**Note de Présentation**

SeeSD est un projet qui vise à promouvoir la culture scientifique au Sénégal. Ce projet a aussi pour but de former des citoyens actifs, capables d'opinions réfléchies et critiques, et acteurs de la construction du Sénégal de demain.

Les différents objectifs de SeeSD sont:

* promouvoir l’apprentissage de la science, la technique, l’ingénierie et les mathématiques
* encourager la pensée critique et l’adoption de la démarche scientifique dans la vie de tous les jours dès le plus jeune âge
* cultiver le plaisir de comprendre, la curiosité et le scepticisme

Pour atteindre ses objectifs, SeeSD se focalise sur 3 aspects:

* l’organisation et l’animation d’ateliers scientifiques à la bibliothèque Issa Samb de Ouakam en partenariat avec la CEEMNA et dans nos écoles partenaires. SeeSD a développé un partenariat avec l’école El Hadji Mbaye Diop (école 2), l’école Mamadou Diagne (école 1) et l’école privée les Mamelles.
* Nous travaillons en partenariat avec des universités, des organisations scientifiques et instructeurs pour créer des ressources pédagogiques. Cette plateforme a pour but de fournir gratuitement des modules en wolof. L’apprentissage dans la langue maternelle est un moyen plus efficace de disséminer des connaissances scientifiques.
* L’organisation d’une conférence annuelle pour promouvoir l’échange entre les institutions au Sénégal et des institutions internationales. Cette conférence a pour but de regrouper les acteurs scientifiques locaux et internationaux et d’aider les jeunes étudiants à développer un réseau international. Notre conférence annuelle se focalise sur les défis à relever au Sénégal en matière d'agriculture, d'énergie, de changement climatique, d'environnement et de la santé.

**Critères d’innovation sociale de votre projet**

Au Sénégal, la promotion de l'enseignement littéraire a conduit à un manque d’enseignants en science. Ceci couplé à un manque de ressources matérielles a débouché sur une négligence des matières scientifiques et un enseignement très théorique. En faisant des ateliers scientifiques dans nos écoles partenaires et à la bibliothèque de Ouakam, nous contribuerons à créer une génération de scientifiques munie d’esprits critiques et capables de trouver des solutions aux problèmes locaux.

Le Sénégal a l'un des marchés les plus dynamiques concernant l'apprentissage en ligne. Elle est classée 1ère en Afrique et 8ème mondiale selon le rapport Docebo 2014-2015.  La création d’une plateforme en ligne gratuite et disponible en wolof est une façon d'élargir notre audience.

**Impact de votre projet**

Cette année, notre thématique est l’eau. Cette thématique explorera les défis de l'eau au 21e siècle dans le contexte sénégalais. En outre, elle expliquera les caractéristiques physico-chimiques de l'eau, son cycle et son traitement pour la rendre potable ou propre pour l'environnement. Nous avons lancé les ateliers scientifiques SeeSD en octobre 2016. Entre Octobre 2016 et Décembre, nous avons accueilli une centaine d’enfants dans la bibliothèque Issa Samb de Ouakam. Notre but pour l’année 2017, c’est d’accueillir au moins 400 enfants dans la bibliothèque, de développer et tester des ateliers dans le domaine de la science, de l’électronique, de la programmation informatique et l’ingénierie (travaux manuels)

**High-concept pitch. In one line, briefly describe what your venture does in a way that we’ll get it.**

SeeSD promotes STEM education in Senegal. The goal is to foster curiosity and critical thinking starting from a very young age.

**What challenge / opportunity are you addressing? Describe the market opportunity.**

The colonial history of Africa has led to a serious disparity in scientific literacy of its citizens. In 2014, World Bank Vice President Makhtar Diop highlighted this fact, stating that fewer than 25% of graduates from African institutions are in STEM fields. The Ebola outbreak and constant food security crisis are a consequence of this lack of STEM professionals. It is necessary to train the next generation of Africans. After all, how can an economy be sustainable if its population is not qualified to maintain its growth? The people are there, the skills have yet to be fostered and acquired.

**Describe your solution (what will you make or do)? For whom are you solving this problem?**

Our goal is to establish an internationally recognized outreach center in Dakar. We are planning to develop partnerships with universities, K-20 schools, research centers, corporates, museums, and NGOs. This center will be a space to develop hands-on learning resources, carry STEM workshops, and lead conferences. Our programs will target K-20 students. Our goal is to train the next generation of African scientists.

