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Alumni Engagement Innovation Fund (AEIF) 2023 in Gabon

BEYOND CODING : CREATIVE AND INNOVATIVE TEACHING

This section marks the final part of our training manual, where we encourage you to tap into your inner creativity to craft engaging STEAM activities for your students. These activities should utilize easily accessible and affordable materials, deeply rooted in your community's context.

Take a moment to consider what resources your community offers and how they can be transformed into valuable learning opportunities for your students.

Look around and identify ways in which STEAM principles can be applied to address pressing community challenges.

Ensure that your content is tailored to your community's experiences and realities, fostering relatability and deeper comprehension of concepts.

For educators in remote and underserved communities like mine, delving into high-tech projects can be costly and resource-intensive. In such contexts, I have embraced the principles of place-based education to educate my students using STEAM concepts.

For instance, I encourage my students to apply their knowledge of Chemistry to tackle local water purification challenges, thus creating access to clean water.

We've also explored using sand logs to mitigate soil erosion along roads, illustrating how classroom knowledge can directly impact the community.



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One particularly exciting project I embarked upon involves bridging the digital literacy gap prevalent in rural areas. Many rural students are familiar with computers in theory but lack hands-on experience.

As a team, we devised a project to bridge this gap by offering practical computer education, emphasizing a human-centered approach.

By imparting computer skills that align with real-life applications, we empower students to leverage their newfound knowledge for community development.

Through these initiatives, we aim to instill a shift in student perspectives – moving beyond theoretical understanding to the ability to translate classroom knowledge into tangible impacts on their communities.

The human body serves as a universally relatable model that grants us a clear understanding of its functioning. This foundational understanding served as the cornerstone of our training program. We successfully facilitated student comprehension by drawing parallels between different computer components and corresponding human body parts. Here are some of our concepts:

The CPU is likened to the human brain, functioning similarly to process information.

Much like the heart, the motherboard acts as the computer's central hub. The monitor is comparable to our eyes, enabling visual perception.

The keyboard, similar to ears, facilitates communication through typing. Speakers, analogous to a mouth, emit sound.



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The mouse functions as the legs, enabling navigation within the computer.

Software can be likened to cells, aiding effective computer functioning.

Hardware stands as our physical body – tangible and observable.

“As teachers we must explore our inner creativity in creating content that helps improve learning outcomes in our classes leveraging very relatable models. This helps simplify learning, making it more real, reasonable and possibly Fun for your students.

This straightforward experiment remarkably enhanced classroom engagement, leading to a remarkable 50% improvement in learning outcomes. The success of this approach lies in our commitment to breaking boundaries and creating tangible, relatable content for our students.

Traditional games commonly enjoyed by children can also serve as effective strategies for teaching STEAM concepts. Embracing creativity and innovation in STEAM education, it's essential to explore diverse methods within your reach to provide a dynamic and engaging learning experience for students.

You can use anything and everything to teach or explain a concept, it is our responsibility to simplify learning.”

Elisha Dorcas



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CLASS ACTIVITY

Let's create innovative content for our classroom:

Using the Lesson plan template provided, Create a content that explore Non-Tech approach to teach a STEAM concept.