From Hatay, a Small Anatolian City, to Global Impact: A Cross-Curricular Lesson Plan Inspired by Duygu

1 – GENERAL INFORMATION

Lesson Title:
"Lighting the Path: Duygu's Inspiring STEM Journey"
(Alternative: "From Hatay to Global Impact – Duygu's Engineering Story")
Teacher's Name:
[To be filled in by the implementing teacher – name, institution, and country]
Target Group:
Girls aged 13–15 – lower secondary school or preparatory high school level
(Interest areas: STEM, computer science, technology careers, female empowerment, overcoming challenges)
Subject(s):

- Computer Science / STEM Awareness
- Guidance / Career Planning
- English (supportive content – for the transcript and video)

Duration:
2 consecutive lesson hours (40 + 40 minutes) – including warm-up, video analysis, discussion, and creative reflection activities
Lesson Date:
[To be determined by the implementing teacher]
Materials/Tools:

- Interview video with Duygu
- Selected inspirational quotes from the interview (e.g., "I walk with the light I carry inside.")
- Projector or screen
- Post-it notes, A4 paper, pens
- Student reflection/evaluation cards

References:

- CodingGirls WP3 Guidelines
- Duygu's Interview (Transcript + Milestones)
- "Women in Code" Living Book – Duygu's Story draft
- CodingGirls Lesson Plan Template (Coordinator Format)

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2. LEARNING OBJECTIVES

By the end of this lesson, students will be able to:

1. Recognize Duygu's personal and professional journey as an inspiring example of women's achievements in engineering and technology.
2. Identify at least three major turning points or challenges she faced in her education and career, and explain how she overcame them.
3. Reflect on the role of resilience, adaptability, and continuous skill development in building a successful STEM career.
4. Discuss the importance of equal opportunities for women in technical fields and the value of mentorship and peer support.

5. Express their own academic or career aspirations and concrete steps inspired by Duygu's story through a short written, visual, or creative activity.

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3. KEYWORDS & THEMES

Keywords

- Duygu Hanım
- Women in Engineering
- Software Development & Technology
- Project Management in Tech
- Resilience and Adaptability
- Career Transition to STEM
- Problem-Solving Skills
- Overcoming Professional Challenges
- Mentorship and Peer Support
- Female Leadership in Technical Fields
- Lifelong Learning & Skill Improvement
- Inspiring Career Journey

Themes

1. **Women's Role and Leadership in Technical Professions**
    - Duygu'nun mühendislik ve teknoloji sektöründeki liderlik deneyimleri, teknik alanlarda kadınların potansiyel etkisini göstermektedir.
2. **Resilience and Adaptability in Career Growth**
    - Eğitimden profesyonel yaşama geçişte karşılaştığı zorluklar ve değişen koşullara nasıl uyum sağladığı.
3. **Continuous Learning and Professional Development**
    - Yeni teknolojiler, yazılım araçları ve proje yönetimi becerilerinde kendini sürekli geliştirme süreci.
4. **Breaking Gender Stereotypes in Engineering**
    - "Teknik alanlar erkek egemen alanlardır" algısının yıkılması ve kadınların bu alanlarda güçlü temsilinin önemi.
5. **Mentorship and Support Networks**
    - Kariyer gelişiminde mentorluk, ekip çalışması ve kadın dayanışmasının rolü.

6. **From Education to Industry in STEM**
    - Üniversite eğitimi ile iş dünyasındaki teknik beceriler arasında köprü kurma süreci.

