Digital Education and Partnerships Survey: Endline - Welcome to the survey! Please answer the following questions asking about your background information.

| What is your: | Name: |  | Age: | Combination: |
| :---: | :---: | :---: | :---: | :---: |
| Grade: Form 5 / Form 6 How many hours does it take to travel from your home to your school? |  |  |  |  |
| How many siblings do you have? |  | What is your primary guardian's occupation? |  |  |
| What is the education level of your primary guardian? <br> No schooling / Primary / O-level / A-level / Diploma / Bachelor's / Master's or above |  |  |  |  |
| How many days per week do you study math and science outside of classroom? |  |  |  |  |
| How many hours per day do you study math and science outside of classroom? |  |  |  |  |

Section 1. Social Interactions: In this game, we would like you to request that you make three decisions, where "credits" allocated to you will be converted to cash scholarship rewards.

Throughout the game, a group of participants including yourself will receive oto $\mathbf{2 0}$ credits according to a menu of possible allocations. One participant ("Proposer") will choose an allocation. Another participant ("Responder") will decide whether to accept or reject the proposed allocation. If the proposal is accepted, all of you will receive the proposed number of credits. If the offer is rejected, no participant will receive any credit. In some cases, the allocation will affect an additional participant ("Bystander"). You will be shown when this is the case and how all participants will be affected by the allocations.

For each decision, you will be randomly matched to different participant(s) and your roles will be randomly assigned. All decisions will remain anonymous. Your identities will NOT be revealed to any participant at any time before, during, or after the exercise.

After the exercise, we will report back to you with the outcomes. Thank you.

## [PROPOSER]

## 1. Two-player interaction game:

Arusha International Partnership is offering 10 credits, each credit worth 500 Tanzanian shillings, for the development of Village Dunia. You and the other participant serve as leaders. The Partnership has granted you the authority to allocate the credits between you and the other leader. For the town, you want to build roads, but the other leader wants to plant trees. Each unit of road and each unit of tree costs 1 credit. (The units are of equal value; the names are simply placeholders.)

Both you and the other leader can see the following menu of allocations. Please decide how you propose to allocate the following credits between yourself and Responder. Responder will decide whether to accept or reject your proposed allocation. If Responder accepts, both of you will receive the number of credits according to your proposal. If Responder rejects, both of you will receive o.
1 credit $=500$ Tanzanian shillings. Please select ONLY one proposal to allocate:

| YOU RECEIVE: | Responder receives: | Total credits allocated: | Your decision: |
| :---: | :---: | :---: | :---: |
| 0 | 10 | 10 | [] |
| 1.5 | 8.5 | 10 | [] |
| 3 | 7 | 10 | $[~]$ |
| 4 | 6 | 10 | [] |
| 5.5 | 4.5 | 10 | [] |
| 7 | 3 | 10 | [] |


| 8.5 | 1.5 | 10 | [] |
| :---: | :---: | :---: | :---: |
| 10 | 0 | 10 | [] |

## 2. Three-player interaction game with a social benefit:

In this interaction, you and two other participants serve as leaders. The third leader, called the Bystander, wants the same thing as yourself, the Proposer. Therefore, when you propose to build roads instead of trees, it benefits an additional leader, the Bystander. When an action benefits not just oneself but another person, we say the action has a social benefit. Again, for the town, you and the Bystander want to build roads, but the Responder wants to plant trees. Each unit of road and each unit of tree costs 1 credit.

Both you and the other two leaders see the following menu of allocations. Please decide how you propose to allocate the following credits between yourself, the Responder, and the Bystander. The Responder will decide whether to accept or reject your proposed allocation. If the Responder accepts, all three of you will receive the number of credits according to your proposal. If the Responder rejects, all three of you will receive o.
1 credit $=500$ Tanzanian shillings. Please select ONLY one proposal to allocate:

| YOU RECEIVE: | Responder receives: | Bystander receives: | Total credits: | Your decision: |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 10 | 0 | 10 | [] |
| 1.5 | 8.5 | 1.5 | 11.5 | [] |
| 3 | 7 | 3 | 13 | $[~]$ |
| 4 | 6 | 4 | 14 | $[~]$ |
| 5.5 | 4.5 | 5.5 | 15.5 | [] |
| 7 | 3 | 7 | 17 | [] |
| 8.5 | 1.5 | 8.5 | 18.5 | $[~]$ |
| 10 | 0 | 10 | 20 | [] |

## 3. Three-player ultimatum game with a social cost:

In this interaction, you want to build roads, but the Responder and the Bystander both want trees. Therefore, when you propose to build roads instead of trees, it incurs a cost on the additional leader, the Bystander. When an action incurs a cost on another person, we say the action has a social cost.

