

fab CONNECT her

Future Female
Innovators In STEAM

Mentorship Training Course



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Your Mentorship Journey Begins Here!

Why Does Mentorship Matter?

Imagine this: "A young woman with big dreams but little confidence walks into a Fab Lab for the first time. She loves technology but doesn't see many people like her in STEAM. Then, she meets a mentor—someone who listens, encourages, and guides her through challenges. A few months later, she's leading a team project and sharing her ideas with confidence."

That's the power of mentorship. And that's where you come in!

This guide isn't just about theories—it's about real impact. Whether you're a first-time mentor or an experienced professional, you'll find practical strategies, interactive activities, and real-world stories to help you make a difference.

By the end of this guide, you'll be able to:

- Create a supportive and inclusive mentoring environment
- Help mentees navigate challenges and build confidence
- Develop your own mentoring style and skills
- Inspire the next generation of women in STEAM (Science, Technology, Engineering, Arts, Mathematics)

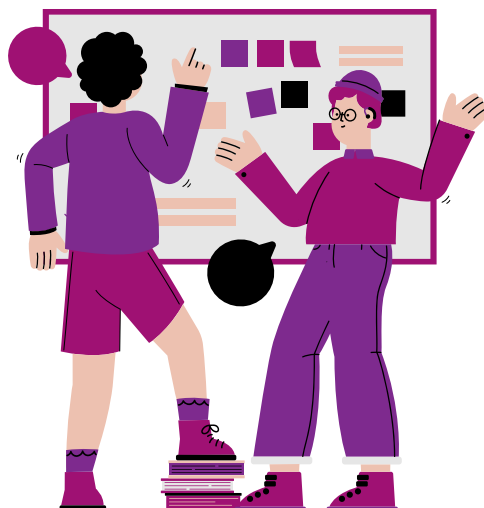
This isn't just a manual—it's a toolkit to help you empower and uplift your mentees.

Who is this guide for?

Mentorship isn't about having all the answers—it's about being there for someone who needs support. Whether you're:

- An educator helping young women take their first steps in STEAM
- A professional looking to give back and support the next generation
- A student mentor guiding peers through learning challenges

...this guide is for you.



How to use this guide?

Think of this guide as your mentorship toolkit—not something you have to read cover to cover in one sitting. Use it when you need:

- Quick tips for an upcoming mentoring session
- Engaging activities to break the ice and build trust
- Real-life case studies to see mentorship in action
- Practical tools for structuring mentorship programs

Take what works for you and your mentee. Adapt, experiment, and grow as a mentor along the way.

 **Ready to make an impact? Let's dive in.**



The role of Mentorship in STEAM

Women remain underrepresented in many STEAM (Science, Technology, Engineering, Arts, and Mathematics) fields, often facing structural barriers, gender biases, and limited access to professional networks. These challenges not only limit individual career progression but also impact the broader STEAM industry, which thrives on diverse perspectives and inclusive innovation.

Mentorship plays a critical role in bridging this gap by providing guidance, professional support, and inspiration. It is one of the most effective ways to increase retention, boost confidence, and expand career opportunities for women in STEAM. Through structured mentorship, mentees can navigate obstacles, develop key skills, and build a professional network that supports their long-term success.

Key benefits of mentorship in STEAM:

✓ **Seeing someone like you makes a difference.**

Many young women don't consider STEAM careers simply because they don't see people like them in the field. Imagine a student who loves technology but thinks, "*I don't belong here.*" Then she meets a mentor—a woman working in robotics, climate science, or digital design—who shares her own journey. Suddenly, it feels possible. Representation isn't just inspiring; it's transformative.

Explore "Understanding Gender Barriers in STEAM" to reflect on representation challenges in the mentoring activities library.

✓ **Confidence comes from having someone in your corner.**

Starting out in STEAM can feel overwhelming. *What if I fail? What if I don't belong?* A mentor helps mentees break through self-doubt by offering guidance, encouragement, and practical advice. Whether it's helping them prepare for a first public presentation or reassuring them that it's okay to make mistakes, mentors build the confidence that mentees need to speak up, take risks, and push forward.

Want to help mentees build confidence? See the "Building Confidence" activity in the activities library.



✓ **It's not just what you know—it's who you know.**

Many opportunities in STEAM come from knowing the right people—but breaking into these networks can be difficult, especially for women. Mentors open doors by introducing mentees to professionals, recommending them for internships, or just showing them where to look. For a mentee, this can be the difference between struggling alone and finding a supportive community that helps them advance.

✓ **Turning ideas into action builds problem-solving skills.**

STEAM is about innovation, creativity, and finding solutions—but sometimes, mentees don't know where to start. A mentor helps mentees take an idea from “just a thought” to something real. Whether it's building a prototype, writing a research proposal, or solving a coding challenge, mentorship makes learning hands-on, practical, and connected to real-world applications.

The impact of mentorship in STEAM

Mentorship is more than a support system—it's a proven method for helping women in STEAM advance in their careers, develop leadership skills, and gain confidence. Research shows that mentored individuals are more likely to succeed in their field, pursue leadership positions, and stay in STEAM careers long-term.

These programs illustrate just how powerful mentorship can be:

Case study: Thrive with Mentoring

Over seven years, Thrive has created 40 mentoring cohorts in 18 cities, supporting over 1,500 mentoring relationships. Its structured approach has advanced careers and enriched mentors' skills.

The impact has been significant:

- Many mentees reported gaining promotions or job opportunities during or shortly after the program.
- Mentorship helped participants refine their decision-making skills and step into leadership roles with confidence.
- Mentees often cited a stronger sense of self-belief and the ability to align their career paths with personal values, leading to greater satisfaction and success.

Source: *Thrive with mentoring impact report*

Case study: The STEAM mentorship academy

This program paired high school students with university mentors to work on STEAM projects. The collaboration culminated in a showcase event, demonstrating the value of mentorship for both mentees and mentors.

The program's structured mentorship model has led to:

- Mentees reported higher confidence in applying STEAM concepts in real-world scenarios.
- High school students took on leadership roles in team projects, learning to manage time, resources, and group dynamics.
- The program culminates in a public STEAM Day showcase, where mentees present their work to industry professionals and educators.

Source: *STEAM Mentorship Academy*

Case study: TInnGO – Sharing Best Practices in STEM Mentoring

TInnGO, a Horizon 2020 project, studied and promoted mentorship initiatives to improve gender diversity in STEAM fields across Europe. By analyzing successful programs in Italy, Germany, and the UK, TInnGO identified key strategies to increase female participation in STEM.

