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Introduction

- In Laikipia County, conservation issues directly impact human livelihood and health.
- Increasing access to conservation education for secondary school students can help communities expand their knowledge of these issues.

Objective of the Project

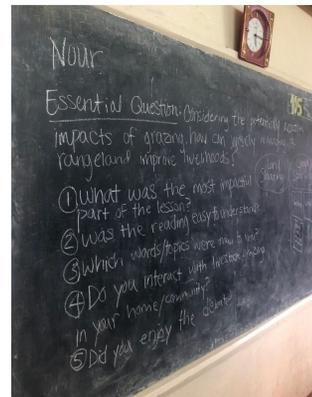
The goal of this project is to explore the current state of conservation education in secondary schools in Laikipia, and develop a curriculum that will address any gaps.

Methods

- Interviews with teachers, Ministry of Education officials, Kenya Institute of Curriculum Development, Laikipia County curriculum support officers, and community members to gather insights about current state of conservation education
- Develop and implement two lesson plans from the curriculum
- Gather feedback from teachers and students to inform the rest of the curriculum

Results

- I taught two lesson plans to 140 students across four secondary schools: Ewaso Secondary, Kimanjo Secondary, Naibor Secondary, and Daraja Academy: “Valuing Biodiversity” and “Land Use and Rangeland Management”
- 95% of students and teachers expressed interest in using my full curriculum.
- Teachers expressed an interest in using the curriculum, but wanted to be provided with supplemental materials to accompany each lesson plan.



After each lesson plan, I collected written feedback from all of the students. This feedback will guide the development of the rest of the curriculum.

Lesson Plan 2: Valuing Biodiversity

Objective: Students will learn the four categories of ecosystem services and apply examples of each service to Laikipia County and East Africa more broadly. Students will also be able to explain examples of trophic cascades in a savannah ecosystem, and the ripple effects of biodiversity loss.

- Each lesson plan includes:
- Objective
 - Key Concepts
 - Materials Needed
 - Procedure
 - Discussion and Extension
 - Assessment

Lesson Plan 9: Land Use and Rangeland Management

Objective: Students will be able to explain the role of land use in impacting the ecosystem, and the purpose of this lesson plan is to explore the impacts of a few important ones that involve current practice versus new alternatives (land sparing via sequestered conservancies or modified land sharing that would involve intensified herding but still letting wildlife roam freely).



Students in the environmental club at Daraja Academy complete an original reading about different land uses.

Discussion

- Based upon this summer’s research, this project shows that there should be a bigger push from the Kenyan government to expand conservation education at the secondary school level.
- Students are interested in lesson plans that include interactive activities and encourage participation and group work.
- When students are presented with conservation topics, they are able to easily draw connections between this field of study and their everyday lives as members of pastoralist communities.

Questions

- Can this curriculum be expanded to other parts of the county or Kenya as a whole?
- What is the best way to provide teachers with supplemental material for the lesson plans?

Conclusion

- There is a strong desire among educators and community members for an expanded conservation curriculum in secondary schools in Laikipia.
- Students in this age group respond well to interactive activities and enjoy doing higher-level thinking through reading assignments.
- This senior thesis project can greatly impact students’ understanding of the ties between public health and conservation.

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