

HEMISTEN



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Work Ethics for Women in STEM

Short Skills Training

Overview

Brief introduction to the topic

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Work ethics for women in STEM are crucial for fostering an **equitable and inclusive environment**, ensuring **integrity**, and **enabling fair recognition in traditionally male-dominated fields**.

For women students in fields like Artificial Intelligence and Robotics, ethical awareness **helps** them **navigate biases** in algorithm development or automation designs. In Biotechnology and Genetics, ethical standards ensure responsible research practices, protecting public trust and advancing innovation. Environmental engineering and Chemistry students benefit by understanding how ethics guide sustainable practices and prevent harm.

Overall, ***instilling strong work ethics empowers women*** to **lead** confidently and **advocate for equity**, shaping the future of STEM disciplines.



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Learning Objectives

By the end of this training learners are expected to be able to:



1. Define and explain the concept of work ethics.
2. Describe its application in STEM fields and apply their knowledge in use cases.
3. Apply their newly build habits, mindsets and practical strategies for ethical decision-making in their work environment.
4. Reflect on personal work ethics and habits.

Content (1)

The following sections will be unfolded in this training:

A. Introduction

- 1) What is work ethics
- 2) Why work ethics matter in stem
 - a) Importance of ethics in stem
 - b) examples of ethical dilemmas in STEM
 - c) Real world Consequences of ethical breaches

B. Core Pillars of Work ethics

- 1) Integrity
 - a) What Integrity means in STEM roles?
 - b) A Case Study
 - c) Scenario-based Exercise
- 2) Accountability
 - a) What Accountability means in Stem roles
 - b) What is the role of Accountability in building trust?
 - c) Self-Reflection - Practical Activity on Accountability
- 3) Teamwork and Respect
 - a) What is the importance of diversity and inclusion in this setting?
 - b) Strategies for respectful communication
- 4) Excellence and Diligence
 - a) Overcoming challenges and maintaining high standards
 - b) The balance between high standards/perfection and practicality.



Content (2)

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The following sections will be unfolded in this training:

C. Ethical Decision- Making

- 1) How to make Ethical Decisions
- 2) Analysing use Cases - Practical Activity

D. Challenges for Women in STEM

- 1) Navigating Ethical Dilemmas in Male-Dominated Environments:
- 2) Strategies for Asserting Ethical Stances

E. Building Resilience

- 1) Practical strategies for staying resilient
- 2) Practical Activity

F. Inspiring Real-World Role Models

- 1) The example of Ada Lovelace
- 2) The example of Dr. Cather Simpson
- 3) The example of Dr. Susan Leavy

G. Practical Takeways

Practical Activity

Warm up “Your Ethics Compass”



1. Think of a scenario (real or hypothetical, happened to you or described by others) where your work ethics were tested.
2. Try to reflect: What guided your decisions?

Write these notes down.

What is “Work Ethics”?

Defining and Understanding Work Ethics

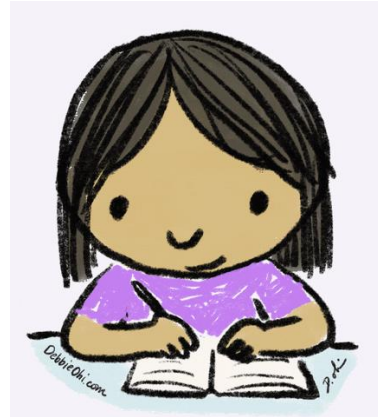


What do we mean by “Work Ethics” ?

- *“is a set of values guiding professional behavior, encompassing integrity, responsibility, quality, discipline, and teamwork”*
- *“ moral guidelines that an organization as a whole, and the individuals who comprise it, follow to comply with state and federal laws.”*
- *“A work ethic is a personal set of values that determines how any employee approaches their work.”*

Why Work Ethics Matter in STEM?

The STEM Perspective



Self-Check: Do you think ethics is more critical in STEM compared to other fields? Why?

Why Work Ethics Matter in STEM?