The impact has been significant:

- An Italian university saw a record 26% increase in female engineering students after launching mentorship programs.
- Germany's Femtec Career-Building Program mentored hundreds of women, leading to higher job placements in STEM.
- The UK's Stemettes initiative engaged thousands of girls, inspiring new female-led startups and STEAM careers.

Source: *TInnGO best practices in STEM Mentoring*

Case study: IT for SHE – Europe's Largest Women in Tech Mentorship Program

IT for SHE, launched in Poland, is one of Europe's largest women-in-tech mentorship initiatives. It pairs female IT students with experienced mentors from top tech companies like Google, Intel, and Accenture, focusing on career readiness, technical skill development, and confidence building.

The impact has been significant:

- Increased employability: Many mentees secured jobs in top tech firms during or shortly after the program.
- Leadership growth: Participants developed stronger problem-solving, teamwork, and leadership skills through mentoring and workshops.
- Award-winning initiative: The program was recognized by the European Commission for its impact on increasing female participation in technology fields.

Source: *IT for SHE*



Why mentors benefit too

Mentorship is a two-way street. While mentees gain knowledge, support, and networks, mentors also experience professional and personal growth.

✓ **Strengthened Leadership and Coaching Skills**

Guiding a mentee requires mentors to improve their communication, coaching, and problem-solving abilities—skills that are valuable in any career.

✓ **A Fresh Perspective and Renewed Inspiration**

Mentors often gain new insights and fresh ideas from their mentees, whether it's a new way to solve a technical problem or a fresh approach to innovation.

✓ **Professional Networking and Career Growth**

Being involved in a mentorship program connects mentors with like-minded professionals and industry leaders, expanding their own career opportunities.

✓ **Personal Fulfillment**

Many mentors describe mentorship as one of the most rewarding experiences of their careers. Helping someone grow and succeed brings a sense of accomplishment that extends beyond professional success.

Best Practice: Technovation – The Impact of Mentorship on Industry Professionals

Technovation's mentorship program not only empowers mentees but also transforms the mentors themselves. According to their impact study:

- 83% of industry professionals said their mentorship experience increased their creativity in the workplace.
- 75% of mentors reported improved communication and presentation skills.
- 67% of mentors said mentorship enhanced their professional relationships.

Source: *Technovation - Impact*

Whether you are a first-time mentor or an experienced professional, your role in this program has the potential to transform lives and careers.

Next, we will explore how to structure mentorship programs effectively, create meaningful mentor-mentee relationships, and apply mentorship best practices for long-term impact.

Creating the Right Foundation for Mentorship

Mentorship isn't a one-size-fits-all process. Every mentor-mentee relationship is different, shaped by individual goals, experiences, and learning styles. For mentorship to be effective, it needs to be intentional, structured, and adaptable.

This chapter provides a practical guide to help mentors:

- ✓ Set up and manage effective mentorship environments
- ✓ Choose the right mentorship model based on their mentee's needs
- ✓ Create an inclusive, goal-driven approach to mentorship
- ✓ Ensure the mentorship process leads to real impact

Whether you are mentoring one-on-one, in a group setting, or within an organization, the strategies outlined here will help you establish a mentorship experience that is structured, supportive, and results-oriented.

Practice this through "Cultural Sensitivity and Inclusion and Confidentiality and Trust" activity in the mentoring activities library.



Choosing the right Mentorship Model

Mentorship can take many forms, and the right model depends on the needs, goals, and availability of both the mentor and mentee. Some mentorships thrive with structured, scheduled meetings, while others work best in hands-on environments or flexible, ad-hoc formats.

This section outlines four key mentorship models, each with a description, real-world example, and implementation tips to help mentors apply them effectively.

1. On the job mentoring

Best for: Hands-on learning, skill development, and real-time feedback.

What it looks like: Mentorship takes place within daily work or project activities, allowing mentees to immediately apply new skills while receiving direct, real-time feedback. This model is particularly effective in technical, creative, and research-based fields, where practical experience is essential for skill development.

Unlike formal training, on-the-job mentoring integrates learning into real-world tasks, making it dynamic and context-driven. The mentor is actively involved, guiding the mentee through challenges and decision-making processes while providing insights into industry best practices.

Try "Hands-on STEAM Skill Development" in the mentoring activities library to support practical learning.

Real-world example: Fab Labs & Maker Spaces

- A mechanical engineering student interns at a Fab Lab, where an experienced mentor guides them through prototyping a new robotic arm. Instead of just explaining concepts, the mentor walks them through each step, from designing blueprints to programming the robotic movement.
- A fashion-tech mentee learns to embed smart sensors into clothing, working alongside their mentor in a digital fabrication lab. Rather than traditional lectures, they gain hands-on experience using wearable technology and machine learning tools.

Case Study: STEM Mentorship in a Research Lab (France)

At the Université Paris-Saclay, a mentorship program pairs graduate students with research scientists. In this setting, mentees work directly on live research projects, shadowing senior researchers and learning experimental techniques, lab protocols, and data analysis in real time.

- ✓ Mentees develop practical research skills faster than through coursework alone.
- ✓ 90% of participants reported increased confidence in their ability to conduct independent research.
- ✓ Many mentees co-authored scientific papers as a result of their hands-on mentorship experience.

Source: *Mentoring Programme - Women & Science | Université Paris-Saclay*

How to make it work:

Encourage reflection:

- After each session, schedule a quick debrief where the mentee can ask questions and process what they've learned.
- Use reflection questions like:
 - What was the most important thing you learned today?
 - What challenges did you face, and how did you overcome them?

Gradually increase independence:

- Start with hands-on guidance, showing the mentee how to complete a task.
- Transition into collaborative work, where the mentee takes on more responsibility under supervision.
- Eventually, allow the mentee to work independently, checking in periodically for feedback.

Make learning intentional:

- Set clear learning objectives so mentees understand what they are working toward.
- Break complex tasks into smaller steps, making learning more structured.
- Provide mini-goals to track progress and maintain motivation.



2. Scheduled Mentorship sessions

Best for: Long-term development, structured learning, and goal tracking.

What it looks like: Scheduled mentorship involves regular, structured meetings between a mentor and mentee—either weekly, bi-weekly, or monthly—to track progress, discuss challenges, and refine goals. This model works particularly well for career coaching, leadership development, academic growth, and professional skill-building.

Unlike on-the-job mentoring, which is spontaneous and hands-on, scheduled sessions provide a clear framework for mentorship, allowing for deep discussions, targeted learning, and continuous progress monitoring.

