





# FACT SHEET

## APPLIED SOCIAL SCIENCES/EDUCATION





Project Commencement: 2019

### **AFRICA**

Higher Education Centres of Execellence for Development Impact (ACE Impact)

### TABLE OF CONTENT

### **APPLIED SOCIAL SCIENCES/ EDUCATION**

- 03 National School of Statistics and Applied Economics (ENSEA)
- Africa Centre of Excellence for Innovative and Transformative STEM Education (ACEITSE)
- Centre of Excellence in Sustainable Cities in Africa (CERViDA DOUNEDON)
- Centre of Excellence in Innovative Teaching / Learning of Mathematics and Sciences for Sub-Saharan Africa (CEA / IEA-MS4SSA)



### National School of Statistics and Applied Economics (ENSEA)

#### University and Host Country:

National School of Statistics and Applied Economics (ENSEA) Cote d'Ivoire

#### Centre's Website:

www.ensea.ed.ci

#### Centre Leader:

Dr. KOUADIO Kouassi Hugues

#### E-mail Address:

hkouadio@ensea.ed.ci / hkouadio@yahoo.fr Secretariat: ensea@ensea.ed.ci

#### Deputy Centre Leader:

Jean Arnaud KOUAKOU

#### E-mail Address:

ja.kouakou@ensea.ed.ci

#### Primary Thematic Disciplines of the Centre:

- STATISTICS APPLIED ECONOMY
- Data Science and Policy Evaluation
- Micro and Macroeconomic Modelling

The Ecole Nationale Supérieure de Statistique et d'Economie Appliquée (ENSEA) in Abidjan is the main statistical training institution in Africa. Created in 1961 with the support of the European Commission and the French Cooperation, its vocation is the training of African statisticians for both the private and public sectors.

ENSEA carries out three types of activities: initial training, continuing education and research (academic and/or applied). In addition to the latter, it also provides technical assistance at the request of public, private and para-public institutions in its fields of competence.

The quality of the training delivered by ENSEA enabled it to obtain the label of Regional Centre of Excellence of the UEMOA in 2005 and that of African Centre of Excellence of the World Bank in 2015.

Since its creation, ENSEA has trained more than 4,000 statisticians from about twenty African countries, including non-French-speaking countries such as South Africa, Liberia, Equatorial Guinea and Cape Verde.

It is part of the African Statistical Training Schools (ESA) Network, the African Group on Statistical Training and Human Resources (AGROST) and the Global Network of Institutions for Statistical Training (GIST).

#### **KEY CAPABILITIES**

- A pleasant working environment with adequate infrastructures on a 3 ha site including a welcoming green space.
- 4 blocks of buildings housing classrooms, research rooms, offices and a 200-seat amphitheatre adapted to the size of the institution
- A University Restaurant, cafeteria, infirmary and studios for visiting professors
- 3 machine rooms for computer work and 1 language laboratory with 21 seats
- 2 cities for students and buses for group outings

#### KEY OBJECTIVES AND EXPECTED RESULTS

The general objective, through the project, is to make ENSEA an attractive and internationally recognized centre of excellence in its two key areas. Five (5) major specific objectives are associated with it:

- Improving the quality and international recognition of the training offer; This includes reviewing the content of the pedagogical offer in both continuing and initial training, and having the institution and its training programmes accredited.
- Developing the quality and visibility of research; This must be reflected in the development of doctoral training and an increase in the scientific publications of researchers.
- Adapting the technological environment to the needs of training, research and administration; The aim is to modernise infrastructure and strengthen IT capacity.
- Provide a quality environment for students;
   This must be reflected in an improvement in its attractiveness, an increase in reception capacities and the implementation of initiatives to strengthen regionalisation and gender promotion.
- Provide ENSEA with the necessary means to ensure its development; This includes modernizing its financial and accounting services, improving its communication activities and installing and operationalizing credible governance bodies.

