

Computer Literacy: Final Project Submission

1) Final Project Idea

Demographic: High School Students (8-10th graders) in the Murkupidi School, consisting of equal numbers of boys and girls. Our ideal group is 15 girls and 15 boys (5 from each grade).

Sustainability Goal

Our short term goal for this summer is to teach high school students in Vemavaram to review Computer Basics from last year in addition to introducing them to the benefits and basics features of Google/Microsoft Suite. Long term our goal is to make them comfortable using the laptops and apps within the laptop regularly so that they can be self-sufficient. In addition, in the long term we also aim to use the internet frequently and effectively so that they can keep learning more. We are planning on doing this by providing knowledge that can be used and reused for future students with our progress tracker.

2) Timeline

Day 1: Computer Basics + Typing + Powerpoint

- **Icebreaker:** *Pictionary About Me*
 - Kids draw on a paper about themselves (favorite animal, subject, fruit, movie, etc.) and present it to everyone.
- Basics about how to open PowerPoint/Google slides and create a blank presentation, how to type in the text boxes, change fonts, etc.
 - Incentives: Word Cheat Sheets + stickers + candy!! (or other incentives!)
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- Activity 1: Typing Practice

- Typeracer (if WiFi) or offline typing game
- Winners get incentives!
- Activity 2: Presenting their About Me Slides
 - A few students come and present their about ME! Slides to the entire group. They get incentives for this!
- Word Basics, explain differences with slides/ppt, how to use Word, how to change font size, create a header, etc.
 - Activity (time permitting):
 - choose 1 animal, insert its picture, write its name in blue, write 1 fact about it in Italic
 - choose 1 country, insert its flag, write its name in red, write 1 fact about it in Italic, write its capital in Bold characters
- Incentive(s): Powerpoint Cheat Sheets + stickers + candy!! (or other incentives!)

Day 2: Excel (can be self-paced or guided over a day)

- Activity 1: Paint By Numbers
 - Guided activity to introduce Excel navigation
- Activity 2: Math Word Problem
 - Interactive story problem to introduce basic math operations and functions
- Incentive(s): Excel Cheat Sheets + stickers + candy!! (or other incentives!)

Women Empowerment Final Project Submission

Part 1: Target audience and Sustainability

Target Audience: 9th and 10th standard girls in Murikipudi

- Higher Education: all of 9th and 10th standard girls since it is an open panel -
- Shark Tank: 30 total girls (15 from 9th standard and 15 from 10th standard)

- Our contact with Lakshmi (a student from Vemavaram going to college in Delhi) and other officials has helped us understand what would empower the girls and encourage them to pursue education/career.

Overarching objectives and impact:

- Shark Tank project: to teach the girls public speaking and entrepreneurial skills ○
Long term goal: to help make these projects a reality
- Higher education project: to encourage the girls to pursue their college education and give them role models to look up to
 - Long term goal: to support the girls in their journey through higher education and their future career

Sustainability:

- Higher Education: Our contact with Lakshmi, a student from the village, the new NGO contacts we are establishing, and the presentation we put together on higher education and career options will all be available for the girls at the school throughout the year.
- Shark Tank: We believe that the public speaking skills we demonstrate during our presentation are skills the girls can take with them into their different endeavors. For the Shark Tank, through our NGO contacts, we intend to help the girls who are interested in continuing their projects further develop and execute them throughout the year.

Part 2: Project Timeline

- 2 days required total
 - Day 1 - Higher Education and Part 1 of Shark Tank
 - Day 2 - Part 2 of Shark Tank
- Women Empowerment Timeline

Reproductive Health

Target Audience:

- 1) 8th-9th grade girls for the informational part: ideally all of them, but if not, 50 girls (25 / 25)
 - a) Classroom capacity : 30

Objectives & Goals:

- 1) Establish a period pantry to be more accessible to the girls in the school
- 2) Make them more comfortable with talking about their periods in other settings beside the home
- 3) Establish support with other girls to let them know they aren't alone

Sustainable measures:

- 1) Work with an NGO, PinkiShe, to make sure the pantry gets restocked (instead of one and done thing)
 - a) We have set up a meeting with them, and will submit a Memorandum of Understanding (MOU) that details the expectations from both sides.
- 2) Ask them what they can do about their periods based on the information they learned about the phases, as a way of implementing these ideas for them to move forward with
- 3) We plan to implement a structure in distributing and maintaining the bathroom supply by:
 - a) Placing period supplies in only one bathroom, and letting the girls know about it

- b) We plan to ask the headmaster if there are any teachers or someone who can maintain the backup storage and maybe restocking it every week (the goal, but maybe as needed)
 - i) We can also pick a student (classroom monitor) to work on these goals
 - (1) Provide an incentive: 1) experience
 - (2) Set guidelines for restocking the pads: must keep track of 1) number 2) when it starts running low (about 10% of each stock left)
- 4) Increase knowledge of phases and internal regulation that occurs within the body