Both you and the other two leaders see the following menu of allocations. Please decide how you propose to allocate the following credits between yourself, the Responder, and the Bystander. The Responder will decide whether to accept or reject your proposed allocation. If the Responder accepts, all three of you will receive the number of credits according to your proposal. If the Responder rejects, all three of you will receive o.
1 credit $=500$ Tanzanian shillings. Please select ONLY one proposal to allocate:

| YOU RECEIVE: | Responder receives: | Bystander receives: | Total credits: | Your decision: |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 10 | 10 | 20 | [] |
| 1.5 | 8.5 | 8.5 | 18.5 | $[~]$ |
| 3 | 7 | 7 | 17 | $[~]$ |
| 4 | 6 | 6 | 16 | [] |
| 5.5 | 4.5 | 4.5 | 14.5 | [] |
| 7 | 3 | 3 | 13 | $[~]$ |
| 8.5 | 1.5 | 1.5 | 11.5 | [] |
| 10 | 0 | 0 | 10 | [] |

## [RESPONDER]

## 1. Two-player interaction game screen:

Arusha International Partnership is offering 10 credits, each credit worth 500 Tanzanian shillings, for the development of Village Dunia. You and the other participant serve as leaders. The Partnership has asked the other leader to allocate the credits between you and her. For the town, you want to plant trees, but the other leader wants to build roads. Each unit of tree and each unit of road costs 1 credit.

Please decide how you would respond to each allocation that Proposer might offer to you without knowing your response in advance. At this point in time, we do not know which allocation the matched Proposer would propose. Your indicated response to Proposer's chosen allocation will determine the final allocation. If you indicate you would accept, both of you will receive the number of credits according to the Proposer's offer. If you indicate you would reject, both of you will receive o.

1 credit = 500 Tanzanian shillings. Please select how you would like to respond in each case:

| Proposer receives: | YOU RECEIVE: | Total credits allocated: | You would: |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Accept | Reject |
| 0 | 10 | 10 | [ ] | [ ] |
| 1.5 | 8.5 | 10 | [ ] | [ ] |
| 3 | 7 | 10 | [ ] | [ ] |
| 4 | 6 | 10 | [ ] | [ ] |
| 5.5 | 4.5 | 10 | [ ] | [ ] |
| 7 | 3 | 10 | [ ] | [ ] |
| 8.5 | 1.5 | 10 | [ ] | [ ] |
| 10 | 0 | 10 | [ ] | [ ] |

## 2. Three-player interaction game with a social benefit:

In this interaction, you and two other participants serve as leaders. The third leader, called the Bystander, wants the same thing as the Proposer. Therefore, when the Proposer propose to build roads instead of trees, it benefits an additional leader, the Bystander. When an action benefits not just oneself but another person, we say the action has a social benefit. Again, for the town, the Proposer and the Bystander want to build roads, but you want to plant trees. Each unit of road and each unit of tree costs 1 credit.

Please decide how you would respond to each allocation that Proposer might offer to you without knowing your response in advance. At this point in time, we do not know which allocation the matched Proposer would propose. Your indicated response to Proposer's chosen allocation will determine the final allocation.
If you indicated you would accept, all three of you will receive the number of credits according to the Proposer's offer. If you indicated you would reject, all three of you will receive o.
1 credit = 500 Tanzanian shillings. Please select how you would like to respond in each case:

| Proposer receives: | You receive: | Bystander receives: | Total credits: | You would: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Accept | Reject |
| 0 | 10 | O | 10 | [ ] | [ ] |
| 1.5 | 8.5 | 1.5 | 11.5 | [ ] | [ ] |
| 3 | 7 | 3 | 13 | [ ] | [ ] |
| 4 | 6 | 4 | 14 | [ ] | [ ] |
| 5.5 | 4.5 | 5.5 | 15.5 | [ ] | [ ] |
| 7 | 3 | 7 | 17 | [ ] | [ ] |
| 8.5 | 1.5 | 8.5 | 18.5 | [ ] | [ ] |
| 10 | O | 10 | 20 | [ ] | [ ] |

3. Three-player interaction game with a social cost:

In this interaction, the Proposer want to build roads, but you and the Bystander both want trees. Therefore, when the Proposer proposes to build roads instead of trees, it incurs a cost on the additional leader, the Bystander. When an action incurs a cost on another person, we say the action has a social cost.