#### **MAIN ACHIEVEMENTS TO DATE**

- Pedagogical Renovation: Creation of a 3-year cycle equivalent to a bachelor's degree, called Statistical Analysts and revision of the Cycle des Ingénieurs Statisticiens Économistes;
- International Accreditation: International accreditation of the ISE sector obtained in October 2019 according to the Eur-Ace Label by the CTI;
- Doctoral Training: Opening of a doctoral training with about ten students in two classes;

- Valorization of Research: Two editions of the International Conference on Statistics and Applied Economics (CISEA) were held.
- Management and Governance: The functioning of three CEA bodies (Steering Committee, Technical Committee and Scientific Council) was ensured.

#### PRIMARY RESEARCH FACULTY MEMBERS

#### 1. Prof. KEHO Yaya

keho.yaya@ensea.ed.ci yayakeho@yahoo.fr Statistics Economics of Development

#### 2. Prof. ESSO Loesse

loesse.esso@ensea.ed.ci Lesso@yahoo.fr Statistics MacroEconomy

#### 3. Dr. FE Doukouré Charles

Fe.doukoure@ensea.ed.ci doukoure.charles@gmail.com International Economy

#### 4. Dr. MOUSSA Kouamé Richard

richard.Moussa@ensea.ed.ci moussakr@gmail.com Statistics Health Economics

#### 5. Dr. FASSASSI Raimi

raimi.fassassi@ensea.ed.ci rfassassi@yahoo.fr Population Economy of Development

#### 6. Dr. MOSSO Rosine Addy

rosine.mosso@ensea.ed.ci raddym@yahoo.fr Health Economics Demography

#### 7. Dr. SIKA Glebelho Lazarus

lazare.sika@ensea.ed.ci sikalazare@yahoo.fr Population Economy of education

#### 8. Dr. SORO Nahoua

nahoua.soro@ensea.ed.ci mariejudithsoro@gmail.com Development Economics

#### 9. Dr. GAKPA Lewis

gakpalewis@ensea.ed.ci gakpalewis@yahoo.fr Development Economics

#### 10. GBENRO Nathaniel

nathaniel.gbenro@ensea.ed.ci nathacole2000@yahoo.fr Finance, Data Science and Development Economics



91764 Palaiseau. France

Tel: +33 (0)1 70 26 67 00

Website: http://www.groupegenes.fr Email: francois.coguet@ensai.fr

#### 2. Université Laval

2325 de l'Université Street. Quebec City, Quebec G1V 0A6

Tel: + 1 877 785-2825

Website: https://www.ulaval.ca/ Email: issouf.soumare@fsa.ulaval.ca

#### 3. University of Ottawa

75 Laurier Avenue East Ottawa ON K1N 6N5 Canada

Tel:: +1 613 -562-5800 (1225) https://www.uottawa.ca/fr afriquesub@uottawa.ca

4. Institut de recherche pour le développement (IRD)

> 44 Boulevard de Dunkerque 13002 Marseille, France

Tel: +33 4 91 99 92 00

Website: https://www.ird.fr/ Email: roubaud@dial.prd.fr

5. Observatoire économique et statistique

d'Afrique subsaharienne (AFRISTAT), BP E 1600, Bamako, Mali

Tel: (+223) 20 21 55 00 Website: www.afristat.org Email: afristat@afristat.org programs/c4d2

