**Sustainable vocational schools**

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**Preface**

Now we are approaching the end of the United Nations Decade Education for Sustainable Development 2005-2014, organizations and policy makers are busy with setting new goals for the post-Decade era. Worldwide it is generally acknowledged that education and training has more and more taken a central place in the list of priorities for future policy-making. After many years of taking primary education as the most important issue, it is now recognized that vocational education and training will have to be one of the most urgent areas that we all will have to pay attention to. Vocational education is really at the basis of human development, locally, regionally as well as nationally and even globally. Vocational education and training can provide people with skills to gain a decent living. Vocational training can enable people to fulfill jobs or run companies to serve the region where they live. Vocational training-centers are the core of regional economic and social development.

It is a basic condition for good professional (or: vocational) education that it relates directly to the region where it has its roots. Sustainable professional education needs to be initiated locally/regionally and be monitored regionally as well, taking into account specific regional considerations such as local culture, regional social economical and environmental conditions. Moreover it has to pay attention to basic human aspects as civil rights, gender equality and protection of the under-aged. **Professional training can never be footloose!** In this paper we have tried to develop the idea of regionally inspired and locally flavored initiatives for schools for professional education and learning practices. Despite unique regional situations, it is possible to identify some aspects that all these individual initiatives have in common. Aspects those are universal in their character: “Quality”,” Consent”, “Concern” and “Ethics”.

In recent years many schools for professional education, public and private, have been established all over the world, a significant number of them in countries with emerging economies. A lot of research has been conducted. A good number of these initiatives has taken root in their home regions and is firmly planted there with success, keeping a good balance between economic, cultural and social factors. They are accepted and appreciated for having brought added value to the society and culture to which they belong. School-leaders are proud of their institutes and often motivated to explain their approach and way of working. **They are potential role models to inspire others!**

So we can dispose of experience, of scientific knowledge and of role-models about professional learning. Why not bring these together in a study- annex handbook? Such a book could be of use for everybody who wants to create new learning facilities for professionals, where-ever in the world! With its RCE-network, IAS-UNU has created the ideal learning space in which such an initiative could take place.

( *The****Third International Congress on Technical and Vocational Education and Training*** *Shanghai, People’s Republic of China, 14-16 May 2012, provides useful hints*.)

In the following pages we have put some ideas on paper. We would be delighted if more colleagues would contribute to this text, especially RCE-members in emerging countries. Everybody who supports the basic idea is invited to join this project that has meanwhile been adopted by UNU-IAS as a Research & Development project in the Program “Better Schools” for the final year of the DESD. **I**

**Introduction**

People have every right to take their future in their own hands. Independent from their circumstances; whether they are rich or poor. If people can make their own choices about how to lead the lives they want to live, people will really be free from poverty, illiteracy, tension, suppression and inequity.

One of the basic conditions for human freedom is that people, young or old, regardless the color of their skin, men or women, will be enabled to learn and be educated the way they want to be. In recent years important training facilities have been launched to educate people. Worldwide, MDG nr. 2 (“Achieve universal primary education”) is addressed as a major challenge in government policies. The need for good and accessible primary education has been settled solidly in the minds of policy makers all over the world. However the focus on MDGs has in Africa led to less priority for vocational schooling. That is why today it is considered necessary that the next step in worldwide education will be to invest in vocational training, be it lower, middle or higher level education and formal, non-formal or informal training. Young people, freshly educated at primary level, need to acquire abilities and professional skills to align their own lives. Older people want to maintain their craftsmanship or upgrade their previously acquired skills. Only by achieving remarkable progress in organizing vocational and professional education in various forms, people can be enabled to influence their own future and that of the region where they are rooted. And it is of crucial importance that people can develop entrepreneurial skills, to become change agents.