**Who are your competitors, and who might become competitors?**

In Senegal, there are STEM organizations such as SenEcole, Jjiguene Tech Hub and Fablab. Their main focus is STEM education through promotion of robotics, engineering and technology.

**How are you going to generate revenue?**

We are developing a sponsorship program, where individuals and organizations can directly sponsor our activities. We are planning to establish an outreach center opened to the public in exchange of an admission fee.

**How are you connected to the challenge / opportunity? Describe your personal nexus.**

I was born and raised in Senegal and familiar with the local challenges and the issues regarding STEM education. I have also experienced working in STEM organizations for many years in France and USA. Throughout these years, I have developed an important network with local STEM organizations, science museums, and universities, which will be important connections. I have created STEM learning tools and performed research. My goal is to use my experience and connections to create STEM educational opportunities for Senegalese people.

**What do you envision the long-term impact of your venture to be?**

We envision having a policy impact through encouraging governments to fully integrate hands-on activities into the school programs.  We are planning to create many hands-on learning resources for K-20 education and will train local teachers and professors by bringing internationally renowned STEM professionals. We envision establishing multiple Outreach centers in Africa. This will contribute towards creating a STEM environment and inspiring the next generation to go into STEM fields, perform research and create technology that will benefit the continent.

**Why are you the right team to build this company?**

Our leadership team is well equipped and composed by many Senegalese but also by people from different countries such as USA, Canada, Taiwan, France, India, and Italy. This diversity of ideas and experiences are shaping each project and making more cohesive, inclusive and open. Most of us are well tied into the Senegalese community and familiar with local challenges. Some of us have also experienced working in STEM organizations and are connected to many international universities. We also have social appeal and youthful energy to entice followers and fellow educators to join our mission.

**What other skills / expertise, outside of the existing team, are needed to ensure success in your venture?**

Most of us are scientists or engineers. We need people with business and marketing skills to help us find capital to finance our venture. We are also in the process of building a MOOC platform that provides online STEM workshops in different local languages. This platform needs more expertise in matters of web development and creating tools that can make learning more interactive and effective. In addition, we also need people with law experience to give us advice about how to operate especially in the African context.

**What potential industry partners and / or customers have you met with to validate your idea?**

Oregon State University has validated this idea through providing mentorship and seed funding to start the hands-on workshops. The Oregon Museum of Science and Industry is assisting us in designing hands-on workshops. We met and discussed with many school directors, who validated this project in Senegal. The Clinton Global Initiative, One Young World, the Scholarly Publishing and Academic Resources Coalition and Sparknews also validated this idea by giving us a platform to share our project.

**Describe for us the market research you’ve conducted: detail data collection method, audience reached, and number of people engaged.**

We collected metrics from the United Nations, the International Monetary Fund, UNESCO, the CIA, the Senegal emergent plan and the Senegalese government. We have interviewed school directors and board members of organizations in Senegal. We have participated in entrepreneurship events in Senegal to test our services and talked about the project. The lack of STEM professionals is a major problem.

**Have you received any funding to date?**

So far, we received small seed funding from the Clinton Global Initiative/Oregon State University network ($800). We have also received another seed funding from the President’s Commission on the Status of Women ($1200)to carry on our hands-on science workshops in our local center. We raised another $1200 through donations.

**Please share with us your timeline and corresponding milestones for the next 6 months.**

We plan to continue establishing a more robust network that supports and participates in establishing our Outreach center. We are seeking to gain more financial support through sponsorship to provide a proof of concept for our outreach program and develop more workshops. So far, we are working on developing workshops related to computer coding, vocational training, electronics and engineering. In April 2017, we will organize a youth camp and launch our coding workshops.

**What is your career vision and how, in your opinion, will it contribute to the development of Africa?**

To make Africa innovative, competitive and an economic power, we need STEM education. A STEM education system that is inclusive, open, and provide quality hands-on education from a very young age. This needs to be achieved without losing our culture and traditions. Therefore, we have to develop tools that are relevant to the local context. We need to promote curiosity, critical thinking so people can make informed and logical decisions. My career vision is to participate into developing the STEM ecosystem that allows people to learn how to learn. It is to promote exchange programs between foreign STEM institutions to gain and share resources that will be adapted to fit our realities. With that, I see empowered Africans who can create the next big technologies and make the next big discoveries.