Notes from Nikitha and the meeting with the headmaster:

- Any of the students can use the bathroom – may be an issue with cleaning up and maintaining supplies
 - Alternate storage with backup supplies and making sure it will be restocked (you can put a student or a figure in charge of it)
 - Pick a bathroom would be ideal starting place
- Focus on creating a structure to distribution – airtight container to prevent contamination (we may have to pay extra for this)

General Timeline (Half day):

First 30-45 minutes: Bracelet making in small groups (4-5 girls)

Next hour/hour and a half: Phases Presentation

Phases will be presented, with interactive questions in between. There will be incentivizing prizes to increase understanding and engagement.

Next 15 minutes:

Explain the period pantry project and show how it will work.

In flexible days/survey days:

Set up the period pantry in the girls bathroom, and if the first batch of pads delivered stock and show some girls how to manage the pantry and refill it. Meet with the headmistress to determine which girls should be in charge of stocking the period pantry. Make sure there is a track record of how many pads are left and give them instructions on when to restock. Pads will be delivered monthly, so keep some boxes in a store room if unused.

Orthopedic Health Project Proposal

Target Audience:

- 1) 6th - 8th grade students for Oral Health Presentation
 - a) Target number (30)

Objectives and Goals:

- 1) Collect information about the dental state of the village

- a) Access what ways oral health can be addressed for future endeavors (Survey)
- 2) Connect AMP with more remedies to joint pain (herbal remedies, heating pads, and some knee braces)
- 3) Supply AMP with Floss and Use them as a contact to spread more awareness of conventional oral hygiene methods.
- 4) Establish better oral hygiene practices with younger generation (preventative medicine)

General Timeline:

(Half Day in Survey)

45 minutes: Contact AMP and have a meeting to explain the importance of herbal remedies and knee braces. Furthermore show them the materials we created (pamphlets and video) for the at home heating pad solutions too. Then we give them the floss and the informational videos and pamphlets we created to guide them through how to treat dental related issues patients present with.

1 Hour: Surveying - Survey questions asking 50 of the villagers about their oral hygiene habits and their current oral health status

(Half Day in School)

First 10 Minutes: Introduction of trip members and quick round of introductions from students

Following 15 Minutes: Explain why Oral Health is important and what plaque/calculus is

Following 10 minutes: proper brushing techniques

Following 15 minutes: Brushing techniques game

Following 10 minutes: Proper Flossing techniques

Following 15 minutes: Flossing techniques game

Following 10 minutes: Wrap up games and session

(TBD Explanations done by Shreya's Uncle/Aunt who are dentists in Andhra)

Survey Questions for Surveying and Data collection:

- 1) How often do you brush your teeth in a day?
- 2) On average, how long do you brush your teeth each time?
- 3) Do you use dental floss or any other interdental cleaning aids regularly?
- 4) How many times have you seen a dental professional in your life?
- 5) Do you have any problems or pain in your mouth related to your teeth or mouth?
- 6) Would you ask to see a dentist if you had the option to?

2023-2024 Water Initiative Project Proposal

Target Audience:

The target audience is definitely going to be the village and the general public in the village. We will be targeting the distribution of the WAPI devices throughout the village through the Clinical Health Fair Day where there would be large audiences of the village members. In terms of age, all ages of families or individuals should be the main target audience, since this is a device and tool that anyone would be able to use.

Objectives & Goals:

2 Projects to be implemented:

- 1. Sending Water Samples to Testing Lab
 - **Timeline:** In Person** (1 Day - beginning part of the day collect samples)
 - This project will be discussed through Raghu and Suman Garu to attain 3 different water samples of 2 L each, one water sample of underground bore water that people drink if they do not buy mineral water, one water sample of the used water source from a house in a low income/caste home, and one water sample of drinking water source from the village school.
 - Underground Bore water sample is from Srinivasa Garu House
 - Tap Water Sample is from different low income/caste home
 - Main Drinking Water Sample is from the village school
 - These water samples are being planned to be collected by Raghu and dropped them off to the [Water Testing Lab](#) in Vijayawada for analysis about which contaminants are present and in how much content.
 - Then we are able to fully use this information to shape our future interventions with the water initiative and be better able to address a solution for their water sources if required.