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4. STEP-BY-STEP TEACHING PROCEDURE

Duration: 2 × 40 minutes
Approach: Using Duygu's 9 milestones as a role model story to move from inspiration to concrete action.
Materials:

- Duygu's interview video (English)
- **All 9 milestone sections**
- Interview transcript (English)
- Duygu's page from "Living Women in Code" booklet
- Post-its, A4 paper, pens

LESSON 1 — Exploring Duygu's Journey (40 min)

) Warm-up & Motivation (5 min)
Write on the board: **Hatay – Computer Engineering – Boarding School – Perseverance – First Job – Mobbing – Support – Entrepreneurship – Impact**
Questions:

- "How would repeated rejection affect your motivation?"
- "Have you ever had to convince your family/community for a big goal?"
  Mini-task: Write down **3 words** that feed your perseverance.

2) Introduction to Duygu's Story (3 min)
Sample teacher talk:
"Today, we will explore the journey of **Duygu**, who started in Hatay and built a 15-year career in computer engineering, founded her own company, and created a global impact. We'll see what's possible when you don't give up despite challenges."

3) Video Viewing & Milestone Sprint (30 min, M1–M9

For each milestone: (a) short viewing/summary (b) 1–2 questions (c) mini task/activity

• **M1 – Personal Introduction (00:00–00:19) | 2 min** Content: 36 years old, computer engineer, mother, 15 years' experience. Q: "How would you describe Duygu in one sentence?" **Mini-task:** Introduce yourself in **1 sentence**.
• **M2 – Childhood & Education (00:20–01:40) | 4 min** Content: Grew up in Reyhan/Hatay; attended **boarding school** for science high school; convincing her family; computer engineering. Q: "What skills could boarding school have developed?" **Activity: Decision Tree** – Draw one difficult decision, your options, and the outcome.
• **M3 – First Job & Early Challenges (01:41–02:55) | 4 min** Content: ~200 job interviews; mobbing at first job; confidence shaken. Q: "What's the difference between constructive feedback and mobbing?" **Activity: Rights–Support Map** – Who/where could you turn to for help (family, guidance counselor, teacher, etc.)?
• **M4 – Rebuilding Herself (02:56–03:16) | 3 min** Content: 1-month break; learning **English from scratch**; revisiting technical topics. Q: "What would your personal 'reset plan' look like?" **Mini-task:** Write down **2 skills** you want to strengthen.
• **M5 – Leap at Pirelli (03:17–04:12) | 3 min** Content: Supportive managers; determination to learn; promotion and relocation. Q: "Why is a supportive environment critical?" **Activity: Support Ecosystem Circle** – List concrete supports from family/school/community.
• **M6 – Rising Through Effort (04:13–04:47) | 3 min** Content: Promotions through hard work; early responsibilities. Q: "Explain the effort–result connection from your own life." **Mini-task: Effort–Impact Line** – Pick one goal; note 3 steps and potential impacts.
• **M7 – Entrepreneurship & Flexibility (04:58–06:03) | 4 min** Content: **Own consultancy company**; **remote work**; need for flexibility as a mother; global clients. Q: "What's 1 advantage and 1 risk of entrepreneurship?" "How would you balance work and life?" **Mini-task:** Write **1 flexibility strategy** suitable for you.
• **M8 – Tool Reaching Thousands of Engineers (06:04–06:43) | 4 min** Content: Software tool developed from scratch now used by **thousands of engineers worldwide**. Q: "How can we measure impact?" "What small impact would you like to make?" **Activity: Design Your Impact** – Create a 3-step mini-impact idea for school/community.
• **M9 – Advice & Inspiration (06:44–07:50) | 3 min** Content: **Don't be afraid, speak up; work hard; believe in yourself — success is unstoppable.** Q: "Which sentence resonated with you most?" "How will you apply it this week?" **Mini-task: My Determination Sentence** – Write your own motto and keep it.

4. Exit Ticket (5 min)
Write on the board: **"Today I learned from Duygu that …"**
Each student writes 1 sentence and hands it in.

LESSON 2 — Turning Inspiration into Action (40 min)

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1) Quick Recap (3 min)
Board: **Perseverance – Continuous Learning – Support – Flexibility – Impact**
3–4 volunteers share one takeaway from Lesson 1.