Real-world example: Women in AI Mentorship Programme (Europe)

A female AI researcher mentors an aspiring data scientist, meeting every two weeks to discuss technical skills, research papers, and career pathways. The structured approach allows the mentee to:

- ✓ Set clear short-term and long-term learning goals.
- ✓ Receive feedback on projects and coding exercises in a consistent, supportive environment.
- ✓ Gain insights into industry trends, job applications, and career strategies in AI.



Case Study: SUCCESS Mentoring at TU Dublin (Ireland)

TU Dublin's MentorHer Programme provides scheduled mentorship sessions for female STEM students, pairing them with academic or industry mentors. Meetings occur monthly, allowing mentees to:

- Discuss career aspirations and academic goals.
- Work through challenges such as imposter syndrome or industry entry barriers.
- Get career coaching, including resume reviews, networking strategies, and technical skill development.

Impact:

- ✓ 75% of participants reported increased self-confidence in their STEM career paths.
- ✓ 40% secured internships or job offers through mentor connections.
- ✓ 90% of mentees felt more prepared to navigate career decisions after structured mentorship.

Source: *Get Involved / TU Dublin*

How to make it work:

Set clear goals:

- Define learning objectives at the start of the mentorship relationship.
- Ask the mentee: What are your biggest challenges and goals?
- Create a mentorship roadmap with measurable milestones (e.g., skill development, networking, confidence-building).

Be consistent:

- Regularity is key—even short check-ins help maintain momentum.
- If a session must be skipped, reschedule rather than cancel to maintain commitment.

Encourage preparation:

- Have both mentor and mentee prepare in advance by outlining discussion topics.
- Use a session agenda to keep meetings focused and productive.
- Ask the mentee to reflect on progress between sessions using questions like:
 - What worked well since our last meeting?
 - What challenges did you face?

Use practical tools:

- Implement the Skills Tree activity to track competency growth over time.
- Use goal-tracking templates or digital tools like Trello, Notion, or shared Google Docs for accountability. See the tools section of the course for more.

3. Ad Hoc Mentoring

Best for: Immediate problem-solving, flexible guidance, and informal mentoring relationships.

What it looks like: Ad hoc mentoring is unstructured, flexible, and needs-based—the mentee reaches out when they need guidance, and the mentor provides support in real-time. Unlike scheduled mentorship, which follows a fixed meeting schedule, ad hoc mentoring is spontaneous, allowing mentees to seek help as challenges arise.

This model is useful when:

- Mentees need quick advice on a specific issue.
- Mentors have limited availability but still want to provide support.
- Formal mentorship structures are not in place, but informal connections exist.

Rather than long-term development, ad hoc mentorship focuses on immediate problem-solving, making it a valuable on-demand resource for mentees.

Real-world example: Women in STEM Slack Mentorship (Europe)

- A female software engineer in a tech company is part of a Women in STEM Slack community. A junior developer posts: "I'm struggling with debugging my machine learning model—any advice?" Within minutes, an experienced mentor responds with insights, links to helpful resources, and troubleshooting steps.
- A university student preparing for a pitch competition messages a former professor, asking: "Could you review my presentation slides?" The mentor provides feedback via email, helping refine the student's pitch before the event.

Source: [10 Slack Communities You Need To Join If You Are A Woman In Tech - Xena](#)



Case Study: Women's Career Network (WCN, Scandinavia)

The Women's Career Network (WCN) in Scandinavia runs a cross-company mentorship program where female professionals provide ad hoc career support to young women entering STEM and finance. Mentees can contact mentors via LinkedIn, email, or networking events whenever they need guidance.

Impact:

- ✓ Flexible networking opportunities for women who don't have access to structured mentorship.
- ✓ Mentees receive quick, career-related guidance, from negotiating salaries to choosing between job offers.
- ✓ Stronger professional connections formed, often leading to long-term mentorship relationships.

Source: [Home / Women's Career Network - Inspire Challenge Unite](#)

How to make it work:

Set boundaries:

- Define when and how mentees can reach out (e.g., Slack, LinkedIn, email).
- Be clear about response times to manage expectations.

Balance Flexibility with Structure:

- While ad hoc mentoring is spontaneous, occasional check-ins can help maintain a connection.
- Suggest a follow-up meeting if a mentee needs more in-depth support.

Encourage independent problem-solving:

- Instead of giving direct answers, guide mentees toward useful resources (e.g., tutorials, research papers, industry contacts).
- Ask questions that help mentees think critically and explore solutions on their own.



4. Collaborative Learning Mentorship

Best for: Group mentorship, peer learning and knowledge sharing, and Innovation-driven environments.

What it looks like: In collaborative learning mentorship, mentors and mentees work together in groups, exchanging knowledge, skills, and experiences. Unlike traditional one-on-one mentorship, this model is highly interactive, allowing participants to learn from multiple perspectives and contribute to each other's growth.

This model is particularly effective in:

- STEAM innovation spaces (e.g., Fab Labs, research groups, hackathons).
- Entrepreneurship and leadership development programs.
- University cohorts where students support each other with faculty or industry mentors.

Real-World Example: SheTech Open Innovation Programme (Italy)

The Women's Career Network (WCN) in Scandinavia runs a cross-company mentorship program where female professionals provide ad hoc career support to young women entering STEM and finance. Mentees can contact mentors via LinkedIn, email, or networking events whenever they need guidance.

Impact:

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Source: [Home | Women's Career Network - Inspire Challenge Unite](#)



Case Study: Fab Labs & Maker Spaces – Peer-to-Peer Mentorship in STEAM (Europe)

Fab Labs across Europe have embraced collaborative mentorship, where professionals, students, and researchers work together on hands-on projects in robotics, 3D printing, and digital fabrication.

These spaces create an ecosystem where:

- Mentees learn by doing – instead of passively receiving knowledge, they work on real projects alongside experienced mentors.
- Peer-to-peer learning thrives – mentees support each other, fostering a culture of shared expertise and innovation.
- Mentors also gain new skills – working with diverse groups exposes mentors to fresh ideas and interdisciplinary collaboration.

Impact:

- ✓ 75% of mentees reported feeling more confident in applying STEAM skills after collaborative mentorship.
- ✓ Innovation increased – many projects led to startups, patents, or further research opportunities.
- ✓ Stronger professional networks – mentees and mentors formed long-term partnerships.

Source: *Fab Labs supports local entrepreneurship with open-source and peer-to-peer production - Shareable*

How to make it work:

Foster equal participation:

- Ensure everyone in the group has a role and contributes.
- Rotate leadership so different members take ownership at various points.

