Educators grapple with complex curriculum, diverse learning styles, and the potential for students to develop math anxiety. A supportive network provides a safe space to share these challenges, brainstorm solutions, and learn from each other's experiences.
- b) *Mentorship and Growth.* Seasoned educators can act as mentors, offering guidance, sharing best practices, and helping new teachers navigate the complexities of the profession. This mentorship fosters professional development and allows new educators to learn from the successes and failures of others.
- c) *Student Inspiration.* Students themselves can be a source of inspiration and motivation for educators. Seeing students develop a love for math, overcome obstacles, and achieve success can be incredibly rewarding. This positive feedback loop fuels the educator's passion and reinforces the importance of their work.

The act of expressing gratitude in times of difficulties and triumphs creates a ripple effect of:

- d) *Community Building.* When educators acknowledge the contributions of others, it strengthens the sense of community within the field. It highlights the collaborative nature of math education and encourages open communication and support.
- e) *Inspiring Reciprocity.* By expressing gratitude, educators set a positive example. It inspires others to pay it forward, offering support to colleagues and fostering a more collaborative environment where everyone feels valued and empowered to contribute.

#### Theme 2: Embracing Life's Imperfections

*"Learn to live alongside cringe...Cringe is unavoidable over a lifetime...Looking back and laughing is fun."*

*"Being embarrassed when you mess up is part of the human experience...That's a gift."* [Taylor Swift]

Effective mathematics educators understand that learning is a journey filled with ups and downs. They embrace mistakes and imperfections as opportunities for growth and learning (Aranzo et al., 2023). By creating a classroom environment where students feel safe to make mistakes and learn from them, educators encourage a growth mindset and resilience in their students, ultimately leading to greater success in mathematics (Bostwick et al., 2020).

Mathematics educators are encouraged to hit upon the crucial aspect of effective mathematics education – transforming mistakes from roadblocks into stepping stones. The following are the key points why embracing imperfections is needed for growth.

- a) *Growth Mindset.* Effective educators foster a "growth mindset" in their students. This means emphasizing that intelligence and ability are not fixed, but rather can be developed through effort, perseverance, and learning from mistakes. When mistakes are seen as opportunities to learn, students are more likely to embrace challenges and persist in the face of difficulty.
- b) *Psychological Safety.* Creating a safe space for mistakes is vital. This means establishing a classroom culture where students feel comfortable taking risks, trying new approaches, and admitting to errors without fear of ridicule or punishment. This psychological safety allows students to experiment, explore different ideas, and ultimately develop a deeper understanding of mathematical concepts.
- c) *Learning from Errors.* Effective educators use mistakes as teachable moments. They guide students to analyze their errors, identify misconceptions, and develop strategies to overcome them. This process not only helps students learn from the specific mistake but also equips them with problem-solving skills that can be applied to future challenges.

The act of embracing imperfections and learning from them would lead to positive outcomes such as:

- d) *Increased Resilience.* Students who are encouraged to learn from mistakes develop resilience. They learn that setbacks are inevitable, but not insurmountable. This resilience allows them to bounce back from challenges and persist in their pursuit of mathematical understanding.
- e) *Deeper Understanding.* By analyzing mistakes, students gain a deeper understanding of the underlying concepts. The process of identifying the root cause of an error forces students to think critically, re-examine their assumptions, and solidify their grasp of the material.
- f) *Greater Confidence.* When students learn to view mistakes as opportunities for growth, their confidence in their abilities increases. They become

more comfortable taking risks and exploring new ideas in mathematics, fostering a more positive and engaged learning experience.

### Theme 3: Passion and Persistence in Pursuit of Dreams

*"Never be ashamed of trying...Effortlessness is a myth."*

*"Everything I do is just an extension of my writing, whether it's directing videos or a short film, creating the visuals for a tour, or standing on stage performing. Everything is connected by my love of the craft, the thrill of working through ideas and narrowing them down and polishing it all up in the end."*  
[Taylor Swift]

Passion is often the driving force behind successful mathematics educators. They are deeply passionate about the subject matter and are committed to inspiring their students to love and appreciate mathematics. Despite facing challenges and setbacks, successful educators persist in their efforts to make a positive impact on their students' lives, continuously seeking innovative ways to engage and motivate them in the learning process (Stoeber et al., 2011).

Passion is the heart of successful mathematics education. It fuels creativity, perseverance, and a commitment to making a positive impact on students' lives. When educators ignite a love for math in their students, the benefits extend far beyond the classroom, shaping future generations and fostering a world that embraces the power and beauty of mathematics (Ruiz-Alfonso & León, 2017).

Passion is the fuel that ignites truly impactful mathematics educators. The following are the key concepts of how passion and persistence manifest in their teaching.