Please decide how you would respond to each allocation that Proposer might offer to you without knowing your response in advance. At this point in time, we do not know which allocation the matched Proposer would propose. Your indicated response to Proposer's chosen allocation will determine the final allocation.
If you indicated you would accept, all three of you will receive the number of credits according to the Proposer's offer. If you indicated you would reject, all three of you will receive o.
1 credit = 500 Tanzanian shillings. Please select how you would like to respond in each case:

| Proposer <br> receives: | YOU <br> RECEIVE: | Bystander <br> receives: | Total credits <br> allocated: | If Proposer made this <br> offer, you would: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Reject |  |
| 0 | 10 | 10 | 20 | [] | [] |
| 1.5 | 8.5 | 8.5 | 18.5 | [] | [] |
| 3 | 7 | 7 | 17 | [] | [] |
| 4 | 6 | 6 | 16 | [] | [] |
| 5.5 | 4.5 | 4.5 | 14.5 | [] | [] |
| 7 | 3 | 3 | 13 | [] | [] |
| 8.5 | 1.5 | 1.5 | 11.5 | [] | [] |
| 10 | 0 | 0 | 10 | [] | [] |

1. Two-player interaction game screen:

How many Responders out of 100 do you think would ACCEPT each of the following proposed allocations? Please enter your expectation for each proposal.

| Proposer <br> receives | Responder <br> receives | Total <br> credits | How many Responders out of 100 would <br> ACCEPT this proposal? |
| :---: | :---: | :---: | :---: |
| 0 | 10 | 10 |  |
| 1.5 | 8.5 | 10 |  |
| 3 | 7 | 10 |  |
| 4 | 6 | 10 |  |
| 5.5 | 4.5 | 10 |  |
| 7 | 3 | 10 |  |
| 8.5 | 1.5 | 10 |  |
| 10 | 0 | 10 |  |

2. Three-player interaction game with a social benefit:

How many Responders out of 100 would ACCEPT each of the following proposed allocations? Please enter your expectation for each proposal.

| Proposer <br> receives | Responder <br> receives | Bystander <br> receives | Total <br> credits | How many Responders out of 100 <br> would ACCEPT this proposal? |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 10 | 0 | 10 |  |
| 1.5 | 8.5 | 1.5 | 11.5 |  |
| 3 | 7 | 3 | 13 |  |
| 4 | 6 | 4 | 14 |  |
| 5.5 | 4.5 | 5.5 | 15.5 |  |
| 7 | 3 | 7 | 17 |  |
| 8.5 | 1.5 | 8.5 | 18.5 |  |
| 10 | 0 | 10 | 20 |  |

3. Three-player interaction game with a social cost:

How many Responders out of 100 would ACCEPT each of the following proposed allocations? Please enter your expectation for each proposal.

| Proposer <br> receives | Responder <br> receives | Bystander <br> receives | Total <br> credits | How many Responders out of 100 <br> would ACCEPT this proposal? |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 10 | 10 | 20 |  |
| 1.5 | 8.5 | 8.5 | 18.5 |  |
| 3 | 7 | 7 | 17 |  |
| 4 | 6 | 6 | 16 |  |
| 5.5 | 4.5 | 4.5 | 14.5 |  |
| 7 | 3 | 3 | 13 |  |
| 8.5 | 1.5 | 1.5 | 11.5 |  |
| 10 | 0 | 0 | 10 |  |

## Free Response

Would you like to explain why you made some or all of the decisions you made in the social interaction exercise [optional]?

Were there any parts of the game that were confusing or unclear to you [optional]?