Email: skanyanda@worldbank.org

7. Institut Sous-régional de Statistique et d'Economie Appliqué (ISSEA)

Rue Pasteur, Yaoundé, Centre, Cameroon

Tel: +237 22 22 01 34

Website: www.issea-cemac.org Email: isseacemac@yahoo.fr

8. Ecole Nationale de la Statistique et de l'Analyse Economique (ENSAE)

Rocade Fann Cerfvolant. BP 116 RP Dakar, Senegal

Tel: +221 33 859 43 30 Website: www.ensae.sn Email: abdou.diouf@ansd.sn

9. Eastern Africa Statistical Training Centre (EASTC)

P.O Box 35103, Dar es Salaam, Tanzania

Tel: +255 22 292 5000

Website: http://www.eastc.ac.tz

Email: info@eastc.ac.tz

10. Makerere University

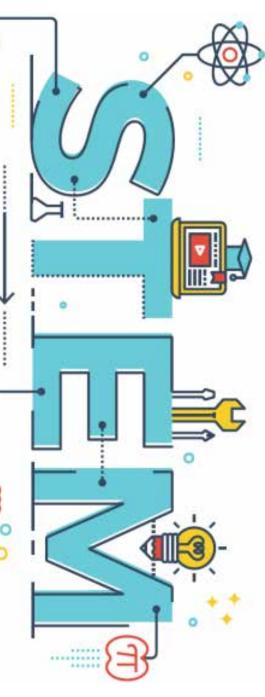
P.O. Box 7062. Kampala, Uganda

Tel: +256 414 541 558

Website: https://www.mak.ac.ug Email: agssekiboobo@isae.mak.ac.ug



# Africa Centre of Excellence for Innovative and Transformative STEM Education (ACEITSE)



#### University and Host Country:

Lagos State University, Lagos State. Nigeria.

#### Centre's Website:

https://acenpee.abu.edu.ng

#### Centre Director:

Distinguished Professor Peter Okebukola

#### E-mail Address:

pokebukola@yahoo.com

#### Deputy Centre Director:

Professor Tunde Owolabi

#### E-mail Address:

owot2002@yahoo.co.uk

#### Deputy Center Director (Science):

Professor Shehu Akintola

#### E-mail Address:

shehu.akintola2@gmail.com

#### Primary Thematic Disciplines of the Centre:

STEM Education

The Lagos State University (LASU) won the bid for LASU to host the World Bank- funded Africa Centre of Excellence for Innovative and Transformative STEM Education (LASU-ACEITSE) in 2018. Within the enterprise of teacher education, science, technology, engineering and mathematics (STEM) teacher education has occupied a respectable niche.

This prominence derives from the critical role that science and technology play in development. The future of humanity, it is often claimed, is inextricably linked to science and technology. This elevates the status of STEM teachers since they are concerned with preparing future scientists who in turn, will drive the engine of science and technology for society's growth and development. In this light, the ACEITSE is poised for improved quality of STEM education in West Africa through innovative and transformative teacher training and leadership.

The enduring logic is: fix the teacher factor in the education enterprise and not less than 30% of the potency of education in addressing developmental challenges would have been fixed. The Centre is unique for its Culturo-Techno-Contextual Approach (CTCA) model for training quality science, technology, engineering and mathematics (STEM) teachers for Nigeria and the African continent.

#### **KEY CAPACITIES**

- One Centre building donated by the University, called the ACEITSE building
- Accommodation facility for visiting professors and foreign students on campus
- Procurement and installation of essential office furniture and classroom equipment
- In lockdown, students receive lectures in a unique mix of live lectures, live workshops, discussion forums, quizzes and assignments.

#### **KEY OBJECTIVES AND EXPECTED RESULTS**

- 1. To offer unique, qualitative and transformative training aimed at promoting excellence and innovation in STEM teaching, development of 21st century skills and leadership using the CTC Approach.
- 2. To serve as a train-the-trainers' centre of excellence for skilled STEM master teachers who will later undertake training of other teachers and school leaders and policy makers.
- 3. To develop and apply models of innovative STEM teaching and learning based on cutting-edge research and practice.
- 4. To address science and technologyrelated national and regional development challenges through the provision of bettertrained STEM teachers.
- 5. To undertake continuous monitoring of the critical mass of master teachers trained by the Centre in institutions where they are multiplying their innovative and transformative skills.