The STEM Perspective



Importance of Ethics in STEM : Precision , Impact on Society and Innovation

- **Precision:** Ethical standards ensure accuracy and reliability in research and applications, fostering trust in scientific findings.
- **Impact on Society:** Ethical considerations guide the responsible use of technology, preventing harm and promoting societal well-being.
- **Innovation :** Ethics encourage sustainable and inclusive innovation, addressing potential risks and benefits.

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Why Work Ethics Matter in STEM?

The STEM Perspective



Examples of Ethical Dilemmas in STEM : *Data Integrity , Patents, Human Experimentation*

“ The five major ethical dilemmas currently faced by emerging technologies are (i) data privacy, (ii) risks associated with Artificial Intelligence, (iii) developing sustainable environments, (iv) health implications due to technology use, and (v) infodemic and data weaponization issues.”

- **Data Integrity:** Ensuring the accuracy and honesty of data collection and reporting is fundamental to scientific credibility.
- **Patents:** Balancing intellectual property rights with public access to innovations poses ethical challenges.
- **Human Experimentation:** Conducting research involving human subjects requires careful ethical considerations to protect participants.

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Why Work Ethics Matter in STEM?

The STEM Perspective



Examples of Ethical Dilemmas in STEM : ***Data Integrity , Patents, Human Experimentation***

❑ ***The real life example of : He Jiankui***

The He Jiankui affair, where human embryos were genetically edited without proper ethical oversight, exemplifies such dilemmas.

Why Work Ethics Matter in STEM?

The STEM Perspective



Real-World Consequences of Ethical Breaches:

Unethical practices can lead to significant harm, including loss of life.

- ***Cardiologist Don Poldermans***
 - Fabricated research data, leading to medical guidelines that increased patient mortality.
- ***He Jiankui***
 - In 2018, Chinese authorities suspended He Jiankui's research and placed him under surveillance, later firing him for violating laws against gene editing.
 - In 2019, he was convicted of illegal medical practices, sentenced to three years in prison, and fined 3 million yuan.

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Core Pillars of Work Ethics

Key Principles

- Integrity
- Accountability
- Teamwork and Respect
- Excellence and Diligence



Reflection Prompt: *Write down one ethical value you believe is critical in STEM.*

Pillar 1: Integrity

Act with Honesty and Transparency



What Integrity means in STEM roles? :

Definition

- Integrity in STEM involves adhering to ethical principles like honesty, accuracy, and transparency in research and practice.
- It ensures credibility, public trust, and ethical outcomes in scientific work.

Examples

Examples include maintaining data integrity, proper attribution to avoid plagiarism, disclosing conflicts of interest, and ethical treatment of research subjects. Violations, such as falsifying data or unethical experiments, undermine scientific progress and public trust.



Pillar 1: Integrity

Act with Honesty and Transparency



Case study: A scientist reporting incomplete results to meet a deadline.

Dr. Patel, a materials scientist, submits a progress report with incomplete results to meet a strict funding deadline, omitting untested stress data critical for assessing the safety of a new composite material. While intending to include the data later, her report implies the material is ready for advanced testing.

This misrepresentation leads to strained trust within her team and risks misleading stakeholders who rely on the data for investment and safety decisions. Upon discovery, the funding agency imposes stricter oversight and delays future approvals, damaging the lab's reputation.

The case underscores the importance of transparency and ethical reporting in scientific research.



Question: *What would you do in this situation?*

Pillar 1: Integrity / Practical Activity

Scenario-Based Exercise

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1. Read the scenario provided.
1. Write a short response: How would you handle this situation? What are the steps you would take?

Scenario: You discover a peer falsifying data.

You are part of a research team developing an algorithm to detect bias in artificial intelligence models. The project involves testing the algorithm on a large dataset of text inputs to evaluate its accuracy and fairness. While reviewing the test results, you notice differences between the raw output logs and the summary data presented for analysis. Upon investigation, it becomes clear that certain biased outputs were removed or altered to make the algorithm appear more effective than it actually is. You are concerned about the integrity of the research and the potential consequences of deploying a flawed model for applications.



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Pillar 2: Accountability

Taking Responsibility



What Accountability means in STEM roles? :

Definition

- In STEM (Science, Technology, Engineering, and Mathematics), accountability refers to the obligation of individuals and institutions to *explain and justify their actions, ensuring adherence to ethical standards and professional practices.*
- This concept encompasses responsibility for one's work, transparency in processes, and responsiveness to stakeholders, fostering trust and integrity within the scientific community.