2) Workshop 1: "My Resilience Roadmap" (12 min)
Materials: Transcript, Duygu's booklet page, A3 paper, pens.
Roadmap includes:

- **Starting point:** My current strengths
- **Skills to learn:** (e.g., language/technical)
- **Possible obstacles & solutions:** (link to M3–M4 strategies)
- **Support network:** Family/teachers/friends
- **First step:** Small, clear step I'll take this week

3) Workshop 2: "My 14-Day Skill Sprint Plan" (10 min)
Task: Choose **one** skill and plan micro-steps over 14 days.

- Daily micro-action (10–15 min)
- Resource/environment (school notes, self-made flashcards, etc.)
- Progress check boxes

4) Workshop 3: "Design Your Impact – Mini Project" (8 min)
Task: Design a **3-step** mini impact project for school/community.

- Goal (1 sentence)
- 3 feasible steps
- 1 metric (how you'll know it succeeded)

5) Sharing & Peer Feedback (5 min)
Groups present in 60–90 seconds. Listeners give **"+" (strength)** and **" 💡 " (idea to improve)** feedback.

6) Closing & Commitment Card (2 min)
Complete the sentence: **"When I face an obstacle, I will apply this step I learned from Duygu: …"**
Teacher's closing: "A career path may not be a straight line; with **persistence, learning, and support**, you can draw your own path."

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5. CROSS-CURRICULAR INTEGRATION

1. **Computer Science & STEM Awareness**
   Duygu's background in computer engineering and software development is directly linked to Computer Science and STEM awareness lessons. The problem-solving, algorithmic thinking, and the process of creating a tool from scratch that went on to be used by **thousands of engineers worldwide** in her story can be used as an entry point to topics such as basic algorithms, simple application design, and the "social impact of software."

2. **Technology and Engineering**
   The "persistent work → promotion → increased responsibility" chain in Duygu's career, along with her steps into **entrepreneurship/remote work**, supports skills in technology and engineering such as

project cycles, debugging, basic versioning logic, and developing small prototypes with iterative progress. Students can try designing a simple algorithm or mini tool idea in three steps.

3. **Social Studies / Citizenship Education**
   Duygu's experience working remotely with **global clients** can be used to enhance awareness of intercultural communication, digital citizenship, and global cooperation. Students discuss principles of respect, time management, and openness to different perspectives in online teamwork.

4. **Guidance and Career Development**
   Duygu's journey of **~200 job interviews** and overcoming **workplace mobbing** in her first job by creating a **"reset plan"** serves as an example of resilience, self-regulation, and goal setting in career guidance. In class, students can create a "mini career roadmap," conduct mock interviews, and try a **14-day skill sprint** activity.

5. **Gender Equality Education**
   Duygu's message of "**raise your voice, work hard, and believe in yourself** in a male-dominated sector" can be used to discuss women's representation in technical fields, overcoming biases, and fostering supportive work cultures. Students identify equality principles and actionable steps (mentorship, solidarity) that can be implemented at the class or school level.

6. **English as a Foreign Language**
   Duygu's decision to learn **English from scratch** can serve as motivation for language learning. The English video + transcript of her interview provides authentic material for listening, reading, vocabulary building, and short speaking activities.

7. **First Language Education**
   Through creative writing and self-expression activities, students write short texts titled "**If I Were Duygu…**," "**My Resilience Statement**," or "**My STEM Journey**." This strengthens narrative building, structuring thoughts and emotions, and storytelling skills in their native language.

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6. EVALUATION CRITERIA

This section proposes **formative, inclusive, student-centered** assessment, focusing on **curiosity, resilience, and inspiration** drawn from Duygu's journey. The aim is to support **personal growth and meaningful learning** rather than competition or grades.

