

Project Proposal

The Student Training for Entrepreneurial Promotion (STEP) is an entrepreneurship training and research project that shall be implemented at the University of Limpopo. Further information concerning the STEP project are described below.

Overview of the STEP program

The Student Training for Entrepreneurial Promotion (STEP) is an entrepreneurship training program for youths and young adults. STEP develops young people's skills, knowledge, and confidence to pursue an entrepreneurial career. In the training program, the students learn step-by-step to start their own businesses. This provides them with an effective means of creating jobs for themselves and other people in the community.

STEP provides an answer to adverse labor market conditions and limited employment opportunities. STEP students learn to create their own jobs by starting and running a business. A key benefit is that the students learn to take charge of their professional future. The students become more proactive and independent.

STEP is action-oriented and evidence-based

Action-orientation means that STEP students form teams and engage in the start-up process of a real micro business during the program. They proceed through the entire entrepreneurial process from preparing to launching and managing a real business. This involves that they identify and evaluate new business opportunities, acquire equipment and raw materials, deal with suppliers, and enter the market to offer their product or service to real customers. The students thus take an active role and learn entrepreneurship "on-the-job". They experience becoming an entrepreneur under real business conditions. They receive real-life feedback and develop a better understanding of the tasks and challenges of an entrepreneur. This is key to develop a feeling of true mastery of entrepreneurship, a belief of "I can do it".

Evidence-based means that STEP students learn entrepreneurship on the basis of action principles. Action principles are applied theory. The STEP action principles have been derived from the scientific literature on entrepreneurship, management, and psychology. The STEP action principles are science-based "rules of thumb" that provide practical knowledge guiding students what to and how to do it to accomplish the start-up process. STEP is also evidence-based with regard to the didactical approach. STEP is rooted in action regulation theory and the result of our long-standing experience in training and entrepreneurship research in developing countries.

STEP is a 12-week training course. In the 12 weeks, the students meet weekly to learn action principles about 12 topics important to succeed in entrepreneurship. The 12 topics are



identifying business opportunities, marketing, leadership and strategic management, action planning, financial management, persuasion and negotiation, acquiring starting capital, networking, accounting, personal initiative, business planning, and legal and regulatory issues. The weekly sessions are three hours long and facilitated by local lecturers. The lecturers receive a three-day train-the-trainer workshop to learn the action-oriented and evidence-based approach of STEP. A team of STEP master trainers holds these workshops and instructs up to 12 lecturers in the methodology of STEP. Upon successful completion of the train-the-trainer workshop, the lecturers from the partner institution become certified STEP trainers.

The impact of STEP

Scientific evaluations showed that STEP has positive short- and long-term effects on students' entrepreneurial behavior. STEP kick-starts the students' entrepreneurial careers. More importantly, the studies demonstrated that the positive impact sustains over several years. The most important facts are:

- More than 3,000 students in various countries in Africa, Asia, and Latin America have participated in STEP since the first training in 2009
- STEP students start 34% more businesses one year after the training and 20% more businesses two years after the training
- STEP students create 35% additional jobs two years after the training
- STEP fits the local context because it is the product of a cooperation with several partner universities in Africa

The evaluation studies also revealed mechanisms underlying the positive impact of STEP on business creation. STEP students develop a stronger entrepreneurial mind-set. This means that STEP enhances students' intentions to start a business, the confidence in their entrepreneurial skills, their knowledge about how to start a business, and their action planning for starting a new business. The stronger entrepreneurial mind-set results in students identifying more business opportunities and performing more start-up activities to start a new business.

Evaluation studies also showed that STEP compensates for a lack of financial capital in the start-up process and leads to higher life satisfaction in the short- and long-run. Furthermore, STEP boosts and sustains students' passion for entrepreneurship, which translates into higher business creation in the long-run. STEP thus impacts on a broad range of positive outcomes.



Implementation of the STEP training

We implement STEP at partner institutions in a period of three years. During the three years, the partner institutions get the necessary know-how in managing and delivering the training program. We train local lecturers in three-day train-the-trainer workshops in the didactical and methodological approach of the STEP training. The local trainers then deliver the program to classes of about 50 students. Furthermore, we support the partner in institutionalizing and up-scaling the training program at their institutions. After the three years, the partner institution can offer the training program without further support from our side.

