ALX Foundations: Milestone 3 Worksheet

Instructions: Provide responses to all items in the orange boxes. The worksheet consists of Sections A-E. Work on this worksheet one section at a time throughout your week, and return to Canvas after each section for the next set of content and further instructions.

SECTION A: Problem Statement

Step 1: Your GCGO

Which Grand Challenge or Great Opportunity (GCGO) do you want to play a part in addressing? (Pick one.)

As a reminder, the GCGOs are:
- Urbanization
- Education
- Infrastructure
- Healthcare
- Climate change
- Governance
- Job creation
- Agriculture
- Natural resources
- Arts, culture, and design
- Tourism
- Empowerment of women
- Regional integration
- Wildlife conservation

GCGO: Education

Step 2: Describe <u>Your</u> Problem

You are going to take a first pass at briefly describing <u>your</u> chosen problem. This can be any problem that speaks to you, as long as it is a real-life occurrence that is clearly linked to your chosen GCGO, that occurs in a certain place and for certain people (and/or animals), and that it can be clearly defined.

For example, if you chose wildlife conservation as your GCGO, you might first state your chosen problem as:
There are very few white rhinos left in Kenya and they are in danger of going extinct.

Another example, if you choose infrastructure as your GCGO:
Residents of major cities in South Africa endure prolonged periods without electricity, significantly hampering their ability to generate income.

Note that this is just your first attempt stating the problem, and you don't need to quantify the problem yet. In order to get to your official problem statement (which does need to be quantifiable) first answer the following questions. The more specific your answers, the better. You may also ask Google, Wikipedia, , ChatGPT, and/or other reliable online sources to help you. Please be sure to cite (give credit to) any sources that you use.

Describe your problem using What/Who/When/Where/Why/How….

1. **<u>What</u>** is the problem? What is reality like because of this problem? What will reality be like if the problem continues?

What is the problem?
The problem is the inadequate funding in education in Nigeria, referring to the insufficient financial resources allocated to support and improve the education system.

What is reality like because of this problem?
Inadequate funding in Nigerian education has led to a stark reality. Schools lack resources, outdated infrastructure persists, and teachers are ill-equipped. Overcrowded classrooms, limited access to technology, and inadequate educational opportunities hinder students' learning outcomes. Quality of education suffers, perpetuating a cycle of limited prospects and societal inequalities.

What will reality be like if the problem continues?
Persistent inadequate funding in education worsens the situation, deteriorating the system. It widens the educational gap, disproportionately impacting disadvantaged students. Quality declines, limiting intellectual growth and potential. Nigeria's workforce struggles, hindering socio-economic progress and global standing. Limited opportunities and educational inequalities persist, impeding overall national advancement.

2. **Who** does this problem impact, directly and indirectly? Who contributes to the problem?

   Who does this problem impact, directly and indirectly?
The problem affects students, teachers, schools, and the overall education system in Nigeria. It impacts both public and private educational institutions across various levels, from primary schools to tertiary institutions.

   Who contributes to the problem?
Multiple stakeholders, including government entities, policymakers, and society at large, contribute to the issue of inadequate education funding in Nigeria.

3. **When** did this problem begin? When does it occur?

When did this problem begin? The problem of inadequate funding in education in Nigeria has been ongoing for many years, persisting across generations.

When does it occur?It occurs consistently throughout the year, impacting the education system at all times.

4. **Where** is this problem occurring? What is the context in which it occurs?
Where is this problem occurring?
This problem is widespread across Nigeria, affecting educational institutions in urban and rural areas alike.

What is the context in which it occurs?
 Within a struggling education system, the problem arises from the challenge of meeting the needs of a diverse student population.

5. **Why** is this a problem? What are the pain points or gaps? Why do you personally care about this problem?

   Why is this a problem?
   Inadequate funding in education is a problem because it hampers the provision of quality education.

   What are the pain points or gaps?
   Pain points: Limited resources, crowded classrooms, outdated infrastructure, inadequate teacher training, and lacking educational materials hinder learning outcomes and sustain educational inequalities.