#### **MAJOR ACCOMPLISHMENTS TO DATE**

- Advertisement/application for admission of students into the postgraduate programmes of the Centre - October 2019
- Upgrading/equipping of university donated building with state-of-the-art facilities for use of ACEITSE – Oct-Dec 2019
- Commencement of postgraduate students' lectures at the Centre – January 2020
- Inauguration and hosting of inaugural meeting of the sectoral Advisory Board of the Centre -February 2020
- Movement of lecture into virtual classroom using a combination of Zoom and the Centre's virtual classroom environment – April 6, 2020

#### PRIMARY REGIONAL AND GLOBAL PARTNERS

#### 1. Professor Sahr P. T. Gbamanja,

Fourah Bay College - University of Sierra Leone

Tel: +23 276 979 465

Email: profgbamanja@yahoo.com

#### 2. Professor William C. Kyle

**Executive Director** 

University of Missouri, St. Louis

Tel: +13 146 065 951

Email: bill\_kyle@umsl.edu

#### 3. Professor Juma Shabani

Director, Graduate School

University of Burundi, Bujumbura

Tel: +257 297 78844

Email: jushabani@yahoo.fr

#### 4. Professor Alejandro Gallard

Director - Georgia Southern University, Georgia, USA

Tel: +18505591546

Email: agallard@georgiasouthern.edu

#### 5. Professor Jophus Anamuah Mensah,

Former Vice Chancellor

University of Education, Winneba,

Ghana

Tel: +233 206 774 104

Email: jophusam@gmail.com

#### 6. Ambassador Adebola Labiran

UNESCO Institute for African Culture and International Understanding Olusegun Obasanjo Presidential Library, Abeokuta

#### 7. Prof. Léonard Todjihoundé

Rector, Université d'Abomey-Calavi, Cotonou. Republic of Benin

#### 8. Mr. Leo Stan Ekeh

Executive Chairman Zinox Group

gideon@zinoxtechnologies.com

#### PRIMARY RESEARCH FACULTY MEMBERS

#### 1. Prof. Tunde Owolabi

owot2002@yahoo.co.uk CTC approach to Science teaching and teacher education/Indigenous knowledge system

#### 2. Prof. Shehu Akintola

shehu.akintola2@gmail.com Immigrant STEM teacher education

#### 3. Prof. Nwabuno Nwaboku

ncnwaboku@yahoo.com
Technology in STEM teaching and teacher
education

#### 4. Prof. Rafiu Okuneye

laolurafiu@yahoo.co.uk STEM Teacher Training

#### 5. Prof. Benjamin Aribisala

benjamin.aribisala@gmail.com Artificial Intelligence

#### 6. Prof. Silas Egbowon

silasegbowon@gmail.com
Technology in STEM teaching and teacher
education

#### 7. Dr. Rasheed Sanni

riosan1@yahoo.co.uk

Teacher knowledge and teacher learning in mathematics education

#### 8. Dr. Michael Ahove

tjahove@gmail.com

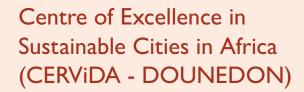
STEM instrumentation with development with CTC flavor and environmental education

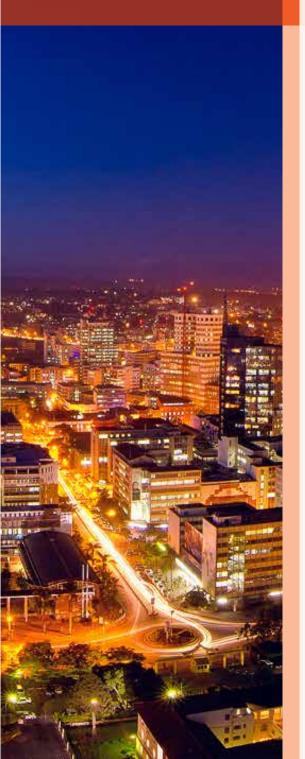
#### 9. Dr. Hakeem Akintoye

akintoyeakm@gmail.com CTC Approach to Science teaching

#### 10. Dr. Yemisi Oludipe

olajumoke.oludipe@lasu.edu.ng STEM teachers' knowledge





#### University and Host Country:

University of Lomé, TOGO

#### Centre's Website:

www.cervida-togo.org

#### Centre Director:

Professor Coffi Cyprien Aholou

#### E-mail Address:

caholou@gmail.com

#### Primary Thematic Disciplines of the Centre:

Sustainable Urban Management (environment, sanitation, mobility, urban economics and marketing)