Examples

- ***Meeting Deadlines:*** Ensuring timely delivery of work builds trust and maintains project timelines
- ***Owning Mistakes:*** Admitting errors and addressing them fosters integrity and improvement



Question: *How can accountability improve teamwork?*

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Pillar 2: Accountability

Taking Responsibility



What is the role of Accountability in building trust?

Discussion

- Accountability is crucial in building trust within organizations.
- When leaders and team members consistently fulfil their commitments and take responsibility for their actions, it forces a culture of reliability and transparency.
- This mutual accountability ensures that everyone is aligned with the organization's goals and values, strengthening trust among all members.

Examples

- **Transparent Communication:** Openly sharing information and decisions fosters trust among team members.
- **Consistent Follow-Through:** Reliability completing tasks as promised demonstrates dependability, reinforcing trust within the team.



Question: *How can accountability improve teamwork?*

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Pillar 2: Accountability / Practical Activity

Self-Reflection



1. Write down situations when you held yourself accountable.
2. Reflect: How did it impact your team/project?
3. Relect: Were there areas for improvement in these situations?



Pillar 3: Teamwork and Respect

Collaborate and Empower



What is the importance of diversity and inclusion in this setting?

- Embracing diversity and inclusion within teams fosters a culture of respect and collaboration, leading to enhanced innovation and problem-solving capabilities.
- Organizations that prioritize these values are considered employers of choice by top talent, strengthening relationships with customers, partners, and the community



Quick Exercise: *List two ways you can encourage diverse perspectives.*

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Pillar 3: Teamwork and Respect

Collaborate and Empower



Strategies for respectful communication :

- 1. Active Listening:** Engage fully with the speaker by maintaining eye contact, avoiding interruptions, and providing feedback, which demonstrates respect and ensures mutual understanding.
- 2. Inclusive Language:** Use terms that are neutral and considerate, avoiding jargon or expressions that might exclude or offend, to create an environment where all team members feel valued.
- 3. Constructive Feedback:** Provide feedback that is specific, focuses on behaviors rather than personal attributes, and is delivered in a supportive manner to promote growth and maintain respect.
- 4. Empathy:** Strive to understand and share the feelings of others, which fosters a compassionate workplace and strengthens interpersonal relationships.
- 5. Conflict Resolution:** Address disagreements promptly and respectfully, focusing on finding mutually acceptable solutions to maintain a harmonious team dynamic

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Pillar 4: Excellence and Diligence

Strive for Excellence



Overcoming challenges and maintaining high standards:

Overcoming challenges in the workplace requires strategic approaches to maintain productivity and morale.

Here are four key strategies:

- 1. *Effective Communication:*** Foster open dialogue to ensure clarity and prevent misunderstandings.
- 2. *Adaptability:*** Embrace change and remain flexible to navigate evolving circumstances.
- 3. *Seeking Support:*** Collaborate with colleagues or mentors to gain diverse perspectives and solutions.
- 4. *Continuous Learning:*** Engage in ongoing education to enhance skills and stay updated with industry trends.



Reflection Prompt: What does "excellence" mean to you?

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Pillar 4: Excellence and Diligence

Strive for Excellence



The balance between high standards/perfection and practicality.

Balancing high standards with practicality is essential for effective leadership and organizational success.

Key considerations include:

- 1. *Setting Clear Expectations:*** Establishing high standards alongside clear expectations fosters peak performance and minimizes confusion.
- 2. *Recognizing Practical Constraints:*** Acknowledging real-world limitations ensures that standards are ambitious yet attainable, preventing employee demotivation.
- 3. *Encouraging Continuous Improvement:*** Promoting a culture of excellence involves setting high standards and empowering teams to achieve them through autonomy and trust.
- 4. *Balancing Safety and Productivity:*** Implementing safety policies requires balancing caution with practicality to avoid hindering productivity.

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Ethical Decision-Making

How to Make Ethical Decisions



1. Identify the issue.
2. Analyze the stakeholders and consequences.
3. Choose the action aligned with core values.



Exercise: Create your own “Ethical Decision-Making Worksheet”.



