

Report twinning activity Universidade Eduardo Mondlane – Maastricht University in the framework of the UDI-A project

13 May 2019

Introduction

EM and UM are twin partners in the UDI-A project. UEM would like the twinning between UEM and UM to focus on the introduction of problem-based learning (PBL) at UEM. During the UDI-A event in Luanda on 1 October 2019 the delegations of UEM and UM agreed to organise a twinning activity on PBL starting in the first quarter of 2019. It was decided to organise a training in PBL followed by the development of a master programme in nutrition that would be based on a PBL format. The master programme will be multidisciplinary to which staff of various faculties, including UEM staff involved in the Centre for Academic Development and Innovation (CADI), are expected to contribute. The advantage of this set-up is that several faculties and the CADI will become familiar with PBL without having to radically overhaul existing programmes. With this experience they will be equipped to facilitate other departments and faculties that want to make a transition of programmes to PBL.

Experiences at UEM with PBL

In the past, several faculties at UEM tried to introduce PBL, but these attempts were not successful for various reasons. The most important reason may have been that the initiative came from the top-down. Nevertheless, there are still staff who think that introducing PBL is a good idea because a PBL curriculum has many advantages. In PBL, education is organised around challenging students to solve problems that are similar to the problems they will encounter in their future careers. Using a combination of small-group work and individual research, students seek possible solutions to the problem and get feedback. Students are in control of their own education, and the tutor is there to facilitate the learning process. Problem-Based Learning helps students to retain information better, to think about problems independently and to develop interpersonal skills. Students are expected to be active participants in class and they are given plenty of space to develop their own ideas.

Rationale for establishing a programme in nutrition

In Mozambique, 43% of the children are chronically malnourished and suffer from stunted growth. This will seriously affect their future health and wellbeing, and it limits their capacity to contribute to the further development of the country. In many cases the cause is not primarily inadequate supply of food. A key factor causing inadequate nutrition resides on the consumer side of the value chain. People in the rural as well as the urban areas, lack awareness of what a healthy and balanced diet consists of. This is exacerbated by cultural beliefs that restrain people from changing their behaviours towards improved nutrition. Mozambique lack the expertise with the capacity to develop and implement policies and programmes to effectively address problem in nutrition. A master programme on nutrition will address this gap.

Training in PBL

On 11 March Geraldine Beaujean, Elena Ambrosino and Heinz Greijn of Maastricht University facilitated a workshop introducing Problem Based Learning (PBL). The workshop was organised at the premises of the faculty of education and representatives of various faculties were invited to participate. In total there were 15 participants from the faculties of Education, Veterinary Sciences, Medicine and Biological Sciences.



Preparing for the establishment for a PBL master programme in nutrition

On the following days (12, 13 and 14 March) a team composed of staff of UEM and UM visited various external stakeholders that are activities the area of nutrition in Mozambique, including: Global Alliance for Improving Nutrition (GAIN), the Ministry of Health (through the Department of Nutrition), FDC, the Scaling up Nutrition Business Network (SBN), the Secretariado Técnico de Segurança Alimentar e Nutricional (SETSAN), USAID and the Netherlands Embassy.

These stakeholder consultations confirm that Mozambique lacks the human resource capacity to address the nutrition problems effectively. The Ministry of Health only employs 256 staff with an education in nutrition. Out these, only a handful have a degree at master or PhD level obtained at a university abroad. The nutritionists are trained primarily in the physiological aspects of nutrition. However, change towards improved nutrition requires a much broader spectrum of knowledge and skills. Mozambique needs professionals in nutrition who, in addition to a solid background in the science of nutrition, possess also other competencies, including knowledge and skills to:

- Change people's behaviour toward healthy nutrition (for example communication)
- Influence decision makers at all levels of government to create an enabling environment to promote healthy nutrition and to protect consumers from sub-standard food products
- Advise and support producers and processors of agricultural products to produce good quality food

Objective of the master programme in nutrition

The objective of the master programme in nutrition will be to deliver graduates who will have acquired a complete set of competencies required combat the problem of malnutrition in Mozambique. In addition to knowledge in the science of nutrition, the competencies will also include knowledge and skills to influence the behaviour of consumers and to effectively influence decision makers of the private and public sector.

Features of the master programme in nutrition

The programme will be offered by Universidade Eduardo Mondlane (UEM). The programme will be developed with support from Maastricht University and funded by the Orange Knowledge Programme.

The master programme will be a multi-disciplinary two-year programme with in the second year an internship with industry, government or an NGO including research project.

Disciplines contributing to the programme will include: nutrition, agriculture, veterinary sciences, medicine, food technology, sociology, psychology, cultural anthropology, communication and marketing.

The disciplines will be offered in an integrated way using the education method of problem-based learning (PBL). Using a combination of small-group work and individual research, students will be confronted with problems that resemble the challenges that they will encounter in their professional careers. Students are expected to actively search for knowledge from a variety of disciplines. Students are in control of their own education, and the tutor is there to facilitate the learning process. Problem-Based Learning helps students to retain information better, to think about

problems independently and to develop interpersonal skills. This way students will develop the skills and behaviours needed in their future careers and their chances to find employment will increase.

In the design stage of the curriculum development process consultations will be held with external stakeholders concerning the problems students will work on during their study, and concerning the competencies that students need to have acquired at the end of the master programme. These external stakeholders include actors from industry, government, civil society and NGOs, especially those that are active in Zambezi Valley including the Beira corridor. Stakeholders that have expressed interest in participating in the design of the programme and/or in offering internship placements are: the Global Alliance for Improving Nutrition (GAIN), the Ministry of Health (through the Department of Nutrition), FDC, the Scaling up Nutrition Business Network (SBN), the Secretariado Técnico de Segurança Alimentar e Nutricional (SETSAN), USAID and the Netherlands Embassy.

