ORDINARY WOMEN: **ADA LOVELACE**

SUMMARY

"A mathematical genius and pioneer of computer science, Ada Lovelace not only created the very first computer program in the mid-1800s but also foresaw the digital future more than a hundred years to come."

STOPPING POINTS/VIDEO BREAKDOWN

0:05 Ada Lovelace's early history

0:50 Advanced Schooling for women as rare

1:15 Lovelace meets Charles Babbage

1:55 The Analytical Engine

2:15 Lovelace translates (and much more)

2:40 Note G and the first computer program

3:20 Contributions to the Computer Age

3:40 Signed A.A.L

3:50 Illness and the claim of "Intellectual Overexertion"

4:10 Controversies surrounding her legacy

4:45 Babbage's view on Lovelace

5:20 Unbuilt Analytical Engine

DISCUSSION QUESTIONS & THEMES

1. The education Lovelace received was rare, as it was the common belief that women were destined only for marriage and children. Although it is far more common today for children of all genders to receive equal education, how is this belief still present in contemporary society?

2. Lovelace's mother discouraged her from pursuing the arts. How might this have been potentially damaging for Lovelace? What are the benefits of a balanced education? How do we see art and science work together in various aspects of society today?

3. Lovelace's vision required that she not only have mathematical skill, but also that she could use her imagination in artful ways to explore the potential of the analytical machine. What role do you think art plays in invention?

4. Lovelace signed the English translation of the Analytical Engine A.A.L, in part to hide her identity and in part to hide her gender. Why do you think she found this necessary?

5. The dismissal of Lovelace's illness as merely caused by intellectual overexertion is part of a long tradition of female health issues being misdiagnosed. How do we see women's health being treated today? Are ailments noted by men and women always treated the same way by doctors? What social expectations might be to blame for assumptions by medical professionals? For example, often women who complain of pain are not taken as seriously as men who come to their doctors with similar concerns.

6. What are some reasons you can think of as to why Lovelace's invention of the first computer program might be contested? What other instances can you think of where a woman's work has been attributed to a male counterpart? How can we address these 'controversies'?

ACADEMIC ACTIVITIES (SCHOOL-BASED OR EXTRA-CURRICULAR)

1. Ada Lovelace invented the first computer program, and used her imagination to consider the possibility of such innovations. Research another female inventor who also contributed to her respective field of practice, and explore any challenges or controversies she may have faced in doing so.

2. Lovelace signed the English translation of the Analytical Engine A.A.L instead of using her full name. This was not an uncommon choice for female writers. Research other female writers who wrote using initials or pseudonyms, and consider the social context for their decision to do so.

3. Invention is at the heart of Ada Lovelace's story, alongside a commitment to use math and science alongside imagination to uncover great possibility. This activity involves invention. Either individually or in partners, create a pitch of an invention that could have useful purposes in the present, and use your imagination to come up with any number of possibilities it might lead to in the future. This is more of a practice in imagination than anything else – just like the analytical engine, this invention may go unbuilt but the process of invention and imagination is what matters.

COMMUNITY-ORIENTED ACTIVITIES (COMMUNITY GROUPS, YOUTH CAMPS, WRITING GROUPS, MUSEUMS)

1. Computer science and related fields are still largely dominated by men. Bring the following initiatives into your community organization, or start similar initiatives:

    http://ladieslearningcode.com/program/girls-learning-code/

    https://girlswhocode.com/

    https://www.hatchcanada.com/

    https://code.org/

2. Many community organizations advocate for equitable educational opportunities for all. This activity encourages members of such organizations to use this video and the stories of other female inventors to further conversations surrounding the importance of education for girls and women, especially education in areas typically dominated by men. As a group, create a way to communicate these stories (a video similar to this one, a blog, pamphlets, a website, etc.) and start these conversations.