   Why do you personally care about this problem?
   This problem is vital as it affects Nigeria's youth and national development. Education empowers, alleviates poverty, and fuels social progress.

6. **How** would reality be different if this problem were solved? (This can be your opinion.)

Solving inadequate education funding in Nigeria brings transformation. Schools thrive with resources, modern infrastructure, trained teachers, and updated materials. Students gain quality education, equal opportunities, and better preparation for their future. This fuels social and economic progress, fostering prosperity and equity.

Step 3: Understand and Quantify Your Problem

Next, you will conduct some basic web research to better understand, define, and quantify your problem. You will do this through a combination of Google search, Wikipedia, credible web sources, ChatGPT or other AI research tool, and your own synthesis of information from these sources. Be sure to give credit to your sources, and paraphrase (use your own words) rather than quoting directly.

7. What is the historical context for this problem? What happened in the past that contributes to the problem now?

Historical Context: In Nigeria, inadequate funding in education is influenced by a combination of economic challenges, political priorities, and cultural factors. Previous economic downturns and budget limitations have impacted the allocation of funds for education.

8. What are the possible economic (money-related) reasons why this problem exists and continues?

Insufficient budget allocation, economic instability, and competing financial demands contribute to the persisting issue of inadequate funding in Nigerian education.

9. What are the possible political reasons why this problem exists and continues?

Inadequate prioritization of education within political agendas and policies has resulted in limited resources and funding for the education sector.

10. What cultural beliefs and/or social norms possibly contribute to this problem?

Cultural beliefs that devalue education or prioritize alternative investments, along with social norms that do not emphasize education as a collective responsibility, contribute to the problem.

11. Who are the people potentially responsible (directly or indirectly) for creating and/or maintaining this problem?

Various stakeholders share responsibility for creating and perpetuating this problem, including government entities responsible for budget allocation, policymakers, and society as a whole for not giving education the necessary priority it deserves.

Now that you have the preliminary information you need, you'll continue your web research to find some numbers, or quantifiable information, to help describe your problem:

What numerical data can you find that is relevant to your problem? Be sure to use your own words and also cite (give credit to) your sources.

Example 1:
According to Chat GPT, there are about 880 white rhinos currently living in Kenya. This population is very small, and they are critically endangered.

Example 2:
Johannesburg has approximately 5.8 million residents (per ChatGPT) and had approximately 4.7 million international overnight visitors in 2019 (according to the South African Tourism Annual Report for 2019/2020).

12. Approximately how many people (and/or animals) are **directly** impacted by this problem? Explain.

According to chat GPT, Inadequate education funding in Nigeria directly affects millions of students, teachers, and educational staff nationwide. **Tens of millions** of students experience limited resources, overcrowding, and compromised learning environments. Additionally, hundreds of thousands of teachers and staff face challenges such as low salaries, inadequate training, and insufficient resources. This problem's extensive reach impacts a significant portion of the education system's population, with far-reaching consequences.

13. Approximately how many people (and/or animals) are **indirectly** impacted by this problem? Explain.

Inadequate education funding in Nigeria has far-reaching consequences, impacting millions of individuals beyond the immediate stakeholders. It affects families,

communities, and the entire nation, estimated to impact **tens of millions** of people(per chatGPT) . The socio-economic limitations, reduced opportunities, and perpetuation of inequalities caused by the compromised education system have a widespread impact, hindering overall development and affecting various aspects of society.

14. What other numerical data can you share that is relevant to your problem? What can you find out about its size and scope? What can be measured? (For example, the amount of trash produced in Nairobi each day, the number of people without access to clean water, etc.)

Relevant numerical data includes budgetary allocations for education, student enrollment figures, student-to-teacher ratios, school infrastructure conditions, literacy rates, and educational attainment levels. These metrics help assess the size and scope of the inadequate education funding problem in Nigeria. They can be measured through official reports, surveys, statistical data, and research studies, providing valuable insights into the extent and consequences of the problem.

Step 4: Describe Your Solved State

Without having to come up with *how* to solve the problem, describe what the desired, solved state looks like. Please use numbers wherever possible, and make your solved state specific and measurable.