- a) *Contagious Enthusiasm.* A teacher's passion for math can be contagious. Their excitement about the subject matter translates into engaging lessons, creative activities, and a classroom environment that fosters curiosity and a desire to learn. Students are more likely to become invested in math when they see their teacher genuinely enjoying it.
- b) *Making Math Relevant.* Passionate educators go beyond rote memorization and formulas. They connect mathematics to the real world, showcasing its applications in various fields like science, technology, art, and even everyday life. This relevance makes math more meaningful for students and ignites their interest in exploring its possibilities.
- c) *Overcoming Challenges.* The path of a math educator isn't always smooth. There will be students who struggle, standardized testing pressures, and moments of frustration. However, passion provides the perseverance to overcome these challenges. Passionate educators are relentless in their pursuit of helping students succeed, constantly seeking new methods and approaches to reach each student.

- d) *Innovation and Creativity.* Passion fuels innovation. Educators who are truly passionate about math are always looking for new ways to engage their students. They incorporate technology, games, hands-on activities, and other creative methods to make learning math fun, interactive, and effective.

This passion for math education has a profound impact on students:

- e) *Lifelong Learners.* A teacher's passion can inspire a love for math in students that lasts a lifetime. Students who experience a positive and engaging math education are more likely to develop a growth mindset toward the subject, fostering a willingness to learn and explore math throughout their lives.
- f) *Increased Confidence.* When educators demonstrate their belief in their students' potential, it boosts student confidence. Students who see their teacher's unwavering commitment to their success are more likely to believe in themselves and their ability to succeed in math.
- g) *Positive Impact on Future Generations.* Passionate educators can ignite a spark in their students that carries forward. Students inspired by their teacher's love for math might pursue careers in mathematics or STEM fields, contributing to the advancement of knowledge and inspiring future generations.

#### Theme 4: Adapting to Change and Taking Ownership

*"You get what you get...you should be very proud of what you've done with it."*

*"We are led by our gut instincts, our intuition, our desires and fears, our scars and our dreams. And you will screw it up sometimes. So will I." [Taylor Swift]*

In the ever-evolving field of mathematics education, successful educators are adaptable and open to change. They take ownership of their teaching practices and are willing to experiment with new methodologies and technologies to enhance student learning (Luzano, 2023). By taking responsibility for their professional growth and development, educators empower themselves to stay current and relevant in their teaching practices, ultimately leading to improved outcomes for their students (Higgins, Huscroft-D'Angelo, & Crawford, 2019; Casanova et al, 2023).

The landscape of mathematics education is constantly evolving, and successful educators are the ones who embrace change and continuous learning. The following are the key subthemes of why adaptability is key.

- a) *Evolving Curriculum and Standards.* Mathematics education standards and curriculum are constantly being refined. Effective educators stay informed about these changes and adapt their teaching practices accordingly. They are open to incorporating

new pedagogical approaches and resources to ensure their students are learning the most relevant and up-to-date mathematical concepts.

- b) *Technological Advancements.* Technology plays an increasingly important role in education. Successful educators embrace these advancements, integrating technology into their lessons in a meaningful way to enhance student engagement and understanding. This could involve using online simulations, interactive tools, or educational software to supplement traditional teaching methods.
- c) *Catering to Diverse Learners.* Every classroom is a melting pot of diverse learning styles and needs. Adaptable educators recognize this and cater their teaching to reach all students. They experiment with different instructional strategies and differentiated learning activities to ensure each student receives the support they need to succeed.

Owning their professional growth empowers educators in several ways:

- d) *Empowered and Self-Directed.* Taking responsibility for professional development allows educators to become self-directed learners. They can identify areas they want to improve, seek out relevant professional development opportunities, and actively participate in learning communities to broaden their knowledge and skillset.
- e) *Improved Teaching Practices.* By continuously learning and experimenting with new methods, educators can refine their teaching practices. This iterative process allows them to identify what works best for their students and adapt their teaching to maximize student learning outcomes.
- f) *Increased Job Satisfaction.* Continuous learning fosters a sense of accomplishment and professional satisfaction. Educators who are constantly growing and evolving feel empowered and equipped to tackle the challenges of the classroom.

Ultimately, adaptability and a commitment to professional growth benefit everyone involved.

- g) *Students Thrive.* Students learn best from educators who are current, engaged, and open to new ideas. By adapting their teaching practices, educators can create a dynamic and stimulating learning environment that fosters student engagement and academic success.
- h) *The Future of Math Education.* Educators who embrace change are at the forefront of shaping the future of mathematics education. Their openness to innovation and experimentation paves the way for new and effective methods of teaching math,



ensuring that future generations continue to develop a strong foundation in this crucial subject.

### Theme 5: Finding Strength in Resilience

*"The times I was told 'no' or wasn't included, wasn't chosen, didn't win, didn't make the cut...looking back, it really feels like those moments were as important, if not more crucial, than the moments I was told 'yes'."*

*"As long as we are fortunate enough to be breathing, we will breathe in, breathe through, breathe deep, breathe out."*  
[Taylor Swift]

Resilience is a key trait of successful mathematics educators, as they navigate the challenges and complexities of teaching mathematics. They understand that setbacks and failures are inevitable, but they view them as opportunities for growth and learning (Luzano, 2020; Tortola, 2021; Pang-an et al., 2022). By modeling resilience in the face of adversity, educators inspire their students to persevere through challenges and develop the confidence and resilience needed to succeed in mathematics and beyond (Hutauruk & Priatna, 2017).