Ethical Decision-Making / Practical Activity

Analysing Use Cases

1. **Choose** a scenario from the list below.
2. **Reflect:** What actions would you take and why?

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"The Data Dilemma: Altering Results to Secure Funding"

A researcher is pressured to manipulate experimental data to meet the expectations of a grant provider.

"Confidential Code: Sharing Proprietary Algorithms"

An engineer faces a decision about whether to share a company's proprietary algorithm with a friend for academic purposes.

"The AI Bias Quandary: Deploy or Delay?"

A team discovers bias in their AI model shortly before a product launch and must decide whether to release it or delay for fixes.

"Sustainability vs. Profit: The Green Innovation Trade-Off"

A product development team debates whether to implement a costlier eco-friendly solution or choose a cheaper, less sustainable option.

"Plagiarism Pressure: Claiming Credit for Collaborative Work"

A graduate student is tempted to take full credit for a research paper co-authored with a peer who is unavailable to verify contributions.

Challenges for Women in STEM

Unique Ethical Challenges

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Navigating Ethical Dilemmas in Male-Dominated Environments:

- 1. Gender Biases:*** Women in STEM often face stereotypes that question their capabilities, leading to under representation and systemic discrimination.
- 2. Ethical Pressures:*** The need to conform to established, male-centric norms can pressure women to compromise their ethical standards to fit in.

Strategies for Asserting Ethical Stances:

- 1. Mentorship and Sponsorship:*** Engaging with mentors provides guidance and support, empowering women to uphold their ethical beliefs.
- 2. Building Support Networks:*** Connecting with other women in STEM fosters a community that reinforces ethical standards and collective resilience.



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Building Resilience

Staying Ethical in Tough Situations

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Practical strategies for staying resilient:

- 1. Prioritizing self-care:*** It enhances resilience by maintaining physical health, reducing stress, and promoting emotional well-being, enabling better coping with challenges
- 2. Building Strong Relationships:*** Cultivating supportive connections provides emotional support and practical advice during difficult times.
- 3. Practicing Mindfulness:*** Engaging in mindfulness techniques, such as meditation and deep breathing exercises, helps manage stress and maintain focus, enhancing resilience



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Building Resilience / Practical Activity

Identify Your Support System



Instructions:

1. Write down a list of mentors, allies, and peers who can support your ethical growth and ethical decisions.
2. *Reflect*: How can you strengthen these relationships?



Inspiring Real-World Role Models

Learning from Ethical Leaders

Stories of women in STEM who upheld strong ethics:

Case: Ada Lovelace - Ethical Contributions in STEM

Ada Lovelace (1815–1852), **the first computer programmer**, worked with Charles Babbage on the Analytical Engine, **writing the first algorithm for a machine**. She upheld intellectual honesty by crediting Babbage's designs while contributing her own groundbreaking insights, like envisioning machines processing more than numbers. Her integrity and respect for collaboration set early ethical standards in computing.

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Inspiring Real-World Role Models

Learning from Ethical Leaders

Stories of women in STEM who upheld strong ethics:

Case: Dr. Cather Simpson

A physicist and chemist, Dr. Simpson has been a vocal advocate for ethics in education and research. At Case Western Reserve University, she promoted innovation in teaching, **women in science**, and ethical practices. In New Zealand, she has emphasized the **importance of ethics and gender bias awareness in science**, actively engaging in public outreach to address these issues

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Inspiring Real-World Role Models

Learning from Ethical Leaders

Stories of women in STEM who upheld strong ethics:

Case: Dr. Susan Leavy

An assistant professor at University College Dublin's School of Information and Communications Studies, Dr. Leavy works on **trustworthy AI projects** and lectures on AI ethics, cultural analytics, and natural language processing. **She is committed to mitigating bias in AI, particularly gender bias**, and emphasizes the ethical development and deployment of AI technologies

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Inspiring Real-World Role Models

Learning from Ethical Leaders



Reflection: What can you learn from their journeys?