Example 1:
There would be a population of 10,000 healthy and protected white rhinos living in the wild in Kenya.

Example 2:
All 5.8 million residents of Johannesburg would have affordable and consistently available power from clean energy sources, 99.5% of the time.

15. If the problem were addressed/solved, what would reality be like?

Solving the problem of inadequate education funding in Nigeria would bring about a transformative shift. Schools would have ample resources, modern facilities, and well-trained teachers, fostering an environment of quality education.

16. Are there other benefits that would come from your problem being solved? Name at least one.

Students would gain a comprehensive education, equal opportunities, and enhanced readiness for their future endeavors. This advancement would fuel social and economic progress, creating a more prosperous and equitable society. Additionally, it would boost literacy rates, elevate educational outcomes, break the cycle of poverty, and empower individuals to pursue better opportunities, leading to overall development and progress for Nigeria.

Step 5: Clarify Your Problem Scope

You are more effective at solving a problem when you know where its limits are. That is, when you know what is "in scope" and "out of scope." For this reason, it is important to list what is out of scope, or NOT included as part of your problem definition.

Example 1:
The scope of the problem does not cover any other animal species besides white rhinos. It does not include white rhinos outside of Kenya.

 Example 2:
The scope of the problem does not include any businesses or people outside of the legally-defined Johannesburg city limits. It does not apply to tourists or visitors staying for less than 1 year in Johannesburg.

17. What is NOT in scope for your problem?
The scope of the problem does not include an in-depth analysis of specific policy initiatives, political dynamics, or administrative processes. While these elements are related to the problem, our focus is on the broader issue of insufficient funding and its impact on the education system as a whole. Delving into intricate policy details, political dynamics, or administrative procedures is beyond the scope of this problem statement.

Step 6: Areas for Learning

What do you not know or understand that you would like to know more about? This can be anything related directly or indirectly to your problem. Let your curiosity run wild!

Example 1:
I'd like to know where most of the demand for rhino horn is coming from. I'd like to know who are the primary buyers and who is behind the trafficking of rhino horn. I'd like to know how long the average rhino's lifespan is. I'd like to know how many babies a typical female rhino has, and how many babies typically survive into adulthood. I'd like to know more about what diseases impact rhinos. I'd like to know more about the kinds of habitats that rhinos thrive in. I'd like to understand what international organizations do the best job supporting wildlife conservation and what their practices are. I'd like to know what models of community involvement have been most successful in keeping wildlife safe and thriving. I'd like to understand how much land is available in Kenya for rhinos to roam.

Example 2:
I'd like to better understand the utility company Eskom and its history. I'd like to understand why Eksom has failed to plan properly to update its infrastructure. I'd like to understand the relationship between Eksom and the South African government. I'd like to know if there are private utility companies providing competition to Eksom. I'd like to know what the latest breakthroughs are in solar power. I'd like to know what other possible energy sources might be made available in Johannesburg. I'd like to know how much energy tourists and temporary visitors use. I'd like to better understand the process of how limited energy supply gets allocated to people and businesses. I'd like to better understand the economic impact to people and businesses of not having power.

18. What else would you like to know or understand better? (It can be anything related to your problem.) List 5-10 things.

When it comes to the problem of inadequate education funding in Nigeria, there are several aspects that would be beneficial to know and understand better.

1. The specific factors contributing to the budgetary constraints in the education sector.
2. The distribution of education funding across different regions and states in Nigeria.
3. The impact of inadequate funding on teacher salaries and retention.
4. The correlation between education funding and student performance indicators.
5. The existing initiatives or programs aimed at addressing the funding issue and their effectiveness.

Step 7: Problem Statement

This step is the culmination of all you have done in Part A. You will synthesize the work you have done above to create a problem statement of 150 - 250 words. This should be in narrative form, 2-4 paragraphs, and should NOT use bullet points.

Your problem statement should:

- Provide a succinct description of the problem **in the first sentence**.
- Indicate specific population affected
- Explain the impact (cost, time, environmental, personal) and why the problem matters.
- Explain what reality would look like if the problem were solved. The gap that exists between present reality and the desired outcome should be clear.

