
Contribution ID: **50** Type: **Oral Presentation**

# Challenges and solutions for quality STEM education in eastern Congo

*Tuesday, 2 October 2018 16:00 (20 minutes)*

There are a number of challenges for proving a strong university education in D.R.Congo. Academia in DRC suffers from a lack of qualified teachers in STEM and access to information is very limited since the internet is both costly and unreliable. In addition, students come from secondary schools with very limited study skills and weak problem-solving skills. Targeting the real cause of these problems is not straightforward due to the chronic conflicts and violence which have created insecurity and have had negative effects on the population. At our university, we are building strategies to produce conscientious capable graduates despite the challenges mentioned above. Graduates from our program finish with strong academic skills, new mind sets, and they strive to transform the country through creative and innovative technological solutions. Yet we are still looking to improve. We are in process of implementing new pedagogical strategies by utilizing some our best alumni as teaching assistants and by applying active learning methodologies such as flipped classroom, incorporating reading and writing in the physics classroom, and a philosophy of learn a little and apply a lot to foster self-learning through creativity and innovation. Because we still have a limited access to laboratory materials, we are actively investigating digital tools that could be used to enable students to have hands on experience in the physics classroom. We are in the midst of developing a renewable energy research lab to provide students the opportunity to learn through solving real problems that are highly relevant to their context. Through some of our new strategies, we are seeing more and more educated innovators and young long life learners who strive to find solutions and make Congo a better place to live.

## Apply to be<br> considered for a student <br>   award (Yes / No)?

No

## Level for award<br> (Hons, MSc, <br>   PhD, N/A)?

N/A

**Primary author:** Mr VITSWAMBA, Othy Kasereka (Université Chrétienne Bilingue du Congo)

**Co-author:** Prof. LAWSON, Benjamin John (Université Chrétienne Bilingue du Congo)

**Presenter:** Mr VITSWAMBA, Othy Kasereka (Université Chrétienne Bilingue du Congo)

**Session Classification:** Parallel Session 1

**Track Classification:** Track A - Physics at University