COMMUNAUTÉ MATHÉMATIQUE

NATIONAL MATHEMATICS AND PHYSICS OLYMPIADS OF BURKINA FASO

I. Quick Highlights

We successfully organized a national mathematics competition in our country during the school year 2020-2021, which ended in an awards ceremony where talented students, most of whom were low-income students needing help for their studies, were awarded outstanding prizes for their work and excellence. This year, the process of creating the second edition of the contest is underway, with the first round of the contest (already counting 1700 participants) which will be done on the 8th of May. We were awarded many prizes for our work for organization in this nationwide contest, spanning 10 out of 13 regions of the country, including the Castrips Project award (all-paid trip to Boston for a Global conference), the AISA Outstanding service learning award ($2500 in grant money for our project) and more impressive achievements are underway! This year as well, we created a brand new website for our association (cmathburkina.org) to allow students to access resources for preparation for the various contests that we are organizing.

To organize our projects, we have received funds from various local and international organizations: - International School of Ouagadougou (ISO) ; Association of International Schools of Ouagadougou ; Raynal assurances (A local insurance company) ; Société d'Ingénierie et de contrôle du Burkina-Faso (ICB) (A local engineering firm) ; Institut Africain de Management (IAM) (A university which provided well deserved scholarships to our winners) ; ECRB TPI, and many more!

We learned and reflected throughout our project! - Kids can bring positive change to the world in their own ways (age does not matter) ; Perseverance is key ; Teamwork is not dispensable.

II. Sustainable Development Goals

Reduce inequalities#10

We provide opportunities to people from disadvantaged backgrounds to pursue a high quality education. We give opportunities to students from disadvantaged backgrounds to access a college education by providing them with scholarship opportunities and helping them in the process of applying to college.

Quality education#4

We Identify and provide the most talented students with the tools and challenges they need to strive intellectually and later become the scientists who would help build our country.

Because of the existence of our activity, some laureates got accepted to the best colleges of Burkina with full-tuition covered. Others went to universities in Tunisia and France almost for free.

Gender equality#5

Slow down the problem of gender stigmatization in STEM fields by giving extra prizes to the most talented female contestants of the competition and in general, encouraging female students to engage in this exciting field of study.

III. Problem and solution

CMath (from its full name "Communauté Mathématique") is a non-profit organization whose aim is to promote mathematics and science education in Burkina Faso by giving chances for quality education to all. Our goals in organizing the first National Math Olympiad of our country include addressing the problem of gender stigmatization in STEM fields and creating a broader universal acceptance of scientific disciplines in our community.

Our group targets the lack of opportunities for young people in our community to afford and pursue a quality higher education. One of the most significant difficulties that our community's educational system faces is a lack of innovation and mobility in higher education. The lack of modern technology makes it difficult for people to evolve in STEM subjects, and as a result, an excessive number of people move to law or other non-science fields and end up unemployed, despite the fact that the demand for scientific minds continues to grow.

By taking the initial step in organizing our country's first national math olympiads, our group identified and publicly displayed our community's

potential. During the first edition, we collaborated with local sponsors who provided the finalists with rewards such as university scholarships to some of the greatest schools in the country. Special rewards were also given to the girls who participated, demonstrating the female community's potential in this subject. The final ceremony was shown on national television, allowing anybody who understands how critical it is for poor countries to begin investing in STEM subjects to recognize that we have the capacity but lack the means. As the initiative grows, we intend to collaborate with foreign sponsors to provide our finalists with the opportunity to travel overseas and participate in learning experiences that will benefit them for the rest of their life.

IV. Impact

In terms of the broader scenario of people's involvement in STEM subjects, our group was the first to take on the arduous challenge of staging national math olympiads in our country. One of our partners is an organization called CAEC-BF, which is composed of kids who pursued a scientific education in high school. Their mission is to educate young students about career and educational prospects in STEM fields.

Our approach is unique in the sense that it has never been considered before. It is systemic in the sense that we, as students and members of the community, are aware of what is going on in schools. We are aware of our peers' perspectives and aspirations, as well as what we wish people had done for us back when we were in the local system. We are tackling a problem that formerly affected us in order to assist future generations.

To date, our organization has effectively created a system of "Math Clubs" in numerous local schools, which are groups of children to whom we frequently reach out with olympiad preparation resources. We are also working on developing our website, which will provide resources and information about the organization and the National Olympiads. We have also improved our social media profiles (Facebook & Instagram) since the inaugural edition to make information from the organization more accessible to individuals and to truly interact with other changemakers. We were also recently recognized as the champions of the CAS Project Challenge 2021, a worldwide competition that determined that our project had enormous potential and that our efforts were deserving of recognition.

In terms of the olympiads, the competition drew around 1300 competitors from ten different cities. Our goal is to significantly increase the number of people and cities participating. Our outcomes are mostly determined by the overall degree of interest in the Olympiads, as well as the rewards awarded to the winners to aid in their learning.

V. Scale

Our organization's ultimate goal is to have Burkina Faso included on the IMO list.

Before turning to an international program, we aim to build an olympiad system that may be expanded to other African countries. Apart from offering opportunities for people from our area to participate in learning experiences overseas, we are also aiming to provide them with a learning experience at home. This will be accomplished by establishing a local "mathcamp" that can be expanded to a multi-disciplinary camp and will, hopefully, one day invite people from all over the world.

Our organization is a lifelong process, and each year, we receive an increasing number of determined young people eager to join the program while simultaneously making a significant influence on their society. We have no doubt that if we are given adequate assistance, this will succeed.

As of now, our group has largely been partnering with local businesses to help us meet the financial costs associated with the olympiads' organizing. We are always attempting to develop great connections with people who will become a part of the process of making the world a better place by financially covering all of the expenditures required.