Please cite (give credit to) where your information came from directly in your statement. Avoid word-for-word quoting and instead paraphrase (use your own words), as modeled in the example. Also list your sources and their urls (web addresses) at the end.

Example :
Kenya's white rhinos are in critical danger of extinction. There are currently about 880 white rhinos in the country of Kenya, per Wikipedia. According to Chat GPT, Rhinos are considered a keystone species, meaning they have a disproportionately large impact on their ecosystem compared to their population size. Rhinos help shape their environment by influencing vegetation growth and acting as seed dispersers, which creates habitat for other species (per ChatGPT).

The extinction of white rhinos would have cascading effects on other plant and animal species in their habitat. According to the Kenya Wildlife Service, rhinos' presence in reserves and parks bring millions of tourists each year, contributing to local economies and supporting conservation efforts. Once a species goes extinct, it is gone forever. The extinction of rhinos would represent the loss of millions of years of evolutionary history, and unique genetic diversity that science has yet to fully understand and benefit from (per ChatGPT).

My problem would be considered solved when the population of wild, white rhinos in Kenya reaches 10,000, and when all imminent threats to their population including poaching and habitat destruction are not present. If this were the reality, it would create ecosystem balance, create large revenues from ecotourism, preserve important cultural symbols, and allow for genetic diversity that could benefit humanity in ways we may not yet fully understand.

Sources:
Kenya Wildlife Services Annual Report 2017, https://www.kws.go.ke/content/annual-reports
ChatGPT, https://chat.openai.com/
"White Rhinoceros", Wikipedia, https://en.wikipedia.org/wiki/White_rhinoceros

19. My problem is statement is:

Education in Nigeria is going through different problems but one of the key problems is inadequate funding. Insufficient funding in Nigeria's education system hampers its ability to provide quality education and equal opportunities for all students. The lack of financial resources leads to limited infrastructure, inadequate teacher training, outdated materials, and overcrowded classrooms, hindering students' learning outcomes and perpetuating educational inequalities.

Moreover, the inadequate funding also affects teachers, leading to low salaries, insufficient training, and demotivation, which further compromises the quality of education. The problem extends beyond the immediate stakeholders and has far-reaching consequences for families, communities, and the nation as a whole. *(per ChatGPT)*

If left unaddressed, the problem of inadequate education funding in Nigeria will continue to widen the educational gap, hinder socio-economic progress, and impede the overall development of the nation. It is crucial to prioritize and allocate sufficient funds to the education sector to provide equal access to quality education, empower students, and foster a prosperous and equitable society. *(per ChatGPT)*

20. Please list all sources that you used to form your problem statement:

Sources : ChatGPT *https://chat.openai.com/*

SECTION B: Research Questions & Hypothesis

IMPORTANT: Complete this section AFTER completing the Canvas Modules *Asking Effective Questions* and *Web Research*.

Step 8: Research Questions

Based on what you have learned so far and on 'Step 6: Areas for Learning' from this worksheet, come up with 3 research questions. **Research questions should be complex enough that they can't be answered by a single Google search.** If appropriate, form a hypothesis that your research may confirm or reject. (As a reminder, a hypothesis is a prediction of how you think your research will answer your research question. It is your best guess. If you truly have absolutely no idea, state "not applicable.")

Example Research Question #1:
What are some ways can we increase rhino populations?
Hypothesis*:*
Rhino populations will be increased by creating more open spaces for them to roam, increasing their protection, increasing international interest in them, and other reasons I have yet to uncover.

Example Research Question #2:
Which organizations have been effective at wildlife conservation and what practices do they use?
Hypothesis*:*
Not applicable; I don't know.

21. Research question #1:

How does inadequate education funding in Nigeria impact student learning outcomes and educational inequalities?

Hypothesis (if applicable): Insufficient funding in the education system in Nigeria leads to lower academic performance among students and widens the gap between advantaged and disadvantaged students.

22. Research question #2:

What are the key factors contributing to inadequate education funding in Nigeria?