It is difficult for regions/neighborhoods to create precisely those forms of professional or vocational education and training that serve both the ambitions of people and of the regional economy. In fact, vocational education and training should always relate to local or to regional circumstances. Really meaningful professional education has as a principal feature that it is subservient to local and regional development, be it as a provider of the necessary skills and techniques, or as a catalyst of desired regional change. Moreover it will give support to universal needs for civil rights, gender equality and protection of the under-aged **(World Development Report 2012).** Alignment of personal and regional interests (and rights!) will be highly promoted by bringing together all relevant parties in an effort to create a sustainable form of learning that is to the benefit of all. We shall call this method of working “Co-Creation”. Co-Creation can only be successful if all stakeholders are participating. Centralized curriculum development processes have too often been a constraint to Co-Creation which requires viewing curriculum development as an ongoing social process.

 The aim of this project-proposal is to develop a methodology and an accompanying way of collaboration that enables regions/neighborhoods to create precisely those learning options that are desired by the regions themselves, and that are supported by all parties involved. One such methodology that is yet to take root is the action research model where participants seek solutions to their own problems using local learning materials. Only when all conditions of this method of Co-Creation will have been fulfilled in a democratic way, without excluding any interested party, will the created training facilities become really self-supportive and intrinsically sustainable. Sustainability in this sense not only means that schools and training institutes will be organized to be future-proof and capable to survive financially. They also should be able to serve the region’s needs and the people’s rights optimally. It goes without saying that the outcomes of this project should be applicable worldwide, in different cultures, geographical backgrounds and levels of wealth.

**II. The content of this project “Sustainable vocational schools”**

This project will have a number of phases, beginning with research. After that comes the data-collecting, describing success stories and best practices and analyzing them. Based on the two previous phases a methodology can be developed. The fourth stage of the project would be the implementation phase, where a regional vocational learning institute ( “Do it yourself”) can be realized.

*In fact the concept of sustainability will be the selling point for the proposed schooling.*

*In Africa, vocational schools are regarded as inferior due to a colonial legacy. For instance in Kenya many people aspire to enter the university. However, it is now being realized that quality vocational education is central to economic and social prosperity.*

**II.1 Research questions:**

* Which are the key factors for well-balanced and inclusive regional development, both enabling and constraining?
* What impact can vocational or professional training have on this type of development?
* What kind of cooperative association of stakeholders can take responsibility for this type of regional development?
* What didactical concepts are available for professional education? Which ones prevail?
* What relations are there between regional circumstances and didactical concepts?
* Which groups of stakeholders play a role in well balanced and inclusive regional development?
* How can existing vocational schooling be improved to reflect changing times?
* What will be the minimum duration of vocational training for a specific course?
* Others… (to be listed by project team)

**II.2 Collecting information**

* Collecting experience worldwide on how professional education can influence regional development and vice versa. How can vocational training work as a catalyst for regional economical prosperity and as a basis for human rights?

*(Compare for instance the “Guiding principles of Kenya Vision 2030).*

Surveys, case studies and best practices. The quickest way to gather initial data would be to run a questionnaire and ask for case studies.

Review some of the existing polices in selected countries. Identify countries that have successful vocational schools.

**II.3 How to do it yourself (a step-by-step approach)**

Main points of attention are:

* How to form a relevant regional working group for regional initiatives.
* How to define the chances and opportunities of a region/neighborhood. Learn to make a SWOT-analysis.
* How to assess the learning ambitions of people in the region? How can be determined what extra vocational learning facilities are needed?
* How to create these facilities with the method of Co-Creation? (Organizational, financial, political, educational).

It would be highly advisable if in the final year of the DESD (2014) we could run some pilot-projects in different emerging countries.

**II.4 Arranging a toolkit with instruments and resources**

Regions/schools will have to be able to work independently with the described method of Co-Creation. Our project aims to produce a handbook in which not only the philosophy behind Co-Creation is described. The book will also guide regional partner-groups through the entire process of creating a truly sustainable vocational school, with a step-by-step approach. At every single step the candidate will be instructed how to proceed, while not overlooking important factors to consider and taking regional cultural and human factors into account. Potential pitfalls will be described and expounded.