Encourage peer-to-peer mentoring:

- Allow mentees to learn from each other, not just from the lead mentor.
- Promote a knowledge-sharing culture by asking: What can each participant teach others?

Use real-world challenges

- Apply mentorship to practical projects, ensuring learning is hands-on.
- Host collaborative problem-solving sessions, like hackathons or innovation sprints.

How to choose the right Mentorship Model

Not sure which model fits best? Use this quick guide:

If your mentee needs...	Best mentorship model
Hands-on experience and real-time feedback	On-the-Job Mentoring
Structured guidance with clear goals	Scheduled Sessions
Flexible, informal support	Ad Hoc Mentoring
A group learning environment	Collaborative Learning

Mentorship isn't one-size-fits-all—these models can be combined to create a more personalized experience. For example:

- A mentee might have scheduled sessions for career development but also reach out ad hoc for quick guidance.
- A hands-on on-the-job mentorship in a lab setting can be paired with collaborative learning in group projects.

Choosing the right model is just the beginning. A successful mentorship experience depends on creating an inclusive, supportive learning environment. The next section will explore:

- ✓ How to build trust and encourage open communication.
- ✓ Fostering collaboration to strengthen the mentor-mentee relationship.
- ✓ Empowering mentees to take ownership of their growth.



Creating a supportive learning environment

A mentorship programme is only as strong as the trust and connection between mentors and mentees. A well-structured mentorship model is important, but how mentorship is delivered—through open communication, inclusivity, and mutual respect—determines its lasting impact.

A supportive mentorship environment allows mentees to:

- ✓ Feel safe to ask questions and make mistakes.
- ✓ Share challenges and receive constructive guidance.
- ✓ Develop confidence and a sense of belonging in STEAM.
- ✓ Take ownership of their learning journey.

For mentors, creating this environment means:

- ✓ Encouraging open, honest communication.
- ✓ Being approachable and available.
- ✓ Recognizing and valuing diverse backgrounds and experiences.
- ✓ Providing both support and challenge to help mentees grow.

This chapter provides practical strategies to help mentors build trust, foster inclusivity, and create a mentorship experience that is engaging, meaningful, and empowering. See also the mentoring activities to help you and your mentee build a supportive learning environment.



Strategies for an inclusive mentorship environment

Establish Mutual Respect Guidelines

- Set expectations from the first session by agreeing on communication norms and mentor-mentee roles.
- Discuss confidentiality, active listening, and constructive feedback as key principles.

Encourage Authenticity

- Create a space where mentees feel comfortable expressing themselves without fear of judgment.
- Ask open-ended questions like: What excites you most about STEAM? What challenges do you face?

Value Diverse Experiences and Knowledge

- Recognize that mentees come from different backgrounds—their unique perspectives enrich the learning process.
- Celebrate different pathways into STEAM, showing that there's no single way to succeed.

Best Practice: Technovation Girls

Technovation Girls emphasizes the importance of setting clear expectations from the outset. Mentors and teams collaboratively create a "Team Agreement," which outlines expected behaviors, meeting schedules, time commitments, and communication norms. This agreement serves as a reference throughout the season, helping to navigate any challenges and maintain a respectful environment.

Source: [Technovation Girls - Mentor Resources](#)

A strong mentor-mentee community enhances motivation, learning, and long-term success. Creating opportunities for networking and informal interaction strengthens these relationships.

Building Community Among Mentors and Mentees

A strong mentor-mentee community enhances motivation, learning, and long-term success. Creating opportunities for networking and informal interaction strengthens these relationships.

Welcome & Closing Meetings

- Host introductory meetings to set the tone and celebrate achievements at the end of the program.
- Encourage mentors and mentees to share reflections on their experiences.

Mentor-Mentee Meetups

- Organize informal gatherings (in-person or virtual) where mentees can connect with multiple mentors and build their support network.

Peer Support Circles

- Establish small discussion groups or online forums where mentees can exchange experiences, challenges, and advice.

Implementation Tip:

Use virtual platforms like Slack or Microsoft Teams to facilitate ongoing interaction between mentorship sessions. This is especially useful for remote or hybrid programs. See also tools chapter in this course for more information.

Women in Tech Nordic – Creating a Supportive Mentorship Network

The Women in Tech Nordic Mentorship Program fosters strong mentor-mentee relationships by:

- Organizing group mentorship events where mentees engage with multiple role models.
- Hosting networking sessions that strengthen professional connections.
- Encouraging peer learning through collaborative problem-solving activities.

One of their key initiatives is "Mentor Speed Networking", where mentees rotate between different mentors to gain diverse insights and expand their professional network.

Source: [Women In Tech Sweden](#)

Ensuring GDPR Compliance & Safety in Mentorship

Data privacy and security are critical in any mentorship program, especially when handling mentees' personal or sensitive information.

Basic GDPR Compliance Guidelines

- Informed Consent: Ensure all participants understand what data is collected and how it will be used
- Restricted Access: Only essential personnel should access mentees' personal data.
- Secure Data Sharing: Avoid sharing sensitive information on unprotected platforms.

Implementation Tip:

Provide mentors with a GDPR & Safety Compliance Checklist to review before each session, ensuring all interactions respect privacy and security guidelines. See also the FabConnectHer safeguarding guidelines template.

Best Practice: STEM Talent Europe – Protecting Mentee Data in Virtual Mentoring

The STEM Talent Europe mentorship program follows strict data protection guidelines to ensure mentees' information is kept secure. They provide:

- ✓ Pre-session GDPR training for all mentors.
- ✓ Encrypted communication channels for mentor-mentee interactions.
- ✓ A GDPR checklist to ensure compliance before every mentoring session.

Source: www.stemtalent.eu



Conclusion

Effective mentorship is not static—it requires continuous reflection, adaptation, and improvement. As mentors and program coordinators, taking time to evaluate the effectiveness of the chosen mentorship model ensures that mentees receive the best possible support.

Key Takeaways from this Chapter

- ✓ A supportive learning environment builds trust and fosters mentee growth.
- ✓ Mentorship models should be flexible and adapted to mentees' individual needs.
- ✓ Community-building activities strengthen mentor-mentee relationships.
- ✓ Mentorship benefits both mentees and mentors, leading to skill development and professional growth.
- ✓ Privacy and data protection are essential for maintaining a safe mentorship environment.

Reflection and follow-up

To ensure a high-impact mentorship experience, mentors and program coordinators should regularly assess and refine their mentorship approaches.

Objective: Encourage mentors to reflect on their mentees' progress and adjust their strategies accordingly.