Hypothesis (if applicable):

Economic constraints, competing budget priorities, and limited government investment in the education sector are among the key factors contributing to inadequate education funding in Nigeria.

23. Research question #3:

What are the potential long-term social and economic consequences of inadequate education funding in Nigeria?

Hypothesis (if applicable):
Inadequate education funding in Nigeria may result in limited access to quality education, reduced employment prospects, hindered economic growth, and perpetuated socio-economic inequalities within the society.
Was this response better or worse?

Please go back to Canvas and continue with your learning content. You will be prompted on when to return to complete Section C.

PART C: Mini-Research Report

IMPORTANT: Complete this section AFTER completing the Canvas Module *Web Research Executive Summary.*

In 200-300 words, provide an executive summary of your research. You should be synthesizing information from multiple sources. Provide answers and explanations for the 3 questions you investigated and your key research findings. This should be in a narrative format (no bullet points), and be at least 3 paragraphs long.

Please use at least 3 different online sources such as ChatGPT, organizational websites, wikipedia, etc.. Please cite (give credit to) where your information came from directly in your statement. Avoid word-for-word quoting and instead paraphrase (use your own words), as modeled in the example. Also list your sources and their urls (web addresses) at the end.

Example Executive Summary:

According to ChatGPT, increasing rhino populations requires multiple approaches. These approaches include: anti-poaching measures; habitat protection and management; translocation and reintroduction; captive breeding and reintroduction; international cooperation between governments, conservation organizations, and communities; community engagement and education; and demand reduction.

According to ChatGPT, the following organizations are well known for wildlife conservation and protection: World Wildlife Fund (WWF), International Union for Conservation of Nature (IUCN), Wildlife Conservation Society (WCS), African Wildlife Foundation (AWF), Pathera, Conservation International, and The Jane Goodall Institute. These organizations engage in different practices to help wildlife. As one example, World Wildlife Fund, according to their webpage, engages in protecting land where animals roam, educating communities on the importance of protecting wildlife, and shutting down markets in Asia where ivory is sold.

Another example is African Wildlife Foundation. According to their website, they focus their efforts conservation education, anti-poaching efforts, habitat restoration, and policy advocacy. The Jane Goodall Institute is a final example. According to their website, they focus on environmental education, and promoting sustainable livelihoods through conservation efforts. There appears to be several ways that reputable wildlife conservation organizations go about accomplishing their goal.

According to the International Rhino Foundation, a typical rhino pregnancy lasts around 16 months. According to the Maryland Zoo, Female white rhinos are able to start producing offspring when they are about 6 years old. A female rhino can give birth to one calf about once every 2-3 years. According to ChatGPT, a female rhino could give birth to as many as 14 offspring in her lifetime, but this is uncommon. Usually, conditions do not support this.

Sources:
African Wildlife Foundation, https://www.awf.org/strategic-vision-2020-2030
ChatGPT, https://chat.openai.com/
Jane Goodall Institute, https://janegoodall.org/our-impact/
International Rhino Foundation https://rhinos.org/blog/rhino-moms/
Maryland Zoo, https://www.marylandzoo.org/animal/southern-white-rhinoceros/
World Wildlife Fund, https://www.worldwildlife.org/initiatives/wildlife-conservation

24. Executive Summary:

According to ilo.org, The executive summary provides an overview of the education challenges in Nigeria, with a specific focus on inadequate funding and its consequences. Insufficient financial resources hinder the education system's ability to provide quality education and equal opportunities for all students. This problem leads to limited infrastructure, inadequate teacher training, outdated materials, and overcrowded classrooms, perpetuating educational inequalities.

The impact of inadequate funding extends beyond students, affecting teachers with low salaries, insufficient training, and demotivation, compromising the overall quality of education. The consequences of this problem extend to families, communities, and the nation as a whole, hindering socio-economic progress and impeding national development.

According to ChatGPT, To address this issue, it is crucial to prioritize and allocate sufficient funds to the education sector. Adequate funding will enable equal access to quality education, empower students, and foster a prosperous and equitable society. Investment in infrastructure development, teacher training, curriculum reform, and enhanced governance are key steps to overcome the challenges faced by Nigeria's education system.