Practical Takeaways

Key Lessons and Next Steps

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The **four core pillars** of work ethics in STEM—**Integrity, Accountability, Teamwork and Respect, and Excellence and Diligence**—are the foundation for ethical and professional success. **Integrity** ensures *honesty and transparency*, fostering *trust in research* and practices. **Accountability** emphasizes *responsibility for actions* and decisions, promoting *reliability*. **Teamwork and Respect** encourage *collaboration* and *inclusivity*, valuing diverse perspectives to create a *supportive environment*. **Excellence and Diligence** drive individuals to *maintain high standards* and *pursue continuous improvement* while balancing *practicality* and *ethical considerations*.

Together, these pillars support ethical behavior, driving innovation and sustainability in STEM.

Reflection Prompt: *What was your biggest takeaway from this training?*

Action plan: *Commit to one ethical improvement starting today.*



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- <https://resources.workable.com/hr-terms/what-is-work-ethic>
- <https://www.peoplehum.com/glossary/what-is-work-ethics>
- <https://www.personio.com/hr-lexicon/work-ethic/>
- <https://21stcented.com/exploring-the-intersection-of-stem-and-ethics-preparing-students-for-responsible-innovation/>
- <https://pmc.ncbi.nlm.nih.gov/articles/PMC2726839/>
- <https://www.mdpi.com/1424-8220/23/3/1151#:~:text=The%20five%20major%20ethical%20dilemmas,infodemic%20and%20data%20weaponization%20issues.>
- https://en.wikipedia.org/wiki/He_Jiankui_affair#Consequences
- <https://www.vox.com/future-perfect/368350/scientific-research-fraud-crime-jail-time>
- https://thejournal.com/articles/2020/02/12/ethics-in-stem-education-going-beyond-the-classroom.aspx?s=the_in_060320
- <https://www.lisedunetwork.com/what-is-academic-integrity-definition-importance-and-examples/>
- <https://new.nsf.gov/policies/scientific-integrity>



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- [https://www.nettercenter.upenn.edu/sites/default/files/STEM Accountability HE Report Final.pdf](https://www.nettercenter.upenn.edu/sites/default/files/STEM_Accountability_HE_Report_Final.pdf)
- <https://www.higheredtoday.org/2017/05/22/new-accountability-broadening-participation-stem/>
- <https://www.forbes.com/councils/forbestechcouncil/2022/01/07/four-keys-to-building-trust-and-accountability-between-you-and-your-team/>
- <https://www.forbes.com/councils/forbesbusinesscouncil/2024/02/13/20-trust-building-strategies-for-a-strong-healthy-work-culture/>
- <https://bymilliepham.com/real-life-examples-of-accountability>
- <https://www.forbes.com/councils/forbesbusinesscouncil/2023/08/16/the-power-of-diversity-and-inclusion-driving-innovation-and-success/>
- <https://asana.com/resources/effective-communication-workplace>
- <https://www.workvivo.com/blog/inclusive-communication-at-work-practical-guide/>
- <https://www.radicalcandor.com/blog/communication-strategies-in-the-workplace/>
- <https://thetimes.com/business-money/entrepreneurs/article/workplace-one-upmanship-is-dead-empathy-and-listening-must-replace-it-3xd98n2wl>
- <https://www.indeed.com/career-advice/career-development/overcome-workplace-challenges>