Brief description of the centre The centre is an initiative of the lecturer-researchers of the University of Lomé in an interdisciplinary approach, to contribute through training and research, to the sustainable urban development of African cities by taking into account the realities of the continent.

The aim is to train young executives in urban management, to strengthen the capacities of professionals in the urban sector through short-term training courses, to develop a university-industry partnership and, finally, to conduct research activities in the fields of urban ecology, sanitation, urban mobility and economy, and urban marketing, the results of which will be made available to managers of African cities to enable them to achieve Goal 11 of the MDGs.

#### KEY OBJECTIVES AND EXPECTED RESULTS

- Existence at the University of Lomé of training offers for new middle and senior managers in sustainable urban management (master's and doctorate level).
- The results of research activities in the field of sustainable urban management are available and made available to professionals in the sector.
- Short-term training packages developed and available for capacity building of urban sector professionals
- Offering expertise to local authorities for the preparation of available urban development plans
- A framework for consultation between teacher-researchers and urban development professionals is created.

#### **KEY CAPACITIES**

- Support from the University authorities and the Togolese Government
- The Centre has human resources and regional and international scientific cooperation at its disposal
- The University has provided the Centre with premises to start its activities pending the construction of its own premises.
- The Centre enjoys broad support from professional circles in the urban sector (sectoral ministerial departments, local authorities, professional associations (architects, town planners, sanitation technicians, etc.).

#### MAJOR ACCOMPLISHMENTS TO DATE

- Creation and appointment of the Centre's Leaders
- Signing of the financing agreement between the Togolese Government and the World Bank on the one hand, and a performance contract between the University and Centre managers and the Togolese Government on the other hand.
- Establishment of support bodies for the implementation of the centre's objectives (Sectoral Advisory Council (SAC) and International Scientific Council (ISC)).
- Development of an implementation plan (PMO) which is currently being finalized.
- Signing of cooperation agreements with academic institutions with the same objectives



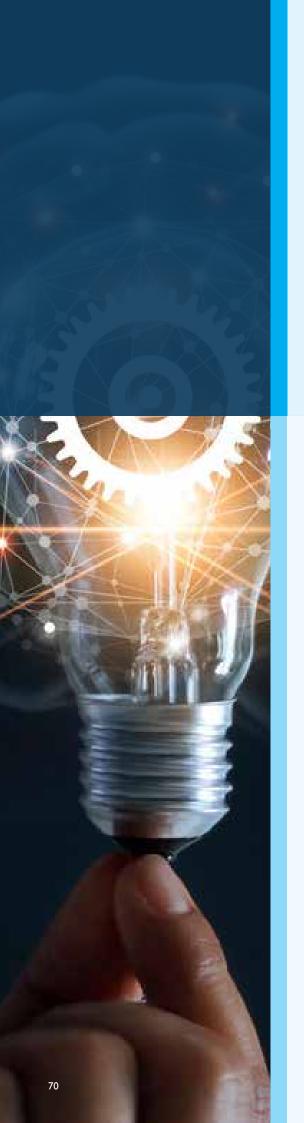
- Ecole Africaine des Métiers d'Architecture et d'Urbanisme (EAMAU) (Inter-African School -Lomé Togo)
   Contact person: DR. Moussa DEMBELE, Director General (m.dembele@eamau.org)
- Ecole Polytechnique de Thiès (EPT) (Senegal).
   Contact person: Professor Alassane DIENE,
   Director General (adiene@spt.sn)
- 3. Senghor Alexandria University (Egypt). Contact person: Professor Thiery VERDEL, Rector (recteur@usenghor.org)