- *Activity:* Every quarter, mentors complete a self-evaluation to assess:
- *Mentee Progress:* Are they meeting their learning goals? What challenges have they faced?
- *Mentorship Approach:* Has the chosen mentorship model been effective? Would a different model better support the mentee's growth?
- *Communication & Engagement:* Are mentees actively participating? Do they feel supported and heard?
- *Personal Growth:* What has the mentor learned from the experience?

Implementation Tip:

Program coordinators can collect anonymous mentee feedback to complement the mentor evaluation and provide insights for improving the program.

Use these reflections to make informed adjustments, ensuring that mentorship remains a dynamic and evolving process that truly benefits both mentors and mentees.

Final Thought: *The Role of Mentors in Shaping the Future*

By fostering inclusive, engaging, and effective mentorship environments, mentors are not just guiding individuals—they are empowering the next generation of STEAM leaders.

FabConnectHer Mentoring Training Resources

This section provides practical tools, resources, and platforms to help mentors and mentees communicate effectively, personalize learning, and implement mentoring strategies with ease.

** All mentoring training activities can be downloaded from the FabConnectHer website. These exercises help mentors learn and apply key skills, such as active listening, effective communication, and mentorship ethics.*

Digital Communications Platforms

Effective mentorship relies on consistent communication, knowledge sharing, and collaboration. Whether in virtual, hybrid, or in-person settings, using the right digital tools can:

- ✓ Keep mentor-mentee interactions structured and accessible
- ✓ Enable collaborative learning and skill-building
- ✓ Help track progress and goals over time
- ✓ Create engaging, interactive mentorship sessions

The key is to choose the right platform based on the needs of your mentorship program. Some tools are great for quick check-ins, while others help with long-term tracking and resource sharing. The table below outlines various digital platforms, how they are used in mentorship, and key tips for implementation.



Platform	Best for	Features	How to use:
Slack / Discord / Microsoft Teams	Ongoing communication and check-ins	Chat messaging, voice/video calls, file sharing	Create private channels for mentor-mentee pairs, set up group discussions, and schedule regular check-ins.
Zoom / Google Meet	Scheduled mentorship sessions	Video conferencing, breakout rooms	Use for structured meetings, career coaching, and virtual one-on-one or group mentorship.
Google Drive / OneDrive / Notion	Storing and sharing mentorship materials	Cloud storage, document collaboration	Create a shared mentorship folder for guides, assignments, and reference materials. Use Notion for progress tracking.
Miro / MURAL / Trello / Asana	Interactive collaboration and project tracking	Visual brainstorming, Kanban boards, real-time editing	Use for goal setting, brainstorming, and task management. Have mentees map their career paths visually.
Google Forms / Typeform / Padlet	Gathering mentor/mentee feedback	Surveys, polls, interactive boards	Collect mentorship evaluations, mentee reflections, and feedback on the program.
Coursera / LinkedIn Learning / Khan Academy	STEAM skill-building and professional development	Online courses, certifications, industry insights	Assign relevant learning modules and set learning milestones. Encourage mentees to complete certificates.



How to Use Digital Tools Effectively in Mentorship

Using digital tools effectively in mentorship requires intentionality and structure. Simply having access to platforms is not enough—mentors and mentees should know how and when to use them for communication, collaboration, and tracking progress. Below are five key strategies to maximize the impact of digital tools in mentorship.

1. Set Clear Expectations for Communication

Digital communication works best when mentors and mentees agree on how they will stay in touch. Setting expectations from the beginning helps prevent miscommunication and ensures accountability.

Implementation Tip: Create a simple communication agreement where both mentor and mentee outline how they will interact.

Common Pitfall: Not defining communication rules, leading to confusion about when and how to connect.

2. Organize and Share Resources Efficiently

Mentorship programs often involve guides, worksheets, and progress tracking—these should be stored in an easily accessible place.

Common Pitfall: Using too many different platforms without a clear system, making it difficult for mentees to find resources.

3. Keep Mentorship Engaging with Visual & Interactive Tools

Mentorship shouldn't be just emails and calls—using interactive tools can enhance engagement and learning.

Implementation Tip: Have mentees visually map their career aspirations in Miro or Trello, helping them break learning goals into actionable steps.



4. Encourage Reflection & Gather Feedback

Regular self-reflection helps mentees track their growth, while mentor feedback ensures the program remains effective.

Implementation Tip: Before mentorship check-ins, ask mentees to fill out a short reflection form to guide discussions.

Common Pitfall: Not collecting feedback regularly—mentorship works best when adjustments are made in real-time.

5. Support Continuous Learning & Skill Development

Beyond mentorship conversations, mentees benefit from ongoing learning opportunities.

Implementation Tip: Use LinkedIn Learning certificates as confidence boosters for mentees as they develop their skills.

Common Pitfall:

Overloading mentees with too many learning resources—focus on one skill area at a time.

Digital tools enhance mentorship, but only when used strategically. By following these best practices, mentors can create a structured, engaging, and impactful mentorship experience that supports clear communication, learning, and reflection.



FabConnectHer Mentoring Activities

FabConnectHer provides structured mentorship activities designed to:

- ✓ Help mentors improve their own mentoring skills
- ✓ Strengthen mentor-mentee relationships through interactive exercises
- ✓ Build trust, communication, and leadership within mentorship programs

These activities can be used individually by mentors for self-reflection and growth or with mentees to enhance engagement, skill-building, and communication.

How to use these activities:

For mentors: Use these activities individually to reflect on mentoring ethics, communication, and leadership strategies.

With mentees: Choose activities that help mentees feel more confident, engaged, and supported in their mentorship journey.

In group mentoring: Some activities work well in mentor training sessions or peer mentoring networks to exchange insights and best practices.

Finding the right activity

Activities are organized on the FabConnectHer website by category and can be found using the search function or tags. **Visit the FabConnectHer website to explore and download the activities.**



FabConnectHer Activity Categories

Activity Category	Purpose	Best for
Mentoring Ethics & Boundaries	Establishing clear roles, confidentiality, and trust	Mentor self-reflection, Setting up mentorship guidelines
Active Listening	Strengthening mentor-mentee communication	Improving mentor empathy, Enhancing listening skills
Effective Communication	Developing verbal, non-verbal, and cross-cultural mentoring skills	Building clarity in mentorship discussions
Constructive Feedback	Learning to give and receive feedback effectively	Strengthening mentor-mentee dialogue
Creating a Supportive Learning Environment	Fostering an inclusive, engaging, and motivating space	Building trust with mentees
Gender-Specific Mentorship	Addressing unique challenges faced by women in STEAM	Supporting mentees in overcoming barriers
Leadership & Career Development	Helping mentors guide mentees toward long-term goals	Setting mentee aspirations, Career coaching
STEAM-Specific Skills & Knowledge	Equipping mentors with STEAM-focused mentoring strategies	Supporting mentees in technical skill-building

Now that you know what activities are available, the next section will show you how to tailor them to different mentoring styles, mentee backgrounds, and program goals.