A major part of the study will be the collection of extra information, highlighting explicit role models together with contact data of experienced school-leaders. Also possible financial resources, subsidy regulations and donor-funds worldwide will be contained in this part of the book. So all together it will be a real toolkit, that can be used in different cultures, by different people, to serve different goals. But the main issue is that it will result in proficient and effective vocational training for the region that needs it, for the people who aspire it.

**II.5 Outputs**

 The project will consist of two periods:

* **Inner-DESD (2014) (Research phase)**

The activities as described before will be carried out. *(For a time planning see also par. IV).* The final products in this period will be:

* A series of presentations at congresses about the R&D phase of the project
* Handbook annex toolkit
* Two (or some more) pilot-projects started up
* **After-DESD ( 2014-….) (Implementation Phase)**
* Existing pilots explored and assessed
* Broadening the scope of schools (beyond engineering, business, agro and health care)
* Dissemination and publication of results

**III Target groups**

To make this project-proposal more specific, it is advisable to limit and frame our objectives. We will focus on four types of vocational training, where the entrepreneurial skills will be an aspect for all the types of training considered:

**III.1 Technical/Engineering**

* *Lower (technical skills in carpentry, welding, forging, tailoring, sewing)*
* *Middle (same as lower, but also design, repair and maintenance and lower management, occupational safety and health)*
* *Higher (major design, architecture and higher management, occupational safety and health*)

**III.2 Economics/Business**

* *Lower (book-keeping, administration)*
* *Middle (administration, procurement, marketing)*
* *Higher (accounting, marketing, management, logistics)*

**III.3 Nursing/Social**

* *Lower (nursing, kindergarten)*
* *Middle (maternal care, child care)*
* *Higher (midwives, social health-care)*

**III.4 Agriculture/Cropdiversity**

* *Lower (homestead, kitchen gardening, nursery))*
* *Middle (nursery, horticulture, crop, fish, poultry, dairy, animal husbandry )*
* *Higher (farm mechanics, product processing, veterinary, marketing and management)*

For every type of school a short typecasting will be given annex:

* A “best practice” in an upcoming country (role model): “how did they do it, where and when?” ” What are they implementing and how can the rest of the world learn and benefit from their experience.
* Didactical concepts
* Branch-typical pitfalls and risks “do’s and don’ts “
* Potential partner schools abroad, to exchange ideas, curricula etc.
* Presentation of a role model (personal profile, references, etc).

The foregoing summary of educational practice is rather traditional. This is for well considered reasons. Only by connecting to broadly accepted types of education we shall be able to find sufficient role models and practical experiences worldwide. Yet a few meaningful changes will be brought into each type of education:

* the introduction of ***entrepreneurship*** in every form of training. That’s why in this chapter we will be looking for role models where this didactical concept has got a rightful place in the curriculum. All over the world, not only in countries with emerging economies, schools should put an emphasis on developing entrepreneurial skills of young people. Their ambition should be, in all sectors and at all levels, to create new dynamics and new employment for themselves and their peers. Furthermore it should be acknowledged that there also needs to be some emphasis on *critical thinking* in any form of training; this would include an introduction to good models of reasoning, pitfalls in reasoning, avenues for productive questioning, and ways of creatively solving problems; in addition, our vocational efforts have recently identified the need to incorporate further training in the “soft skills”, that is people acquiring the basic inter-personal people skills to work collaboratively with others and multiple ways of collaborating within different contexts (e.g. business, cooperatives, self-employed, non-profit/volunteer management.
* Another feature of our project will be that the schools we aim to organize/facilitate/inspire will often be ***private*** initiatives, of course with public accreditation. The reason for this is that the chances of success in the private sector are quite some times bigger than in the public sector because of the greater flexibility and market-orientation. But in the end we aim to organize/facilitate/inspire a range of innovative initiatives including private, co-operative, not-for profit, indigenous and government organizations, all of them of course with public accreditation

*Adopting a range of both traditional and innovative partnerships (like for instance Public Private Partnerships) for educational development is an option with regard to financing the proposed Technical, Industrial and Vocational Education and Training in several strategic visions in East African countries. Many countries are now embracing the private-public partnerships. This will ensure getting the political support from host countries.*

Moreover, most investment funds that are available in western countries, for use in emerging markets, are only for private investments and not for public use. But of course, public schools can also take part in local/regional initiatives, or ask for support.