- 4. Université Bretagne Ouest (UBO) (Brest France). Contact person: Professor René Paul DESSE (rene-paul.desse@univ-brest.fr)
- Abertay University (Scotland United Kingdom): Contact person: Professor Joseph AKUNA (J.Akuna@abertay.ac.uk)
- 6. Université Québec Troix Rivière (UQTR) (Québec Canada). Contact person: Professor James
- 7. TonyiAGBEBAVI (James-Tonyi.A.ebavi@uqtr.ca)

#### PRIMARY RESEARCH FACULTY MEMBERS

- Professor Gnon BABA gnonbaba@gmail.com Environmental Chemistry, Waste, Sanitation
- 2. Professor Kssao GNANDI kgnandi@gmail.com Environmental Geochemistry
- Dr. Cyprien Coffi AHOLOU (Lecturer) caholou@gmail.com Urban Sociology
- Dr. Komlan AVOUGLA (Senior Lecturer)
   avougla@yahoo.fr
   Urban Sociology
- Dr. Mafobatchie NANTOB (Senior Lecturer)
   Nantob\_bobo@yahoo.fr
   Urban Sociology

- 6. Dr. Edem KOLEDZI (Senior Lecturer) edemledzi@gmail.com
  Environmental Chemistry and Waste
- 7. Dr. Madjouma KANDA (Lecturer) kmadjouma@yahoo.fr Applied Ecology
- 8. Dr. Bassai Bodjona (Master Assistant) bodjonabassai@mail.com Environmental Chemistry Waste Sanitation
- Dr. Koko Zébéto HOUEDAKOR (Master Assistant)
   Koko.houedakor@gmail.com
   Urban Geography
- 10. Dr. Koffi ADJALO (Assistant) Koffi.adjalo@gmail.com Urban Geography



Centre of Excellence in Innovative Teaching / Learning of Mathematics and Sciences for Sub-Saharan Africa (CEA / IEA-MS4SSA)

#### University and Host Country:

Abdou Moumouni University (Through the École Normale Supérieure), Niamey (Niger)

#### Centre's Website:

www.cea-ms4ssa.org

#### Centre Leader:

Prof. MADOUGOU Saïdou

#### E-mail Address:

nassara01@yahoo.fr

#### Deputy Centre Leader:

Ms. IBRAHIM DOKA Dahiratou (Lecturer)

#### E-mail Address:

dahiratou@yahoo.fr

#### Primary Thematic Disciplines of the Centre:

STEM Education - Teacher training in Mathematics and Sciences (PC and SVT) and research in teaching of these disciplines.

It is recognized that education is the basis for the development of any individual, human community or nation. Studies on the teaching of mathematics and science in Sub-Saharan Africa point to a poor performance of pupils and their under-enrollment in scientific series, as well as an insufficiency of quality teaching / learning conditions.

The expected impact on the development challenge will be the improvement of the education level of young people aged 15 and over, the reduction of gender disparities in these disciplines and contribute to the elevation of the teaching status of these last as a major priority.

In this perspective, the École Normale Supérieure (ENS), through this Center, will focus on excellent scientific, professional and technical training. The Center will offer diploma courses at the Bachelor, Master and Doctorate levels as well as continuing education and retraining for education professionals. The lessons given in will train independent teachers, capable of implementing contextualized and quality teaching-learning. The Center will also conduct applied research in mathematics, physical sciences, SVT and the teaching of these disciplines. For the smooth running of its activities, the Center will establish academic, sectoral and industrial partnerships with different institutions.

#### KEY OBJECTIVES AND EXPECTED RESULTS

General objective: To contribute to the improvement of the quality of teaching / learning of mathematics and sciences (Physical Sciences and Life and Earth Sciences) in Niger and in the sub-region.