*** In case the water samples are not able to be collected and tested prior to the India trip, time would need to be allocated during the trip for this.*

- 2. WAPI Distribution to General Public of the Village + Hanging up Posters about how to use WAPI's around Centers of Village and Office
 - **Timeline:** In the Village for a Day (Whichever day Clinical Health Fair Project is happening)
 - We would have these WAPI devices present during the trip and we would be setting up a quick run through of how to use these devices and tools by just going over the steps
 - Introduce our WAPI poster either at the beginning of the Clinical Health Fair Day or at the end of in the middle sometime; give a quick run through of the poster and what it explains about WAPI's (30 minutes)

- Distribute to everyone interested about these devices, and if extras try to distribute to Panchayat or A and M offices and tell rest of the general public members that if they would like to they can get more WAPI's at these offices. (1 hour)
- Stick up Posters of the WAPI Poster Information Page at least 5-7 spots around the village as well as the A and M office (1 hour)

Details: This year's project is focussed on understanding in a deeper level exactly which contaminants are present in each of the different water sources, to further investigate which water sources have a better possible invention that can be applied via the Water Initiative. Having this information is extremely key for the committee in future years as well as our project trips to India to be more effective and directly targetable towards a solution for their issues and problems with the water quality in Vemavaram. This project is also based on the research idea/data that was promoting the use of WAPI's to better help pasteurization and cleaning the water through heating to improve water quality with no treatment methods. We have been able to do research and will be aiming to produce a WAPI poster of the information on how to use and set up as well as the functionality of these WAPI devices.

WAPIs

- What is this?
 - A water pasteurization indicator (WAPI) is a simple reusable thermometer that indicates when water has reached pasteurization temperature (65°C/149°F) and is safe to drink.
 - It consists of a small polycarbonate tube that contains a soybean wax that melts when water is hot enough to be pasteurized
 - When the wax melts, it flows to the bottom end of the tube indicating that the water has been pasteurized and made safe to drink. After the WAPI is removed from the hot water, the wax hardens again and the device is ready to use again.
- Why use them?
 - Water pasteurizes at a temperature below its boiling point (100°C/212°F), so using WAPIs allows communities to conserve resources like time, fuel and energy
 - If water is heated to the pasteurization temperature of 149°F, microbes associated with water borne diseases including diarrhea, cholera, typhoid, dysentery, roto virus, polio virus, hepatitis A, giardia and E-coli will be killed.
- Environmental impact
 - A third of the world's population still cook over open fires that require natural resources, such as trees. The use of WAPIs is a more environmentally friendly way to purify the water.
 - Relation to UN's Sustainable Development Goals: SDG #3: Good Health and Well-Being, SDG #6: Clean Water and Sanitation, SDG #15: Life on Land

WAPI sources:

- [https://sswm.info/content/water-pasteurisation-indicator#:~:text=A%20Water%20Pasteurisation%20Indicator%20\(WAPI,C%2F149%CB%9AF\).](https://sswm.info/content/water-pasteurisation-indicator#:~:text=A%20Water%20Pasteurisation%20Indicator%20(WAPI,C%2F149%CB%9AF).)
- http://waterinternational.org/?page_id=272

2023-2024 Clinical Health Project Proposal

LINK TO FOLDER WITH ALL MATERIALS AND BUDGET:

https://drive.google.com/drive/folders/1IwsfxTK6XHIXAEbe87QZYDqrPRGlvGOS?usp=drive_link

Target Audience:

The target audience includes both the village and the school as the vitals workshop will be conducted in both locations on different days. Within the school, our project will be focusing on 9th and 10th graders. Within the village, our project will focus on middle-aged village members.

Objectives & Goals:

Projects to be implemented:

- Vitals & CPR Workshop
 - **Timeline:** Half day (x2)
 - The project will be implemented in the village one day and in the school another day. Some trip members will go to the village to conduct the workshop while the rest of the trip members are conducting a different project at the school.
- **School Day Breakdown:**
 - Workshop setup - (15-20 minutes)
 - Setting up the tables, machines, CPR dummies, the laptop and projector
 - Icebreaker (30-45 minutes)
 - After the icebreaker, split the classroom into 3 groups (mix of boys and girls); these 3 groups will rotate through the stations.
 - Workshops - 45 minutes per stations – 3 stations so total (2 hours 15 minutes)
 - Station 1: Students will watch a brief CPR demonstration followed by actual practice on the dummies
 - Station 2: Students will watch a debrief of vitals training and be able to use actual machines to practice how to take vitals; explain the normal ranges for each value
 - Station 3: Students will be given information about prevalent diseases and conditions within the village and country

- End Group Quiz (20 minutes) - we will ask verbal questions and give students in their groups time to discuss and choose their own representative who will speak up, discuss and come up with a solution. Each question must be answered by a different person in the group to ensure everyone participates.