## Section 2: Charity/Equity Exercise

Next are three questions that ask you to allocate or donate resources. In this exercise, you receive additional credits on top of those determined above. These additional credits have real-life charitable giving implications.

| 2.1 | We are giving you 10 extra credits. You can choose how much to keep yourself or donate to a healthy young brother or sister in a poor household in need of education support. You can choose not to give and keep all 10 credits for yourself if you want. How many credits would you like to give? |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [o] |  | [1.5] | [3] | [4] | [5.5] | [7] | [8.5] | [10] |
| 2.2 | Now, we would like to ask you to choose between two extra giving options to support additional young children from poor households in need of education support. Which option would you like? |  |  |  |  |  |  |  |
| [ ] Option 1: Support one child with 12 credits and another child with o credit. |  |  |  |  | [ ] Option 2: Support two children with 4 credits and 4 credits each. |  |  |  |
| 2.3 | We are giving you 10 extra credits. You can choose how much to keep for yourself or donate to a young brother or sister with disability in a poor household in need of education support. You can choose not to give and keep all 10 credits for yourself if you want. How many credits would you like to give? |  |  |  |  |  |  |  |
| [o] |  | [1.5] | [3] | [4] | [5.5] | [7] | [8.5] | [10] |

## Refresher:

Thank you very much for your responses. Soon, we will report back your allocations and share your scholarship rewards in an envelope equivalent in value to your credits.

Additionally, we will report back to you if you were a Bystander in an exercise, and we will send you cash in an envelope that corresponds to your resulting credits.

## Section: Interaction-related Psychosocial Well-being

Next are questions that ask your feelings about the outcomes of each interaction on the previous Partnerships survey. Please refer to outcomes as indicated on your Credit Slip.

|  | For this question, please refer to the outcome of Game 1 shown on the slip, where the role you <br> played is shown underlined. How did you feel about this interaction and the outcome? |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [ ] Upset | [ ] Slightly upset | [ ] Neutral | [ ] Slightly satisfied | [ ] Satisfied | [ ] Very satisfied |
|  | Please refer to the outcome of Game 2, where the role you played is shown underlined. How <br> did you feel about this interaction and the outcome? |  |  |  |  |  |
|  | [ ] Upset | [ ] Slightly upset | [ ] Neutral | [ ] Slightly satisfied | [ ] Satisfied | [ ] Very satisfied |


| 3 | Please refer to the outcome of Game 3 shown on the slip, where the role you played is shown underlined. How did you feel about this interaction and the outcome? |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [ ] Very upset | [ ] Upset | [ ] Slightly upset | [ ] Neutral | [ ] Slightly satisfied | [ ] Satisfied | [ ] Very satisfied |
| Would you like to explain what about the interaction(s) made you feel this way [optional]? |  |  |  |  |  |  |

## Section 3: Social Interactions

Next are questions about your social behavior and preferences. Please let us know to what extent you agree.

| 3.1 | "If there is a small amount of pilau prepared for family dinner, I will try to take most of it to my plate." |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & {[\text { ] Strongly }} \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.2 | "When my friend needs help with her homework, I am willing to spend my time to help her." |  |  |  |  |  |  |
| [ ] Strongly |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | $\begin{gathered} {[\text { ] Do not agree }} \\ \text { nor disagree } \end{gathered}$ | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| $3 \cdot 3$ | I think: "People don't need to be fair in order to live a good life." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ ] Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | $\begin{gathered} \text { [ ] Slightly } \\ \text { disagree } \end{gathered}$ | $\begin{gathered} \text { [ ] Do not agree } \\ \text { nor disagree } \end{gathered}$ | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.4 | "What makes a good life is not determined by being fair, but by keeping the most benefit to oneself." |  |  |  |  |  |  |
| [ ] Stronglydisagree |  | [ ] Disagree | [ ] Slightly | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.5 | "One's own happiness is separate from the happiness of others." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ ] Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.6 | "Incomes should be made more equal even if it discourages individual effort." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ ] Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.7 | "It is fair to tax rich people at a higher rate than ordinary people in order to help pay for government programs to benefit the poor people." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | $\begin{gathered} \text { [ ] Slightly } \\ \text { disagree } \end{gathered}$ | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.8 | "Children with disabilities should be given equal opportunity to access, learn, and progress in common schools." |  |  |  |  |  |  |
| $\begin{gathered} \text { [ ] Strongly } \\ \text { disagree } \end{gathered}$ |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | $\begin{aligned} & \text { [ ] Do not agree } \\ & \text { nor disagree } \end{aligned}$ | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.9 | "The school and government recognize the importance of giving children with disabilities equal opportunity to access, learn, and progress in common schools." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ ] Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.10 | "The school and government are making investments to improve the opportunities for children with disabilities to access, learn and progress in common schools." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | $\begin{aligned} & \text { [ ] Do not agree } \\ & \text { nor disagree } \end{aligned}$ | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.11 | "Inclusion of students with disabilities in the classroom will require significant resources and retraining of teachers." |  |  |  |  |  |  |
| [ ] Strongly |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |


| 3.12 | "Inclusion of students with disabilities in the classroom will help students be more open-minded about people in different circumstances." |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [ ] Strongly disagree |  | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.13 | "Inclusion of students with disabilities will NOT help students without disabilities be more openminded." |  |  |  |  |  |  |
| [ ] Strongly disagree |  | [ ] Disagree | $\begin{aligned} & \text { [ ] Slightly } \\ & \text { disagree } \end{aligned}$ | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.14 | "I would NOT mind if a student with disabilities sits next to me." |  |  |  |  |  |  |
| [ ] Strongly disagree |  | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| 3.15 | "I would stand with a student with disabilities who is being teased." |  |  |  |  |  |  |
| $\begin{aligned} & \text { [ ] Strongly } \\ & \text { disagree } \end{aligned}$ |  | [ ] Disagree | $\begin{gathered} \text { [ ] Slightly } \\ \text { disagree } \end{gathered}$ | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |

## Section 4: Psychosocial Wellbeing

Next are questions and statements that are about your psychosocial wellbeing.

| 4.1 | How often do you feel angry? |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [ ] Every day |  | [ ] Once in 2 or 3 days | [ ] Once in a week | [ ] Once in 15 days | [ ] Once in a month | [ ] Rarely |
| 4.2 | How often do you feel annoyed? |  |  |  |  |  |
| [ ] Every day |  | [ ] Once in 2 or 3 days | [ ] Once in a week | [ ] Once in 15 days | [ ] Once in a month | [ ] Rarely |
| 4.3 | How often do you feel lonely? |  |  |  |  |  |
| [ ] Every day |  | [ ] Once in 2 or 3 days | [ ] Once in a week | [ ] Once in 15 days | [ ] Once in a month | [ ] Rarely |
| 4.4 | How often do you feel jealous of others? |  |  |  |  |  |
| [ ] Every day |  | [ ] Once in 2 or 3 days | [ ] Once in a week | [ ] Once in 15 days | [ ] Once in a month | [ ] Rarely |
| 4.5 | How often do you feel difficulty concentrating on your studies? |  |  |  |  |  |
| [ ] Every day |  | [ ] Once in 2 or 3 days | [ ] Once in a week | [ ] Once in 15 days | [ ] Once in a month | [ ] Rarely |
| 4.6 | How often do you worry about your future? |  |  |  |  |  |
| [ ] Every day |  | [ ] Once in 2 or 3 days | [ ] Once in a week | [ ] Once in 15 days | [ ] Once in a month | [ ] Rarely |
| 4.7 | In the last month, how often have you been upset because something unexpected happened? |  |  |  |  |  |
|  | [ ] Never | [\| [ ] Almost neve | r\|c|c [ ] Sometimes ${ }^{\text {r }}$ |  | [ ] Fairly often | [ ] Very often |
| 4.8 | In the last month, how often have you felt you were unable to control important things in your life? |  |  |  |  |  |
|  | [ ] Never | [ ] Almost ne |  | times | [ ] Fairly often | [ ] Very often |
| 4.9 | In the last month, how often have you felt nervous or stressed? |  |  |  |  |  |
|  | [ ] Never | [ ] Almost ne |  | times | [ ] Fairly often | [ ] Very often |
| 4.10 | In the last month, how often have you felt that things were going your way? |  |  |  |  |  |
|  | [ ] Never | [ ] Almost ne |  | times | [ ] Fairly often | [ ] Very often |
| 4.11 | In the last month, how often have you been able to control annoyances in your life? |  |  |  |  |  |
|  | [ ] Never | [ [ ] Almost ne |  | times | [ ] Fairly often | [ ] Very often |