#### Specific Objectives:

 Train independent teachers, at the license, master and doctorate level, capable of implementing quality contextualized teaching-learning in mathematics and science in order to stimulate the performance of our countries in science, technology, engineering and mathematics (stem);

- Provide the center with accredited and innovative training programs of good teaching / learning practices in mathematics and science based on new pedagogical approaches (pmi / psi);
- Develop teaching materials and textbooks adapted to the needs of our countries;
- Develop applied research in didactics of mathematics, physical and chemical sciences and in life and earth sciences;
- Provide the center with adequate teaching and research infrastructure;
- Establish collaboration with other regional and international centers in order to share and disseminate good teaching / learning practices;
- Increase the visibility of the ens, make it more competitive regionally and internationally in terms of teacher professional training.

#### The expected results are:

- Independent teachers, at the license, master and doctorate level in mathematics and science, capable of implementing quality contextualized teaching-learning, in order to stimulate the performance of our countries in science, technology, engineering and mathematics (stem) are trained;
- Exchanges of professors (teachersresearchers) and students are carried out;
- Accredited training programs and adequate teaching and research infrastructure are in place;

- Teaching materials and textbooks adapted to the needs of our countries are developed;
- Joint research projects are implemented;
- Research results are valued;
- The institutional capacities of national and regional partners are strengthened;
- Multiple and lasting collaborations are established between the different partners.

#### **KEY CAPABILITIES**

- Offices for administration and teachers as well as classrooms for Bachelor and Master and Doctorate students;
- Educational laboratories (SVT, Physics and Chemistry and didactics) and research laboratories in these disciplines;
- A library of more than 18,000 books and 180 reading places and 16 documentary research computers.
- A social campus of the university housing the students (university pavilions; restaurants; sports complex; medico-social service, ...);
- A distance learning platform (moodle) used for our sub-regional training offers.

#### MAIN ACHIEVEMENTS TO DATE

- Elaboration and submission of all institutional preparation documents (basic and total);
- 250 students enrolled in License and Master training during the 1st year of the Center;
- 200 students have completed work placements of at least three months in the workplace during the 1st year;
- Several publications produced including two (02) accepted by the Regional Facilitation Unit (AAU);
- An increasingly strong partnership with the socioeconomic and external environment.



#### **REGIONAL PARTNERS**

- Ouagadougou Institute of Sciences (Burkina Faso);
- Higher Institute of Educational Sciences of Guinea (ISSEG of Guinea);
- 3. École Normale Supérieure (ENS) of Atakpamé (Togo);
- 4. École Normale Supérieure (ENS) of Natitingou (Benin).
- 5. The different ACE regional impact on the same theme or with collaboration interests.

#### **INTERNATIONAL PARTNERS**

- The Worcester Polytechnic Institute (Boston – USA);
- 2. The New Jersey Center of Teaching and Learning (New Jersey USA);
- 3. The Research Institute for Development (IRD- France).



- M. ALHOU Bassirou (PhD)
   alhoubass@yahoo.fr
   Hydrobiology and Didactics SVT
- Mme GOZA Nana Aïcha (PhD)

   aichagoza@yahoo.fr

   Psychopedagogy and General Didactics
- M. KAKA Mohamadou (PhD) mohamadou\_kaka@yahoo.fr Physical
- M. BOUKARY M. Sani (PhD)
   mahamanesani.boukary@gmail.com
   Physics / Didactics of Physical Sciences
- M. BOUKARI Issiaka (PhD) issiaka\_boukari@yahoo.fr Chemistry

- M. MAHAMAN KABIR M. (PhD) mahamankabir@yahoo.fr Mathematics
- M. RABIOU Ousman (PhD)
   rousman@yahoo.com
   Mathematics Didactics
- 8. M. GAZIBO K. Mohamed (PhD) mgazibok@yahoo.fr Mathematics
- M. HALILOU Oumarou (PhD) omarhalilou2000@yahoo.fr Biology / SVT
- 10. M. ALMOU Mamane (PhD) almou\_ens@yahoo.fr Chemistry