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Resources

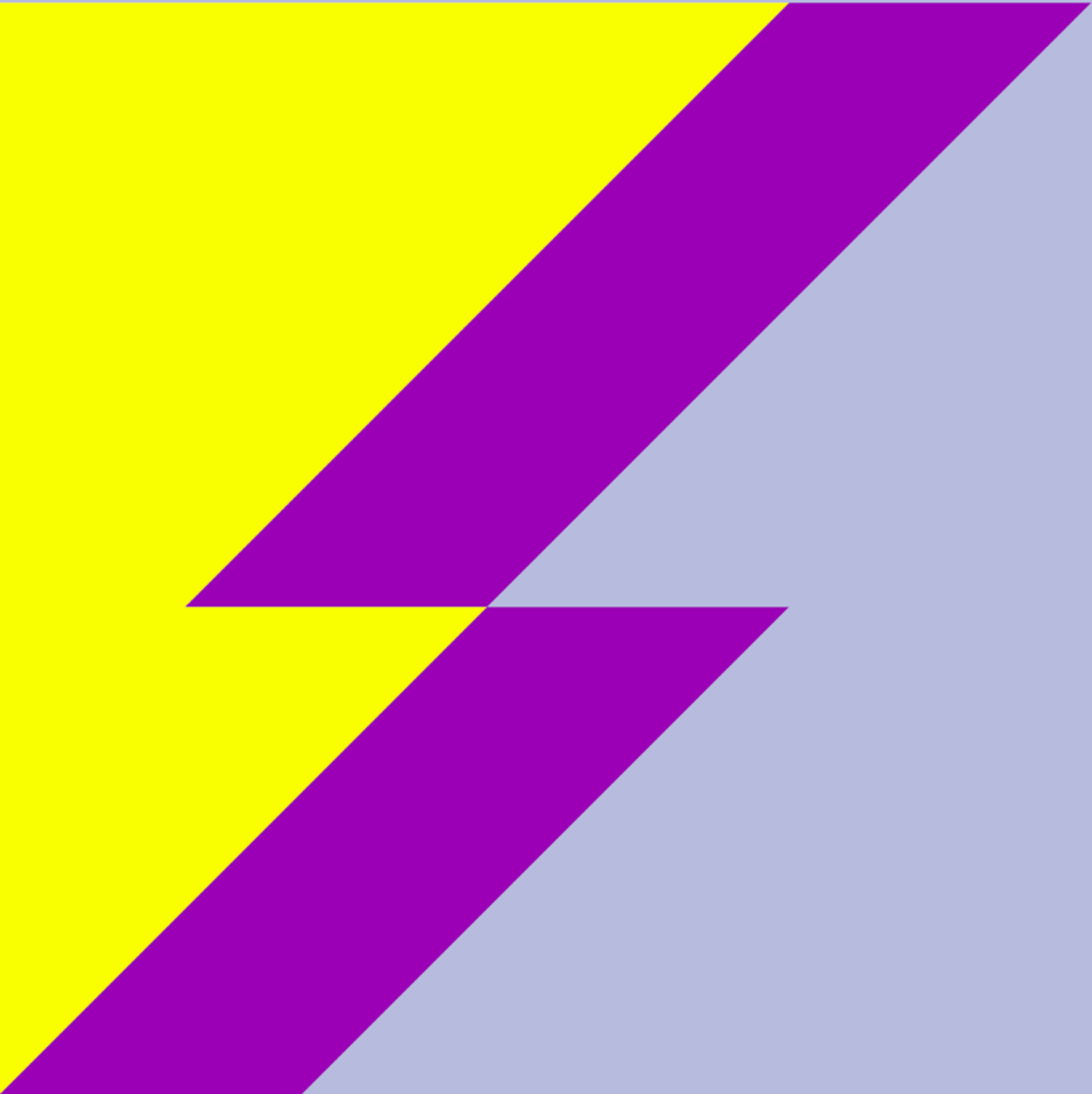
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- <https://www.forbes.com/councils/forbescoachescouncil/2020/03/10/four-strategies-for-overcoming-the-challenge-of-change/>
- <https://uk.indeed.com/career-advice/career-development/work-challenges>
- <https://www.leadingapiens.com/setting-high-standards-leadership/>
- <https://www.termscompared.com/ideal-vs-practical-standards/>
- <https://www.ginnyclarke.com/blog/what-is-excellence>
- <https://www.engineerette.com/balancing-safety-and-practicality-in-the-workplace/>
- <https://genderandset.open.ac.uk/index.php/genderandset/article/download/1095/1304>
- <https://www.aacrao.org/resources/newsletters-blogs/aacrao-connect/article/empowering-women-in-stem-breaking-barriers-and-forging-new-paths>
- <https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-023-00411-0>
- <https://education.nationalgeographic.org/resource/women-fighting-stereotypes-and-systemic-discrimination-stem/>
- <https://www.lifecoach.com/articles/happiness/building-resilience-13-strategies-to-stay-happy-and-thrive-through-lifes-challenges/>
- <https://blog.calm.com/blog/how-to-be-resilient>
- <https://www.apa.org/topics/resilience/building-your-resilience>



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