Customizing Mentoring Resources

Mentorship is not one-size-fits-all—mentees have different learning styles, career goals, and levels of experience. Customizing mentorship resources ensures that:

- ✓ Mentees receive relevant and engaging support
- ✓ Activities match individual goals and challenges
- ✓ Mentors can adapt their approach based on feedback and progress

FabConnectHer activities are designed to be flexible—mentors can modify them to fit their mentees' specific needs. This section provides a step-by-step guide on how to access, choose, and tailor mentorship resources effectively.

Strategies for customizing mentoring resources

Step 1: Understanding What Works for Your Mentee

Before choosing or modifying activities, mentors need to get to know their mentee's learning style, preferences, and goals.

- ✓ *Ask Directly:* Start the mentorship relationship with a "Getting to Know You" discussion or a short mentee reflection form.
- ✓ *Observe Their Engagement:* Pay attention to how they respond during mentorship sessions—do they prefer conversation or structured exercises?
- ✓ *Use a Quick Self-Assessment:* Encourage mentees to reflect on their own learning style, career aspirations, and preferred communication methods.

Step 2: Adapt Activities to Mentees' Learning Styles

Mentees learn in different ways—some prefer visuals, while others learn best through discussion or hands-on practice. Choosing the right format increases engagement and impact.



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If your mentee learns best by...	Try this approach
Visual Learning (Diagrams, Charts, Mind Maps)	Use Miro/MURAL for brainstorming, visual goal-setting, or mind mapping career paths.
Hands-On Experience (Trial & Error, Doing vs. Reading)	Adapt activities into real-world scenarios (e.g., role-playing feedback conversations).
Listening & Discussion (Conversations, Podcasts, Verbal Reflection)	Focus on dialogue-based activities, like mentee-led discussions or storytelling exercises.
Reading & Writing (Guides, Articles, Reflection Journals)	Assign mentorship journals or written reflections after activities.

Before starting mentorship, ask mentees about their preferred learning style so you can choose the best resources for them.



Step 3: Modify Activities Based on Experience Level

A mentorship activity should match the mentee's stage of development—some mentees need fundamental skills, while others benefit from advanced challenges.

If your mentee is...	Modify activities by...
New to STEAM or Mentorship	Focus on confidence-building, career exploration, and goal-setting activities. Keep it structured with clear step-by-step guidance.
Developing Skills in STEAM	Encourage problem-solving exercises and give mentees more autonomy to lead discussions or activities.
Experienced or Transitioning to Career	Adapt activities for leadership development, networking, and real-world application. Shift to mentor-as-a-coach mode.

Start with guided activities for beginners and progress to independent exercises as mentees gain confidence.



Step 4: Align Activities with Mentees' Career Goals

Every mentee has different ambitions—customizing resources to fit their career path makes mentorship more meaningful.

If your mentee wants to...	Focus on these types of activities...
Explore STEAM careers	Career pathway planning, shadowing professionals, networking exercises
Develop technical skills	Hands-on project challenges, skill-tree mapping, industry-relevant problem-solving
Gain leadership experience	Team-building activities, public speaking practice, mentoring peers
Overcome confidence barriers	Stereotype reflection, confidence-building exercises, mentor storytelling

Personalize activity discussions—relate exercises to mentees' aspirations to keep them motivated.

Step 5: Adjust Activities for Virtual or In-Person Mentorship

FabConnectHer activities are designed for flexibility—they can be used in in-person or remote mentorship settings.

If mentoring...	Modify activities by...
In person	Use hands-on workshops, role-playing, or physical brainstorming (e.g., whiteboards, sticky notes).
Online/Remote	Adapt activities to Miro/MURAL, Google Docs, Padlet, or digital discussion boards.

Additional Learning Resources

Effective mentorship goes beyond structured activities—it involves continuous learning and access to the right resources. Whether you're looking for deeper insights into mentoring practices, STEAM-specific skills, or gender-inclusive mentorship strategies, the following resources will help mentors and mentees stay informed and engaged.

Learning resources:

These resources provide deeper insights into mentoring principles, STEAM skills development, and gender-inclusive mentorship strategies.

- Mentoring principles background information from FabConnectHer – Covers active listening, effective communication, mentoring ethics, constructive feedback, and more. (Available on the FabConnectHer website)
- TED Talk: The Importance of Women in Technology – Explores why representation matters in STEAM. [TED.com](https://www.ted.com)
- Python for Beginners – Free coding course for mentees interested in programming. <https://www.codecademy.com/learn/learn-python>
- Creative Coding for Designers – Interactive projects in digital arts & coding. <https://processing.org/>
- Hands-on STEAM Project Guides – Step-by-step learning guides. <https://www.sciencebuddies.org/>
- Setting boundaries video: Setting Boundaries| Mental Health Lessons | RTÉ Player Original
- UNESCO report on Women in STEM – Insights into global efforts to increase female participation in STEM. [Cracking the code: girls' and women's education in science, technology, engineering and mathematics \(STEM\) - UNESCO Digital Library](#)
- [Girls Who Code](#) – A global initiative providing coding resources and mentorship for young girls.
- [National Mentoring Resource Center](#) – Tools, guides, and research on mentoring effectiveness.
- [Home – Women Stem Up](#)



