



Colorado Science and Engineering Fair

2025 Individual Project Abstract Form

Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.

Title of Project: Period Poverty and Its Affects on Education in Sub-Saharan Africa

Finalist's Name: Sloane Alexander

School and City: Aspen Middle School - Aspen, CO

Sponsor's Name: Brandy Keleher

Category: Behavioral & Social Sciences

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

In rural countries, when most girls start to get their periods, their education paths end. Missing a week of school every month is unacceptable, and most of the time, the girls have no other option. Eventually, they drop out. This is a huge problem because it furthers the gender gap, and ensures that women have less opportunities for success than men. According to ActionAid UK, 65% of women in Kenya can't afford period products, and over 10% of sub-saharan african girls miss school because of the natural occurrences they cannot control. To get these products, women are forced to extremes for something all women should have equal access to. Additionally, the unaddressed issue of period stigma only furthers the problem according to UN women. To solve this problem, I dived deeper into reusable pads. On average, a box of disposable pads for 3 days costs \$6. Although this may not seem like much, for those in rural countries, it is unimaginably expensive. Additionally, some developing countries have the stigma that using tampons is losing your virginity, therefore reusable pads are one of the only realistic solutions. Other research from World Vision concluded that due to lack of toilets in schools, period products must last 8 hours. I hypothesized that a reusable pad made with 4 layers would last the 8 hour time period, and would be a cost effective alternative. I started by sewing together the top layer to the inside layers. Then I sewed the bottom layer to the top. I poked a hole in the wings and then threaded a ribbon through both sides to allow the pad to secure. To create "blood" I mixed 2 teaspoons of red and green food dye, 2 tbsp cornstarch, and 3 tbsp water. I researched, and according to Healthline, through the course of a week, a girl loses 2-3 tbsp of blood. To simulate a heavier flow, I used ¼ tsp per hour, for 8 hours. This is more than enough to ensure that it could truly last a long period of time.

I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.

Finalist's Signature:

Date:

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with you Finalist Verification/Permission Form. **A signed copy of this form must be included in your notebook.**