STEP has been implemented at the following institutions:

Uganda: Makerere University, Uganda Christian University, Uganda Martyrs University, Nakawa Vocational Training Institute, St. Joseph's Secondary School

Tanzania: University of Dar es Salaam

Kenya: Kenyatta University

Rwanda: University of Rwanda

Liberia: University of Liberia

Lesotho: Lesotho Agricultural College, Limkokwing University of Creative Technology, Lerotholi Politechnic

Philippines: Bicol University

Mexico: Instituto Tecnológico Autónom de México (ITAM), Instituto Gustavo A. Madero (Tecnológical Nacional de México), Instituto Tecnológico de Puebla (Tecnológico Nacional de México)

Scientific Evaluation of the STEP training

We aim at using randomized controlled trials (RCT) to assess the impact of STEP. This means that our evaluation studies use the gold standard to assess the impact of interventions and comply with the highest scientific standards (Frese, Gielnik, & Mensmann, 2016; Gielnik et al., 2015; Gielnik, Frese, Bischoff, Muhangi, & Omoo, 2016; Gielnik, Uy, Funken, & Bischoff, 2017). A randomized controlled trial means that applicants are randomly selected into a training group and control group. This guarantees that the students in both groups are equivalent before the training and all differences after the training program can be attributed to STEP. Furthermore, we conduct a pre-training measurement and several post-training measurements to assess the long-term impact of STEP over several years.



For reasons of a proper scientific evaluation, it is important to have a control group of students who are part of the population of students who applied for the training program. The students of the control group do not receive training during the first round but it is possible that they receive training at some point later in time. Based on the population of students who applied for the training program, there should be a random selection process of who will be in the training group and who will be in the control group.

The STEP application form can be distributed to the students. The application form contains the basic information about the students. We also ask for contact details of the parents, siblings, and friends to be able to trace the students for the 6-month or 1-year follow-up study. Applying this procedure was very helpful for conducting the long-term evaluation for our pilot study in Uganda because if we were not able to trace a particular student, we were nevertheless able to find him or her via the parents, siblings, or friends.

The recruitment of students should be a three-step process

1) Inform students about the STEP training and distribute application forms; we recommend that the deans of all faculties are contacted and requested to pass the information to their lecturers and teachers

2) When the students complete the application form, they also complete the baseline questionnaire. After the collection of all questionnaires, there will be a random process (e.g., a lottery) to assign the applicants to the training or control group.

The data we will collect includes:

- Sociodemographic background (age, gender, year of studies)
- Entrepreneurial experience
- Business opportunity identification
- Entrepreneurial goal intentions
- Entrepreneurial self-efficacy
- Entrepreneurial action planning
- Entrepreneurial action
- Business ownership
- Employment and employment experience
- Life satisfaction
- and related psychological constructs, such as fear of failure, entrepreneurial passion, etc.

3) The students who participate in the training program will be informed that they participate in the training program and they will receive the training timetable.

Follow-up data collection will take place in the month after the training (T2), one year after the training program (T3), and two years after the training program (T4).



Ethics

STEP strives to benefit those with whom we work and takes care to do no harm. We seek to safeguard the welfare and rights of those with whom we interact.

In this context, data collection meets due diligence requirements of science. This means that data are collected from study participants in an honest, ethical, and responsible manner.

Recruiting students happens according to the principle of voluntary informed consent, meaning that the consent of the participants is informed, explicit, voluntary and documented (see recruiting process above). Confidentiality and privacy of the participants are respected, e.g. meaning that personal information are separated from the individual's questionnaire answers. Moreover, the participants will not be deliberately deceived in any way.

Data is only collected from study participants (i.e., training group and control group). Integrity – promoting accuracy, honesty and truthfulness in science, teaching and practice - is of utmost importance, fabricating or making up data is absolutely forbidden – there is no exception, whatsoever. Data is collected in the prescribed manner and transferred from the questionnaire to spreadsheets in a reliable and accurate manner.

Activities that affect the training process are documented. For example, the following aspects and activities need to be documented: Recruiting additional students to the training group after the training started, initial group constellations and changes in the group constellations, as well as the disbursement and repayment of starting-capital. The documentation is a way to secure follow-up studies and guarantee the high standard of evaluation of STEP.

References

- Frese, M., Gielnik, M. M., & Mensmann, M. (2016). 'Psychological training for entrepreneurs to take action: Contributing to poverty reduction in developing countries'. *Current Directions in Psychological Science*, 25, 196–202.
- Gielnik, M. M., Frese, M., Bischoff, K. M., Muhangi, G., & Omoo, F. (2016). 'Positive impact of entrepreneurship training on entrepreneurial behavior in a vocational training setting'. *Africa Journal of Management*, 2, 330–348.
- Gielnik, M. M., Frese, M., Kahara-Kawuki, A., Katono, I. W., Kyejjusa, S., Ngoma, M., et al. (2015). 'Action and action-regulation in entrepreneurship: Evaluating a student training for promoting entrepreneurship'. *Academy of Management Learning & Education*, 14, 69–94.
- Gielnik, M. M., Uy, M. A., Funken, R., & Bischoff, K. M. (2017). 'Boosting and sustaining passion: A long-term perspective on the effects of entrepreneurship training'. *Journal of Business Venturing*, 32, 334–353.