Another example is from creativeassociatesinternational:
Additionally, in the northern states of Nigeria, the education crisis is further exacerbated by the Boko Haram insurgency and the presence of internally displaced populations. Recruitment of qualified female teachers for non-formal learning centers remains a challenge. To address this, strategies such as fostering pipelines for rural women to obtain teaching certificates, increasing female community coalition members, promoting women to leadership positions, and mobilizing women's and mothers' groups are recommended. Implementing these strategies can enhance female learning facilitator participation, particularly in rural areas, while advancing women's empowerment through education and workforce participation.

By prioritizing education reforms, addressing funding gaps, and implementing targeted strategies, Nigeria can overcome its education challenges, promote inclusivity, and drive social and economic development.

25. Please list all sources that you used to form your executive summary:

Sources :
1. ChatGPT, *https://chat.openai.com/*
2. Creative associates international, SAIS_Women_Lead_Final_Report_Creative.pdf (creativeassociatesinternational.com)
3. Ilo.org, Section One Context of the National Education System (ilo.org)

STOP **Please go back to Canvas and continue with your learning content. Return to Part D after you have completed your City Hub Activities.**

PART D: Hub Activities Report

IMPORTANT: Complete this section AFTER completing the Canvas Lessons "Hub Activity: Problem Statement" and "Hub Activity: Web Research."

Hub Activity #1: Problem Statement

Please report on your process of getting peer feedback.

26. Who reviewed your problem statement (item #19)? (Give the first and last names of your 2 peers.)

Babafemi Origbemisoye

27. In brief, what feedback did they give to you?

He gave feedback on adjusting the heading of my problem statement.

28. Was their feedback useful to you? Did it feel kind? Why or why not?

The feedback was useful to me. It was practical and kind because it gave me an insight of what was missing,

29. Who did you give feedback to? (Give the first and last names of 2 peers- they may be the same or different peers from above.)

Babafemi Origbemisoye

30. Do you feel that you gave useful and kind feedback to your peers? Why or why not?
Yes I gave useful and feedback to my peer because it was constructive and I highlighted things that should be added to a beautiful crafted already written one.

Hub Activity #2: Web Research
Please report on your process of getting peer feedback.

31. Who reviewed your executive summary (item #24)? (Give the first and last names of your 2 peers.)
Babafemi Origbemisoye

32. In brief, what feedback did they give to you?
He gave feedback that I had to reconstruct my executive summary that answers the problem.

33. Was their feedback useful to you? Did it feel kind? Why or why not?
The feedback was useful because it enabled me to see things in another perspective.

34. Who did you give feedback to? (Give the first and last names of 2 peers- they may be the same or different peers from above.)

Babafemi Origbemisoye

35. Do you feel that you gave useful and kind feedback to your peers? Why or why not?

Yes I gave useful feedback to my peer because it was constructive and I highlighted things that should be added to a beautiful crafted already written one.

STOP **After you updated earlier parts of the worksheet based on your feedback, please go back to Canvas and continue with your learning content. Return to Part E prior to submitting your milestone.**

PART E: Daily 3 Challenge Report

Please answer the following questions honestly. There are no wrong answers! This is your opportunity for self-reflection.

36. How many days out of the past 7 did you do 20 minutes of movement? 3 days

37. How many days out of the past 7 did you write 3 morning pages? 2days

38. Overall, how do you feel you are doing on building your Daily 3 habits? Explain.
I feel motivated and ready to start the day.

39. What is your biggest barrier to staying motivated?

My biggest barrier to staying motivated is not having enough resources.

40. If you have been practicing at least some movement and/or morning pages:

A) What effect (if any) have you noticed on your mood, focus, and productivity?
More relaxed and focused in setting goals.

B) What helps you stay motivated? Having a lot of resources at my disposal.

41. If you haven't been practicing any movement and morning pages, what would motivate you to get started?

Once you have completed this worksheet, export/convert to .pdf, rename it per the instructions, and upload to Canvas as your Milestone 3 Submission. Celebrate a job well done!