The entry requirement for the master programme are a bachelors in nutrition, Biology and Health or related sciences. There will be a foundation programme for students who do not entirely meet the entry requirements.

A sponsorship programme involving contributions from external stakeholders will be developed to support students with excellent entry qualifications but who lack the financial means to participate in the master programme.

Report by Heinz Greijn, Maastricht University, 2 April 2019

University Development and Innovation – AFRICA is a Project coordinated by NOVA, which intends to promote the capacitation of four African Universities: two from Angola, Universidade Agostinho Neto (Luanda) and Universidade Katyavala Bwila (Benguela), and two from Mozambique, Universidade Eduardo Mondlane (Maputo) and Universidade Lúrio (Nampula).

It aims to empower these Higher Education institutions to play an effective impacting role in fostering sustainable and inclusive development in their region and country. The Project has officially started in November 2017 and will last for two years.

Other European partner universities in this project are: Maastricht University, King's College London, Université Libre de Bruxelles,



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Key Activity 2: Capacity Building in Higher Education

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Annex

Programme

Programme: Monday 11 March - Problem-Based Learning workshop

The workshop starts with an introduction of the concepts and principles behind the PBL approach in higher education. It will stimulate understanding of those and of how they can be implemented in practice. Interactive discussion and exchange of experiences will be stimulated.

- 1) Introduction on principles of Problem-Based Learning
- 2) Interactive session on fundamentals of PBL
- 3) Experiences from Maastricht
- 4) Q&A session

Report of the week

Elaborated by Telma Magaia,

According the visit of Prof.(s) Heinz Greijn, Elena Ambrosine and Geraldine Beaujean realized from 11 to 14 of March in Maputo-Mozambique

We started with Workshop at 11 of March, at Education Faculty organized by the Faculty of Veterinary focus in the PBL. The workshop helped as to understand how to implement the PBL, the importance to activate student with practical exercise according the evidences.

On days 12 to 14 of Mach we had different meeting with external stakeholders. According different meetings that we had, they were all very grateful to have been contacted for listening and looking for the ideas, about the employability and skills required of those trained in Nutrition in order to respond to the demand of the Country. All external stakeholders consulted are open to collaborate in the Master Programme in Nutrition, for training, research even for teaching.

We start with team of Nutrition Department, head of Department Ministry at Health, where they have a nutritionists with a Honor Bachelor's degree but need to improve and focus on nutrition issues at a more advanced level, such as behavior change without clashing with culture and other skills, centralized research, food consumption, establishing local food standards, food safety, introduction of food abuse system, diet and many areas... need to be communicate in behavior changes. UniLurio in Nampula Province have Master Program in Nutrition, however they do not cover the country Nutrition problem. So it is an advantage to have in Maputo. The group suggested same subject that can give competences for the Master student such as: Nutritional Surveillance and Clinical Dietetics, Nutrition and public health, Researcher in nutrition, Food security and nutritional, Communication for behavior changes and Profile and eating habits by region of the country.

Then in the Embassy of Nederland, they advise to focus in the Zambeze Vale, as a pririority, according the embassy program, they also work with Unizambeze in Food Agriculture. They also mentioned that the problem is not only lack of food, we have food, we need have an education program, a good view in behavior changes, and the aspect of nutrition is a crucial.

Global Alliance for Improving Nutrition (GAIN), is linked with many other companies of the Nutrition area, they think about multidisciplinary program, food fortification, work place nutrition (providing food in the work, talking about nutrition, like how should eat, important nutrients to get energy, paying attention for the first meal of the day) and to people understand that we need nutritionist in all places, to changes the mind of people to look for better diets and improve nutrition. Also to focus in Adolescent girls. They suggest that government should be involved, private sector, and also the market.

The United States Agency for International Development (USAID), they can provide employability for the student. They advise to link with government perspectives, look for basic communication, to have "SPAR" as partnership, to establish the legislation in Nutrition over the country in coordination with National Institute of Standards and Quality (INNOQ).

In the Fundação para o Desenvolvimento da Comunidade (FDC), they mentioned that Nutrition is relevant component and is very critical aspect in the country, it is important to look for the communication skills, social behavior changes, culture and geographic culture, what they produce in different places. Also the governance and advocacy it is important aspect. They are open to collaborate in the Nutrition field to help the community to development knowledge about nutrition. Need to improve as a country in concept of Nutrition, diagnostic skills. Improve nutrition in the community, in work, in the Hospital, schools and need also to have advocacy component of Food Security. As a GAIN they advise to involve the private sector. Nutrition in FDC Company is Central and 2015-2025 and transform Nutrition best practice where standing is a crucial.

Secretariado Técnico de Segurança Alimentar e Nutricional (SETSAN) mentioned about label market and competences, people understating how and what to eat. Food security behavior changes, understand the social political, government issues should be able to provide inputs with community to empower technical coordination. Need advocacy communication in decision, regulation, right consumers, personal vigilance, and food vigilance.

The meeting with internal stakeholders, we also discuss the PBL approach. Develop works how to reduce the effect of maxotoxin in different types of food to have a safe food, base knowledge. Competences developed by students, integration design of integrate curricula's. Plan group team with people from different departments or faculties. Look to expertise to coordinate and think about models

We closed the work week with Vice Reitor were we talk about what kind of background we need for our applicants to apply for this master. We discuss the possibility to involve UniLurio and UniZambeze for develop the Program, need teaches training in PBL, the possibility to select some to be trained in this field for the coordination.

Participants PBL workshop



FACULDADE DE VETERINÁRIA

PBL Workshop - 11 de Março de 2019

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