## Section 5: STEM interest

Next are six statements that you may agree or disagree with regarding your own interest in Science, Technology, Engineering, and Mathematics field, which will be shortened as STEM during the survey.

| $\mathbf{5 . 1}$ | "I would like to spend extra time in addition to school, studying subjects related to STEM." |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [ ] Strongly <br> disagree | [ ] Disagree | [ ] Slightly <br> disagree | [ ] Do not agree <br> nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |



## Section 6: Gender Attitude

Next are five statements that are about your gender attitude.

| 6.1 | "Going to university is more important for a boy than for a girl." |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Never true of/to me | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |
| 6.2 | "Girls, compared to boys, have similar ability to write programming codes or solve mathematical problems." |  |  |  |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |
| 6.3 | "Men make better scientists or engineers than women do." |  |  |  |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |
| 6.4 | "Men should work outside home, and women should stay home and be a good homemaker." |  |  |  |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |
| 6.5 | "It is normal that men teach/coach/manage women in academic/professional environments." |  |  |  |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |

## Section 7: Blood Donation

| 7.1 | Did you give blood this year? (Please note: giving blood is not required.) | [ ] Yes [ ] No |
| :--- | :--- | :--- |
| 7.2 | How many times did you give blood this year? |  |

## Section 8: Social Attitude

Next are three statements that are about your personal feelings and behavior.

| 8.1 | I feel little concern for others. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |
| 8.2 | I often insult people. |  |  |  |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |
| 8.3 | I take time out to help others. |  |  |  |
| [ ] Never true of/to me |  | [ ] Slightly true of/to me | [ ] Mostly true of/to me | [ ] Very true of/to me |

## Section 9: Digital Exposure

Next are questions about your usage of and exposure to the Internet and social media.


## (AA) Digital Education and Partnerships Survey: Endline - Section Z.

| What is your: | Name: | Grade: Form 5 / Form 6 |
| :--- | :--- | :--- |

In this last section of the survey, we again give you 10 extra credits that you can use or keep for yourselves! This section is about four C++ and Scratch programs you may have seen: the C++ Compiler, C++ Calculator, Scratch Adiah, and Scratch Barika programs.

Please do not worry if you have not seen all four programs. Some of you have seen more lessons about these programs than others. Please answer the following questions only about the lessons you have seen.

In question $\mathbf{Z 1}$, we are interested in understanding how the lessons may have affected your experience with each of the survey games. We would like to understand how you value this effect, and we would like to give you a chance to express this value by donating some credits back to the lesson designers.

For example, some of you may think that the lessons did not affect your experience. In this case, your answer may be o. Some of you may judge the lessons to have had a positive effect and may even be willing to donate more than 10 credits. Please cap your answers at 10 credits. Others may judge the lessons to have had a negative effect-that is, you would have rather seen a different lesson or not seen the lessons at all before playing the games. If so, you may express this disappointment by asking for more credits from the lesson designers.

Again, the following questions are only about the lessons you have seen so far regarding the C++ Compiler, C++ Calculator, Scratch Adiah, and Scratch Barika programs.

Finally, please note that some of you will be asked to answer questions $\mathbf{Z} \mathbf{1}$ through $\mathbf{Z}_{\mathbf{3}}$ below now, while others will be asked to answer these questions at the end of this section. If you see questions $\mathbf{Z} \mathbf{1}$ through $\mathbf{Z}_{\mathbf{3}}$ printed for you immediately below, please answer them now. If you do not see questions $\mathrm{Z}_{1}$ through $\mathrm{Z}_{3}$ printed for you immediately below, you will see them printed at the end, so please wait to answer them at the end.

Questions $\mathbf{Z}_{\mathbf{5}}$ through $\mathbf{Z 1 O}_{10}$ ask you about the same programming lessons. Please let us know to what extent you agree or disagree.

| (c1) | (c2) | (c3) | (c4) | (c5) | (c6) | (c7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| "The programming lessons were difficult." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "The programming lessons showed me I was good at programming." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "The programming lessons promote economic growth." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "The programming lessons promote equality among people." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "The programming lessons informed me about what I should value for myself and others when interacting with people." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "The programming lessons informed me about how to behave strategically when interacting with people." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |

Questions Z11 through Z13 ask you about how many Responders out of 100 you think would accept or reject each proposal: specifically, how people who saw the same programming lessons you have seen would behave. If your answers are identical to your answers in previous pages, please skip this part.