Resilience is the bedrock of success for mathematics educators. The following are the key areas of why this trait is so significant.

- a) *Navigating Challenges.* The world of math education is full of challenges. Educators may face students who struggle, with standardized testing pressures, limited resources, or even personal setbacks. Resilience allows them to navigate these challenges without giving up. They can bounce back from setbacks, find creative solutions to problems, and maintain a positive outlook in the face of adversity.
- b) *Learning from Setbacks.* Even the most experienced educators encounter setbacks. Resilient educators view these not as failures, but as opportunities to learn and grow. They analyze what went wrong, adjust their approaches, and try again. This growth mindset not only benefits their professional development but also sets a powerful example for their students.
- c) *Modeling Perseverance.* Students learn by observing their teachers. When educators demonstrate resilience in the face of challenges, they send a powerful message to their students. It shows students that setbacks are a normal part of the learning process and that with perseverance and effort, they can overcome obstacles and achieve success.

This resilience of educators translates into positive outcomes for students.

- d) *Developing Grit.* Students who see their teachers persevere through challenges are more likely to develop grit themselves. This grit, or determination,

is essential for success in mathematics and in life. Students who are resilient are more likely to stick with difficult tasks, overcome obstacles, and ultimately achieve their goals.

- e) *Building Confidence.* When educators model resilience, it fosters a sense of confidence in their students. Students see that they too can overcome challenges and learn from their mistakes. This increased confidence empowers them to take risks, try new things, and embrace challenges in their mathematical journey.
- f) *Lifelong Learners.* Resilient educators inspire a love of lifelong learning in their students. Students see that learning is not always smooth sailing, but that it's a journey filled with setbacks and triumphs. This fosters a growth mindset in students, encouraging them to embrace challenges and continue learning throughout their lives.

### Emerging Framework

The emerging framework is an intersection of the five (5) key themes of the Success Initiatives of Mathematics Educators as Inspired by Taylor Swift's Commencement Address at NYU.

*The Power of Support and Gratitude* reflects the acknowledgment of the diverse support systems that shape individuals, mirroring how different aspects of identity influence one's experiences in mathematics education.

*Embracing Life's Imperfections* aligns with the recognition of the complexity of human experiences and the acceptance of imperfections, resonating with the idea that identities are multifaceted and intertwined in mathematics education.

*Passion and Persistence in Pursuit of Dreams* connect with the understanding that efforts and pursuits are influenced by various intersecting identities, emphasizing the importance of acknowledging the diverse facets that drive individuals in the mathematics context.

*Adapting to Change and Taking Ownership* mirrors the idea that individuals navigate challenges and opportunities shaped by their intersecting identities, highlighting the need to adapt and take ownership of their experiences in mathematics.

*Finding Strength in Resilience* underscores the significance of resilience in the face of adversity, emphasizing how individuals draw strength from their intersecting identities to overcome obstacles and grow in the field of mathematics education.

This intersectional lens provides a nuanced understanding of how individuals' identities interact and shape their experiences in mathematics, emphasizing the importance of considering the complexity of prejudices and privileges in society.



Figure 1. Emerging Framework on Success Initiatives of Mathematics Educators as Inspired by Taylor Swift's Speech at New York University

#### 4. CONCLUSION AND RECOMMENDATION

Mathematics educators who cultivate a supportive network, embrace imperfections and demonstrate passion and persistence are more likely to achieve success in their field. This success is measured not only by their professional satisfaction and growth but also by the positive impact they have on their students. By fostering a love of learning and a growth mindset in their students, these educators equip them with the tools they need to not only succeed in mathematics, but also to thrive in a world that demands resilience, adaptability, and a lifelong love of learning.

Drawing on the themes discussed in this study, here are some recommendations for mathematics educators:

- ✓ Build a strong support network by connecting with colleagues, mentors, and even students. Share experiences, challenges, and successes to foster a sense of community and collaboration.
- ✓ Create a safe space for students to make mistakes and learn from them. This will help students develop a growth mindset and perseverance.
- ✓ Find your passion in mathematics and share it with your students. Your enthusiasm can be contagious and inspire a love of learning in your students.
- ✓ Embrace change and be open to new ideas and technologies. Continuously seek out professional development opportunities to improve your teaching practice.
- ✓ Develop resilience and model it for your students. Show them that setbacks are inevitable, but that with hard work and perseverance, they can be overcome. By following these recommendations, mathematics educators can create a positive and impactful learning environment for their students

and ensure their success in the ever-evolving field of mathematics education.

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