A third innovation in this project will be that explicit attention will be given to human factors like civil rights, gender equality and protection of the under-aged. Democratic issues like a introducing a Student Council in every school, the appointment of mediators for confidential affairs for staff and for students and last but not least the organization of well monitored internships for young students will be at the heart of our project.

**IV**  **Life-Long Learning /Incubator**

Special attention in our survey will be given to informal and non-formal learning.

*In Kenya, many vocational schools are not within the formal education mainstream. This makes sense to focus on informal and non-formal learning.*

It is without doubt that informal learning centers around the world are the real hotbeds for creativity. People with or without diploma should be welcomed in these centers if they have the ambition to give shape to their entrepreneurial ideas and want to be trained in managing how to do this. (It should also be investigated if there can also be a role for mobilizing volunteerism, given the importance of the voluntary sector in many countries and the formation of not-for-profit entities.) Creating Business Incubators could be a basis for seeding innovative entrepreneurship.

*(Incubating: creating locations where young starters can begin their own company, under well-protected circumstances).*

As much as possible these Incubators should be connected to formal education institutes, because productive synergy with regular education will thus be created. But in cases where this would not be feasible, independent Incubators should not be rejected.

Also the updating of previously acquired competencies can take place in informal training centers. Craftsmen are continuously challenged in their day-to-day work to be informed about state-of-the-art techniques and procedures. Their competencies have a strong tendency to get outdated by the increasing dynamics of nowadays economies. It should be a normal habit for people, not only in the western world, to take updates on a regular basis. And informal training centers can play a crucial role here.

One of the main parts of this project will be the search and data-collecting of a good number of existing informal training-centers annex Business Incubators. How were they established? What is their spectrum of educational services? How are they organized? Taking at least five centers of excellence, whether or not officially linked to formal learning institutes in our study will be of great importance.

**V. How to organize the project (some thoughts)**

The project “Sustainable vocational schools” could be organized as a Research & Development team-effort under the umbrella of IAS-UNU. Length of the project is estimated on one year for the first phase ( 2014) and some more years (to be defined) for the second phase.

Planned procedure first phase:

 **Jan-March 2014**

 Completion of underlying proposal

This text has been considerably adapted and amended. We will send it around mid December 2013 to the current project members for a final check. Final document before 31 December to be published on RCE-web-platform.

 Building of project-team

* Until now we are happy to welcome Jos Hermans, Jos Rikers, Zinaida Fadeeva, Roger Petry, Abel Barasa Atiti. Potential new partners:
* Niels Larsen RCE Denmark (already active in Kenya)
* RCE Kakamega With a large number of local initiatives including training centers. Their interest is to show and transfer experiences but also to learn from others and improve their own performances.
* Zhulkifli Abdul Razak, (dzulrazak51@gmail.com)
* Mohammed Ataur Rahman, Coordinator, RCE Greater Dhaka and Director, Centre for Global Environmental Culture (CGEC) y International University of Business Agriculture and Technology in Dhaka, Bangladesh (marahman@iubat.edu)

Project organisation

We will have to specify how many members we will need in the project team. This project team will occupy with day-to-day activities. To oversee the over-all strategies of the project we will also need to have a Steering Committee (5 people).

Identifying role models and five pilots

**Febr. -Nov. ’14 Start-up five pilots**

We will need to identify around 5 pilots. We want to present at least 2-3 going pilots in November 2014. It would have to de preferred if we could find projects in different sectors of expertise and on different levels of training. We want also to include at least 1 informal training center and one or more Business Incubators.

**November 2014 Final presentation during End-of-Decade Global RCE-conference in Yokohama**