Mentorship & STEAM Networks Across Europe

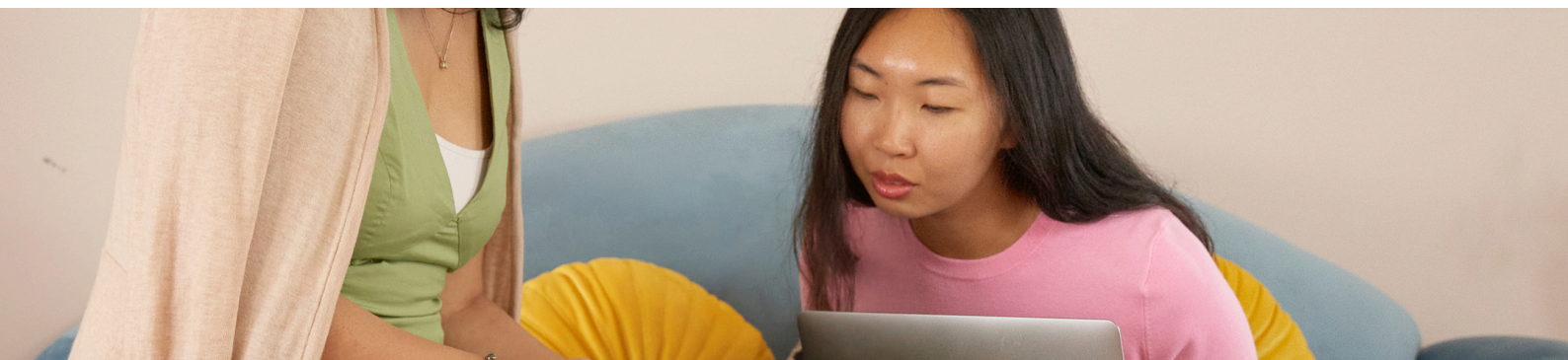
Connecting with mentorship networks provides valuable opportunities for collaboration, networking, and long-term growth. Below are key mentorship initiatives available across Europe.

- Technovation Girls – A global mentorship program helping young women develop skills in technology, entrepreneurship, and leadership.
- Women in STEM Networks – International networks supporting women in science, technology, engineering, and math.
- STEAM Mentorship Forums – Peer mentorship spaces where mentors can share experiences and advice.
- National Women's Council of Ireland (NWCi) – Advocates for gender equality and leadership opportunities for women in Ireland.
- Big Brother Big Sister Ireland – A national mentorship program supporting young people through guidance and role models.
- Network Ireland – A professional women's network promoting leadership and mentorship.
- Talent-Girl – A mentorship program supporting girls in STEM fields across Spain.
- Mujeres Líderes Educación – A Spanish initiative promoting female leadership in education and mentorship.
- Mentor Program Friesland – A mentorship program connecting students with professionals to develop skills and confidence.

Conclusion: Expanding Your Mentorship Toolbox

The resources in this chapter are primarily designed for mentors to enhance their skills, deepen their understanding of effective mentorship, and support mentees in their personal and professional growth. However, many of these resources can also be shared with mentees, allowing them to explore new knowledge, develop skills, and take an active role in shaping their mentorship journey.

Encourage your mentee to explore these resources and discuss key takeaways during mentorship sessions. Whether it's a TED Talk, a coding tutorial, or a leadership guide, these materials can spark valuable conversations and insights that strengthen the mentoring relationship.



Evaluation & Monitoring

Reflection is an essential part of the mentorship process, enabling both mentors and mentees to monitor progress, identify areas for improvement, and ensure the experience remains impactful. By incorporating reflection into mentorship, participants can gain deeper insights into their strengths, challenges, and opportunities for growth. Reflection can be done individually or collaboratively, using methods tailored to the participants' needs.

Options for Mentor Reflection

Mentors can use various tools to evaluate their practices, track their growth, and refine their approach over time:

- Journaling – Keep a private log to note what worked, what didn't, and key insights from mentoring sessions.
- Structured Questionnaires – Use provided templates to assess your communication style, effectiveness, and support strategies.
- Self-Assessment Checklists – Regularly evaluate your mentoring skills to track improvements over time.

Tip: Sharing some reflections with your mentee can open opportunities for feedback and strengthen the mentoring relationship.

Options for Mentee Reflection

Mentees can reflect on their growth, challenges, and learning experiences using these tools:

- Goal-Tracking Sheets – Monitor progress toward short-term and long-term mentorship goals.
- Personal Journaling – Write about successes, challenges, and areas needing further support.
- Questionnaires – Assess current skills and needs, using tools tailored to STEAM development.
- Session Preparation Notes – Reflect before each mentoring session to clarify questions or topics to discuss.

Options for Joint Reflection

Collaborative reflection allows mentors and mentees to evaluate the mentorship journey together and make adjustments when needed. Methods include:

- Reflection Sessions – Schedule periodic meetings dedicated to reviewing progress, challenges, and successes.
- Discussion Prompts – Use guiding questions such as:
 - What has been the most valuable part of this mentorship?
 - Are there challenges we should address?
 - Do our goals need adjustment?
- Co-Developed Plans – Identify new areas of focus or strategies for improvement based on reflection outcomes.
- Questionnaire Comparison – Compare mentor and mentee responses from skills assessments to guide discussions on progress and future priorities.

Tip: Regular reflection sessions help ensure that mentorship stays aligned with evolving goals and remains meaningful for both participants.



Evaluation Tools

Regular evaluation ensures that mentorship remains structured, productive, and aligned with participants' goals. FabConnectHer offers a range of tools to support this process:

Feedback Forms

Feedback forms are a simple yet powerful tool for gathering insights from both mentors and mentees. These can be used periodically to reflect on:

- ✓ Quality of communication between mentor and mentee.
- ✓ Effectiveness of mentoring sessions in supporting mentee goals.
- ✓ Overall mentorship experience and areas for improvement.

Tip: Encourage mentors and mentees to complete feedback forms at key intervals to ensure the mentorship remains effective.

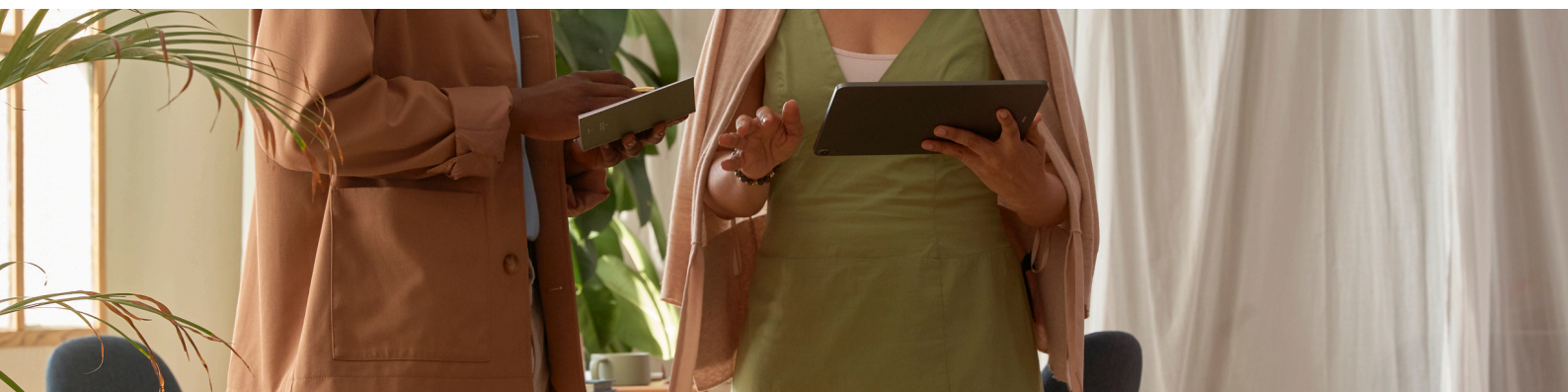
Self-Assessment Templates

Both mentors and mentees can use self-assessment templates to evaluate their performance and growth. These templates help participants:

- ✓ Reflect on their strengths and areas for improvement.
- ✓ Assess how well the mentorship aligns with personal and professional goals.
- ✓ Set new goals based on self-evaluation insights.