Z11. Two-player interaction game. How many Responders out of 100 who saw the same programming lessons you have seen do you think would \{ACCEPT\} each proposal below?

Z11_1. Is your answer identical to your answers in previous pages? [ Yes / No ] If "Yes," skip the table below.

|  | Proposer <br> receives | Responder <br> receives | Total <br> credits | How many Responders out of 10o would <br> \{ACCEPT\} this proposal? |
| :---: | :---: | :---: | :---: | :---: |
| $(\mathrm{r} 1)$ | 0 | 10 | 10 |  |
| $(\mathrm{r} 2)$ | 1.5 | 8.5 | 10 |  |
| $(\mathrm{r} 3)$ | 3 | 7 | 10 |  |
| $(\mathrm{r} 4)$ | 4 | 6 | 10 |  |
| $(\mathrm{r} 5)$ | 5.5 | 4.5 | 10 |  |
| $(\mathrm{r} 6)$ | 7 | 3 | 10 |  |
| $(\mathrm{r} 7)$ | 8.5 | 1.5 | 10 |  |
| $(\mathrm{r} 8)$ | 10 | 0 | 10 |  |

Z12. Three-player interaction game with social benefits. How many Responders out of 100 who saw the same Scratch programming lessons you have seen would \{ACCEPT\} each proposal below?

Z12_1. Is your answer identical to your answers in previous pages? [ Yes / No ] If "Yes," skip the table below.

|  | Proposer <br> receives | Responder <br> receives | Bystander <br> receives | Total <br> credits | How many Responders out of 10o <br> would \{ACCEPT\} this proposal? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (r1) | 0 | 10 | 0 | 10 |  |
| (r2) | 1.5 | 8.5 | 1.5 | 11.5 |  |
| (r3) | 3 | 7 | 3 | 13 |  |
| (r4) | 4 | 6 | 4 | 14 |  |
| (r5) | 5.5 | 4.5 | 5.5 | 15.5 |  |
| (r6) | 7 | 3 | 7 | 17 |  |
| (r7) | 8.5 | 1.5 | 8.5 | 18.5 |  |
| (r8) | 10 | 0 | 10 | 20 |  |

Z13. Three-player interaction game with social costs. How many Responders out of 100 who saw the same Scratch programming lessons you have seen would \{ACCEPT\} each proposal below?

Z13_1. Is your answer identical to your answers in previous pages? [ Yes / No ] If "Yes," skip the table below.

|  | Proposer <br> receives | Responder <br> receives | Bystander <br> receives | Total <br> credits | How many Responders out of 100 <br> would \{ACCEPT\} this proposal? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $(\mathrm{r} 1)$ | 0 | 10 | 10 | 20 |  |
| $(\mathrm{r} 2)$ | 1.5 | 8.5 | 8.5 | 18.5 |  |
| $(\mathrm{r} 3)$ | 3 | 7 | 7 | 17 |  |
| $(\mathrm{r} 4)$ | 4 | 6 | 6 | 16 |  |
| $(\mathrm{r} 5)$ | 5.5 | 4.5 | 4.5 | 14.5 |  |
| $(\mathrm{r} 6)$ | 7 | 3 | 3 | 13 |  |
| $(\mathrm{r} 7)$ | 8.5 | $\mathbf{1 . 5}$ | $\mathbf{1 . 5}$ | 11.5 |  |


| (r8) | 10 | 0 | 0 | 10 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

Questions Z14 through Z16 ask you how the programming lessons may have affected how you respond to UNFAIR proposals and whether this experiencing this effect was a positive or a negative experience for you. Please let us know to what extent you agree or disagree.

| (c1) | (c2) | (c3) | (c4) | (c5) | (c6) | (c7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | [ ] Do not agree nor disagree | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "When I reflect on the above influence the programming lessons had on me, I become upset." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | $\begin{gathered} \text { [ ] Do not agree nor } \\ \text { disagree } \end{gathered}$ | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |
| "When I reflect on the above influence the programming lessons had on me, I become happy." |  |  |  |  |  |  |
| [ ] Strongly disagree | [ ] Disagree | [ ] Slightly disagree | $\begin{gathered} \text { [ ] Do not agree nor } \\ \text { disagree } \end{gathered}$ | [ ] Slightly agree | [ ] Agree | [ ] Strongly agree |

Finally, for those of you who have answered questions $\mathbf{Z} \mathbf{1}$ through $\mathbf{Z}_{\mathbf{3}}$ before, you are done. Please do not return to previous questions. Please flip your survey over and wait until others finish.