Skill Area	Assessment Tool / Strategy
Emotional Reflection	**Exit Ticket:** Students complete "The most inspiring thing I learned from Duygu today was…". Volunteers may share aloud to foster empathy and collective inspiration.
Creative Thinking & Expression	**Product Observation:** Teacher looks for originality, symbolism, and personal connection in outputs directly tied to milestones: **Decision Tree (M2)**, **Rights–Support Map (M3)**, **Reset Plan (M4)**, **Support Ecosystem Circle (M5)**, **Effort–Impact Line (M6)**, **Design Your Impact** idea (M8). Focus is on ideas and meaning—not artistic perfection.

Engagement & Participation	**Observation Checklist:** Informal tracking of active involvement during warm-up, video Q&As, mini-tasks, and group work; respectful peer feedback; attention and time management.
Empathy & Perspective-Taking	**"If I were Duygu…" short write-up:** Students imagine her experiences (e.g., distinguishing constructive feedback vs. mobbing in **M3**, rebuilding in **M4**) from her perspective and propose responses.
Communication & Sharing Skills	**Lightning Presentations:** 60–90 sec shares of **Resilience Roadmap** and **Mini Impact Project**. Evaluate clarity of message, effective timing, and respectful listening.
Goal Setting & Self-Awareness	**14-Day Skill Sprint Plan:** Clarity and feasibility of daily micro-steps; progress check boxes; plus a **Commitment Card** ("When I face an obstacle, I will apply this step I learned from Duygu: …"). Emphasis on progress and realism, not grades.

Notes for Teachers

- These criteria value **connection, creativity, and self-expression**; prioritize **progress over perfection**.
- Keep the process **supportive, encouraging, and non-judgmental**—each learner's path is unique.
- Apply strategies via individual observation, quick feedback moments, or group reflections.
- Reward **participation and inspiration** rather than competition; explicitly revisit safe-support seeking (M3–M4) and the role of supportive environments (M5).

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7. RESOURCES AND MATERIALS (Extensions & Enrichment)

These enrichment activities extend learning beyond the classroom, strengthen real-world connections, and encourage interdisciplinary engagement. Teachers may select any options based on time, context, and student interest.

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1. **"My Role Model: Women in Engineering" Poster Exhibition**
   Objective: Build research skills by introducing inspiring women in computer engineering and software.
   Activity: Each student prepares an A3 poster about a local or international woman engineer (photo if possible, field, an inspirational quote/achievement). Students may feature Duygu's story under the themes **perseverance, self-directed learning, global impact**.
   Extension: Display a "Women in Engineering Gallery" in the corridors; invite families, staff, and local media.
   Pedagogical Value: Research, visual presentation, awareness of non-linear career paths.

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2. **Mock Interview & Resilience Workshop (Mock Interview + Reset Plan)**
   Objective: Use Duygu's experience of **~200 interviews** and overcoming **workplace bullying (mobbing)** to develop career resilience.
   Activity: Pairs conduct short mock interviews; teacher facilitates a discussion distinguishing "constructive feedback vs. bullying." Students then draft a personal **Reset Plan** (M4: steps for English/technical upskilling).
   Extension: Co-create a "rights & support channels" info poster with the guidance office.
   Pedagogical Value: Self-awareness, feedback culture, psychological safety.

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3. **"Design a Mini Tool" — 3-Step Algorithm (Paper Prototype or Block-Based)**
   Objective: Inspired by Duygu's **from-scratch tool** now used by **thousands of engineers**, practice product thinking and algorithmic reasoning.
   Activity: Students choose a small school/community problem and sketch a **3-step solution flow** (input–process–output) as a paper prototype or short block-based flow.
   Extension: Create mini posters on the "social impact of software."
   Pedagogical Value: Problem solving, computational thinking, impact-oriented design.

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4. **Global Collaboration Simulation: Remote Work Experience**
   Objective: Draw on Duygu's **remote/global** work to build digital citizenship and online teamwork skills.
   Activity: A 15-minute mini sprint with roles (developer, product lead, tester), a 3-item task list, brief "daily status" messages, and a time-zone difference scenario.
   Extension: Co-write a class charter for online team communication/ethics.
   Pedagogical Value: Collaboration, time management, intercultural sensitivity.