Tip: Self-assessments help track growth over time, making it easier to see the impact of mentorship.

**Use the FabConnectHer Base & Impact questionnaires to track progress. Find them in the mentoring activities library.*



Goal-Tracking Sheets

Goal-tracking sheets provide a structured way to document progress toward specific objectives. These sheets can be updated regularly to ensure mentees stay on track and mentors can measure their impact.

Templates might include sections for:

- ✓ Short-term and long-term goals.
- ✓ Action steps and milestones.
- ✓ Challenges encountered and strategies for overcoming them.
- ✓ Mentor feedback on progress.

Tip: Regularly updating goal-tracking sheets keeps both mentors and mentees focused on progress and encourages ongoing learning.

Reflection and evaluation are not one-time tasks—they are part of an ongoing cycle of learning, adaptation, and improvement. By integrating structured reflection and evaluation tools, mentorship programs can:

- Ensure that mentorship remains meaningful and aligned with mentee goals.
- Help mentors refine their approaches to provide better support.
- Empower mentees to take an active role in their own development.



Building Your Mentorship Toolbox: A Guide for Action

A strong mentorship experience is not just about knowledge—it's about having the right tools to apply it effectively. Throughout this course, you have encountered various resources, templates, and strategies designed to help you become an effective mentor.

The Mentorship Toolbox is your personalized collection of resources that will support you throughout your mentorship journey. Rather than a fixed set of materials, this toolbox is a living document—something that you can update, adapt, and refine over time based on your experiences, your mentee's needs, and what works best in your mentoring style.

Now that you have completed the course, take a moment to reflect on what you need in your toolbox and start assembling your own unique version.

What to Include in Your Mentorship Toolbox?

There is no single formula for a mentorship toolbox, as every mentor and mentee relationship is different. However, below are some key categories to consider when selecting tools that will help you support, guide, and empower your mentee.

1. Mentorship Planning & Goal-Setting

Mentorship requires clear structure and defined expectations. Consider including:

- Mentorship Plan Template – A structured plan outlining objectives, expectations, and key milestones.
- Goal-Tracking Worksheets – A way to document your mentee's short-term and long-term goals.
- Session Preparation Guides – Tools to help plan and structure mentorship meetings.

2. Communication & Relationship Building

Strong mentorship relies on active listening, open dialogue, and trust-building. Consider adding:

- Active Listening Techniques – Methods to strengthen engagement and understanding.
- Effective Communication Strategies – Ways to tailor mentorship interactions to different personalities.
- Reflection Questions – Prompts to encourage deeper conversations and personal growth.

3. Practical Mentorship Tools & STEAM Learning Resources

As a mentor, you may need resources to help your mentee build skills and explore STEAM opportunities. Consider adding:

- STEAM Skills Development Guides – Articles, videos, or tools for mentees interested in technical skills.
- Networking & Mentorship Communities – A list of organizations and communities your mentee can connect with.
- Problem-Solving & Confidence-Building Exercises – Activities designed to support mentees in overcoming challenges.

4. Reflection & Evaluation Tools

Mentorship is a continuous learning process for both mentors and mentees. Consider including:

- Self-Assessment Templates – A way to reflect on your effectiveness as a mentor.
- Feedback Forms – Structured tools to gather insights from your mentee.
- Co-Developed Progress Plans – A space for mentors and mentees to adjust strategies based on reflection.

This Mentorship Toolbox is not static—it should evolve with your mentorship journey. Consider:

- ✓ Regularly reviewing and updating your tools based on what works best for you and your mentee.
- ✓ Removing resources that are not relevant and adding new ones as you discover them.
- ✓ Keeping a digital or physical version for easy access and organization.

To every great journey comes an end, even your mentorship relationship. This is a perfect moment for reflection, to celebrate progress, and to support your mentee in setting future goals. A well-structured conclusion ensures that both mentor and mentee leave the experience with a sense of accomplishment and direction for what comes next.

Use "End of Mentoring Relationship" for a structured wrap-up. Find this in the mentoring activities library.

Conclusion

Wrap-Up: The Power of Mentorship in STEAM

Mentorship plays a critical role in empowering female students in STEAM, helping them overcome barriers, build confidence, and develop the skills needed to thrive in their careers. Through this course, we have explored:

- The importance of mentorship in addressing gender disparities in STEAM.
- Effective mentorship models and strategies for fostering meaningful connections.
- Creating an inclusive and supportive mentorship environment that encourages growth.
- Practical tools, resources, and activities to strengthen mentorship relationships.
- The value of reflection and evaluation to ensure mentorship remains impactful.

Mentors are not just guides—they are role models, supporters, and champions for change. By applying the insights and strategies from this course, mentors can make a lasting impact on the next generation of STEAM professionals.

Make a Difference Today

Now it is time to take action.

- Apply what you have learned. Start using the mentorship models, activities, and resources to create a meaningful experience for your mentee.
- Encourage continuous learning. Direct mentees to additional learning resources and mentorship networks to help them grow beyond your sessions.
- Foster inclusivity. Promote a supportive and encouraging environment where all mentees, regardless of background, feel valued and empowered.
- Reflect and improve. Regularly assess your mentorship approach, seeking feedback and adjusting strategies to enhance your impact.
- Stay connected. Engage with the FabConnectHer community and mentorship networks across Europe to exchange best practices and support each other.

Mentorship is not just about guiding someone today—it is about shaping the future of STEAM. Every conversation, every piece of advice, and every opportunity you provide helps build a more diverse, innovative, and inclusive STEAM landscape.

Thank you for being part of this journey. Let's make a difference—one mentorship at a time.

Next Steps: Join the FabConnectHer Community & Stay Engaged!

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