For those of you who did not see questions $\mathbf{Z} \mathbf{1}$ through $\mathbf{Z} \mathbf{3}$ printed before, they are printed for you below, and now is your chance to answer them. Here, again, we are interested in understanding how the programming lessons may or may not have affected your experience with each of the survey games. We would like to understand how you value this effect, and we would like to give you a chance to express this value by donating some credits back to the lesson designers.

For example, some of you may think that the lessons did not affect your experience. In this case, your answer may be o. Some of you may judge the lessons to have had a positive effect and may even be willing to donate more than 10 credits. Please cap your answers at 10 credits. Others may judge the lessons to have had a negative effect-that is, you would have rather seen a different lesson or not seen the lessons at all before playing the games. If so, you may express this disappointment by asking for more credits from the lesson designers.

Again, the following questions are only about the lessons you have seen so far regarding the C++ Compiler, C++ Calculator, Scratch Adiah, and Scratch Barika programs.

Z1. How much are you willing to donate to express the value of the average effect the lessons have had on each of the games you have played?

| (c1) | (c2) | (c3) | (c4) | (c5) | (c6) | (c7) | (c8) | (c9) | (c10) | (c11) | (c12) | (c13) | (c14) | (c15) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| "The lessons negatively affected my experience. I need to receive more credits from the design team." |  |  |  |  |  |  | "No effect' | "The lessons positively affected my experience. I am willing to donate credits to the design team." |  |  |  |  |  |  |


| $[-10]$ | $[-8.5]$ | $[-7]$ | $[-5.5]$ | $[-4]$ | $[-3]$ | $[-1.5]$ | $[0]$ | $[1.5]$ | $[3]$ | $[4]$ | $[5.5]$ | $[7]$ | $[8.5]$ | $[10]$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

In questions $\mathbf{Z 2}$ and $\mathbf{Z}_{3}$, we would like to understand how you derived some of this value. For example, to what extent did you derive this value because the programming lessons affected your views on fairness? To what extent did you derive this value because the programming lessons otherwise affected your strategic and logical reasoning given people's attitudes?

Z2. To what extent did you derive this value because the programming lessons affected your views on fairness?

| (c1) | (c2) | (c3) | (c4) | (c5) | (c6) | (c7) | (c8) | (c9) | (c10) | (c11) | (c12) | (c13) | (c14) | (c15) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| "I am disappointed in how the lessons affected my views on fairness." |  |  |  |  |  |  | "No effect" | "I am delighted in how the lessons affected my views on fairness." |  |  |  |  |  |  |
| [-10] | [-8.5] | [-7] | [-5.5] | [-4] | [-3] | [-1.5] | [o] | [1.5] | [3] | [4] | [5.5] | [7] | [8.5] | [10] |

Z3. To what extent did you derive this value because the programming lessons affected your strategic and logical reasoning given people's attitudes?

| (c1) | (c2) | (c3) | (c4) | (c5) | (c6) | (c7) | (c8) | (c9) | (c10) | (c11) | (c12) | (c13) | (c14) | (c15) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| "I am disappointed in how the lessons affected my strategic and logical reasoning given people's attitudes." |  |  |  |  |  |  | $\begin{aligned} & \text { "No } \\ & \text { effect" } \end{aligned}$ | "I am delighted in how the lessons affected my strategic and logical reasoning given people's attitudes." |  |  |  |  |  |  |
| [-10] | [-8.5] | [-7] | [-5.5] | [-4] | [-3] | [-1.5] | [o] | [1.5] | [3] | [4] | [5.5] | [7] | [8.5] | [10] |

Z4. [Free Response]

```
Would you like to add any other thoughts about the programming lessons [optional]?
```

