# **Core Skills Analysis**

# **Computer Science / Coding**

- Lottie has developed foundational skills in programming logic using Scratch, a block-based coding language suited for ages 8-16.
- Through regular practice, she has gained experience in computational thinking, particularly in problem-solving and debugging her projects.
- Lottie's participation in a university-level coding program shows early exposure to collaborative and technical environments beyond typical classroom settings.
- Her role in mentoring peers indicates she has not only learned coding but also understands concepts well enough to guide others, fostering leadership and communication skills.

## **Communication and Public Speaking**

- Lottie regularly engages in 'show and tell' presentations, enhancing her ability to articulate her coding projects and ideas clearly to an audience.
- Her confidence in public speaking reflects social and emotional learning, including selfexpression and peer interaction.
- Explaining technical work to others builds critical thinking as she distills complex concepts into understandable language.
- Collaborative discussions likely improve her active listening and feedback skills.

## **Tips**

To further enrich Lottie's learning experience, encourage her to document her coding projects through multimedia blogs or video tutorials, blending creativity with technical skills. Organizing a small coding club where she can design challenges for peers fosters leadership and deepens conceptual understanding. Introducing her to real-world problem-solving scenarios where she codes solutions can also contextualize her skills. Additionally, practicing structured public speaking through debates or storytelling tied to technology themes can strengthen her communication prowess.

#### **Book Recommendations**

- <u>Super Scratch Programming Adventure!</u> by The LEAD Project: An engaging, illustrated guide that teaches kids to code with Scratch through exciting game projects.
- <u>Hello Ruby: Adventures in Coding</u> by Linda Liukas: A charming storybook introducing young learners to programming concepts through storytelling and hands-on activities.
- Speak Up with Confidence: How to Prepare, Learn, and Deliver Effective Speeches by Jack Valenti: A kid-friendly guide to building public speaking skills and overcoming stage fright.

#### **Learning Standards**

- ACMSP228 Represent data in tables and describe the relationships between categories.
- ACTDIP023 Design and implement a digital solution with user interfaces that respond to events.
- ACSIS124 Represent data logically and interpret flowcharts and computer programs.
- ACELY1703 Plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements.

#### **Try This Next**

- Create a worksheet on debugging common Scratch coding errors with step-by-step hints.
- Develop a quiz where students explain the logic behind simple Scratch scripts to test comprehension.
- Set a writing prompt for Lottie to describe her favorite coding project and the challenges she

Empowering Future Coders: Lottie's Journey in Scratch Programming and Public Speaking / Subject Explorer / LearningCorner.co



• Design a peer mentoring role-play scenario where Lottie practices teaching a new Scratch concept.