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5. **Language & Skill Growth Pack: 14-Day Sprint + "Letter to Duygu"**
   Objective: Use M4—Duygu's decision to learn **English from scratch**—to build sustainable micro-learning habits.
   Activity: Students pick one skill (e.g., vocabulary set, basic code literacy) and plan a **14-day micro-step** routine (10–15 min/day, resource, check boxes). Then write a short **Letter to Duygu** (TR/EN) sharing what inspired them and their sprint goal.
   Extension: Optional class wall tracking sprint progress.
   Pedagogical Value: Self-regulation, language/coding motivation, written expression and empathy.

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6. **Community Collaboration: Women & Technology Day**
   Objective: Amplify student voice and visibility; connect with local networks.
   Activity: Host a school event with municipal women's centers, youth clubs, or women-focused NGOs. Students showcase **role-model posters**, mini tool/project ideas, and their **Resilience Roadmaps**.
   Extension: Add a 20-minute Q&A with a woman software engineer online.
   Pedagogical Value: Social awareness, networking, authentic audience for student work.

Note: Prepare digital/print materials in advance (video link, transcript, activity templates: Decision Tree, Reset Plan, 14-Day Sprint, Mini Impact Project) and make them easily accessible before the lesson.

8. SUPPORTING MATERIALS AND RESOURCES

This section lists the essential materials and resources to implement the lesson effectively. All core teaching tools will be available via the project's digital platform. No specialized or hard-to-access tools are required.

Digital Materials (Provided by the Project)

Resource	Description
Duygu's Story Video	An inspirational **7–8 minute** video (Turkish with **English subtitles**). Short edited clips highlighting **all 9 milestones** will also be provided for lesson segmentation.
PDF Transcript (TR + EN)	Full transcript of Duygu's story for classrooms without projection or for text-based learning.
Lesson Plan Document	A complete guide with step-by-step procedures, integration of the 9 milestones, activity templates, and pedagogical notes.
Digital Platform Access	All resources hosted on the project portal (e.g., Living Libraries / CodingGirl Educational Portal). Teachers will receive login details to download/print worksheets.

Printable Templates

- **Decision Tree (M2)**
- **Rights–Support Map (M3)**
- **Reset Plan (M4)**
- **Support Ecosystem Circle (M5)**
- **Effort–Impact Line (M6)**
- **My Resilience Roadmap** (Lesson 2)
- **14-Day Skill Sprint Plan** (Lesson 2)
- **"Design Your Impact" Mini-Project Canvas** (Lesson 2)
- **Exit Ticket:** "**The most inspiring thing I learned from Duygu today was…**"
- **Reflection Card:** "**If I were Duygu…**"
- **"My Determination Sentence"** card
- **"Letter to Duygu"** template (TR/EN)
- **Duygu's Profile Booklet** — A Living Libraries style one-pager with background, highlights, and key messages for display or reading circles.

Basic Stationery (Typically Available in Schools)

- A4/A3 white paper
- Pencils and erasers
- Colored pencils or crayons

- Rulers, scissors, glue sticks
- Sticky notes or small cards (optional)

Accessibility Recommendations

- Print transcripts in **large font** if needed.
- Offer **oral sharing** as an alternative to written tasks when appropriate.
- If the video cannot be shown, use the transcript with **guided reading questions**.
- **Sensitive discussion note:** When addressing **mobbing** in M3, maintain a respectful, safe classroom climate; clarify the difference between constructive feedback and bullying, and remind students of **support channels** (guidance counselor, teachers, family).

Note to Teachers:
No external apps or paid tools are required. Activities can run **offline** using only the provided project materials and common school stationery. Optional digital sharing can be done with simple office tools if desired.