TOTAL ESTIMATED TIME: 4 hours

- **Village Day Breakdown:** need to decide which time of the day, possible Saturday or Sunday
 - Workshop Set up (20-30 min)
 - Introductions speeches that will be given by trip members explaining what we will be doing and why it is important.
 - Ask if anyone is familiar with CPR or Vitals
 - Similar to rotation in classroom - 3 groups of people that rotate through each station
 - Ending: go over questions and have an ending open discussion
- **School:**
 - **Icebreakers:** Connection a main stream media example – name the movie
 - Popular Telugu movie - hospital scene
 - Manam
 - Hi Nanna
 - Nayak - comedy scene
 - Julayi - comedy
 - Kick - Dr. Bali and memory loss
 - Race Gurram - Allu Arjun throwing up the blood (funny)
 - **Game:** Freeze Dance with Telugu music
 - **Details:** We will set up stations/tables with different vitals machines and CPR with two trip members at each station. They will walk through the basics of using the machine in addition to providing information about when the machine would be used/what it tells us. The RISHI members can demonstrate the machines to each other or the students/villagers. Then, the students and village members will have the opportunity to practice using the equipment under the guidance of the trip member. If it works out, we will try to have medical students or ANM/RMP daughters help out with this teaching.
 - Ask questions during the workshop to make more interactive at each station and add up points - give prize (chocolate) at end based on which group gets the most points
 - At each station, we will also have printed out sheets with instructions that students/villagers can take home with them - might have to be in Telugu?
 - Vitals Instructions Sheet
 - CPR Instructions Sheet
 - Diabetes Awareness Infographic

Stations during the Workshop:

1. Vitals - Blood Pressure, Heart Rate, Pulse Ox, Blood Glucose
2. CPR
3. First Aid Kit - what everything is and how to use them
4. Info booths - Diabetes/Thyroid, what they can do to prevent developing these diseases.
This station will primarily be led by the trip member who will be talking and providing information in an interactive way. We will have infographics that they can take home. For the trip members in this station, try to come up with questions (we will give some examples) to make this interactive as this station is not as hands-on as the other stations.
 - **Goal:** The primary objective of this project is to provide vitals taking skills to both students and village members. In addition to this, we hope to expose the students to the field of medicine, especially for those already interested in pursuing a medical career. Additionally, we hope to teach CPR skills to students and villagers.
 - Distribution of Basic Vitals Equipment & First Aid Kits – we will be donating any equipment for vitals and cpr training that we take with us
 - Video Modules about Taking Vitals
 - Pamphlets

Sustainability:

- a. Pamphlets/video modules
 - i. The students and village members can refer to the pamphlets and the video modules when operating the vitals machines in the future
 - ii. Additionally, we plan to set up worksheets and quizzes in accordance with the video modules which can be a long term activity the school students continue doing as each year cycles in
- b. All the equipment used for the vitals training workshop will be left in the clinic/village
- c. Encourage the students to share what they learned with their family member

Career Development Project Submission

1) Final project idea

Target audience

- 6th to 8th graders
- 30+ (no set bounds)

Sustainability goal within community

Our goal is to inform the student of various career paths beyond the stereotypical ones. Sustainability is achieved through the influence of this education that will carry over in the students career/life. It is also achieved through the resources we've created (primarily the

presentation) that can be utilized, and even modified if necessary, for future generations of students and for years to come.

Our first tool for accomplishing this goal is by providing the students with a questionnaire regarding their interests and strengths to correctly match them with their optimal career path. These questions range anywhere from “Do you like working with others?” to “What lifestyle best suits you?”, weighting multiple key factors that help narrow down what the students would be good at.

Our second tool is a presentation on five major career paths, including three uncommon ones among Indian students. The presentation is a detailed summary of Engineering, Medicine, Business, Academia, and Government jobs, and how to be successful in them. After each presentation, we have a 5 question quiz prepared for the students to highlight the key takeaways.

These tools can be modified/used in future years accordingly to promote the sustainability of our project.

2) Timeline

Activity	Description	Estimated Time
Icebreaker#1	<u>Option 1:</u> Human knot Stand in a circle, ask everyone to grab two hands in the circle, untie arms to form a proper circle <u>Option 2:</u> Look up game Stand in a circle, everyone look down, say “look up” and everyone looks at a person - if any two people are making eye contact they’re out and step out of the circle, repeat until there are 1 or 2 winners	5-10 minutes
Icebreaker #2	<u>Exploratory Knowledge Activity</u> - Separate students into 5 groups - Assign each group to one of the (one for each field) and present what you already know on it Mix boys and girls Randomly assign the field	
Survey		15 minutes
Presentation /	After each career presentation, there	100 minutes

Quiz Games	will be a 5 question mini-quiz regarding information presented. The students will be broken up into the same 5 icebreaker teams and will be called on based on how quickly they raise their hands. Points will be tallied cumulatively through the different presentations and the winning team be awarded a prize at the end.	
Post-Survey		5-10 minutes

-Number of days required for project

-DETAILED Description of all micro level activities WITH TIME ESTIMATES - icebreakers, incentive handouts, games, workshops, panels, etc