

Introducing an Innovative International Format for Experience-Based Sustainability Entrepreneurship Education: The YEEES Sustainability Camps



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1 Introduction: Why International Sustainability Camps

With the sustainability issues society is facing, and the public sector apparently unable to solve these problems by themselves, the private sector is stepping up to play an increasingly important role (Kickul and Lyons, 2020; Fischer et al., 2012; Halberstadt et al., 2019a). This is why the interest in sustainability entrepreneurship is growing (Farny and Binder, 2021; Sarango-Lagangui et al., 2018). Sustainability entrepreneurs can be defined as change agents that recognize, explore, and exploit entrepreneurial opportunities that address social and/or ecological issues, and provide social value as a result. They have vast potential for practice, research, and education (Biberhofer et al., 2019; Gast et al., 2017; Spiegler and Halberstadt, 2018).

Given this crucial role that sustainability entrepreneurs play for our future, the authors stress that fostering sustainability-oriented entrepreneurial thinking and acting is an important task for higher education (Conchado et al. 2015). Several arguments support the idea that universities should become more involved in sustainability-driven entrepreneurship. Some of these are described by Halberstadt et al. (2019b). Universities are increasingly being asked to include a “third mission” of societal engagement (Zomer and Benneworth, 2011), and an entrepreneurial university is one of the arenas in which this is being addressed. In addition, companies’ structural changes sometimes lead to smaller businesses, business units within existing companies, and independent ventures being created out of organizations (Blanka, 2019; Kreuzer et al., 2017). Here, changes in innovation from closed innovation to open innovation continue to develop (Chesbrough, 2003).

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This leads to an increasing interest in entre- and intrapreneurship aspects, and a growing field of future work for today's students as a result. We furthermore see that the public awareness of sustainability continues to grow. Authors such as Erdil et al. (2018), specifically underline the increasing importance of sustainability in business and management contexts. This is also reflected in the interests of students. Last but not least, it can be stated that the world's sustainability problems are "wicked" problems requiring multidisciplinary approaches at scale, such as those facilitated by entrepreneurs (Walsh, 2017). Fostering the combination of sustainability and entrepreneurial skills development should thus be seen as one of the core topics at universities in the future. Universities should see it as a strategic task to create innovative solutions themselves—including new teaching formats in this field (Fidalgo-Blanco et al., 2014; Rodríguez Perez and Ordóñez de Pablos, 2003).

However, facing sustainability issues requires new competencies as well as new ways of competence management, and competence acquisition (Gloet, 2006; Lang et al., 2012). Today's students as future change agents should not only be aware of sustainability problems but also be able to find solutions to them. The question remains how to best support the acquisition of the relevant skills needed to develop and implement sustainability-oriented entrepreneurial solutions. Education research suggests several approaches for fostering sustainability-oriented entrepreneurial thinking and acting (entrepreneurship). Researchers as well as practitioners stress the value of experience-based entrepreneurship education. It is stated that involving individuals in entrepreneurial processes lead to entrepreneurial experiences which make them learn entrepreneurial practice "by doing" (Kassean et al., 2015; Williams Middleton et al., 2014). There are also a growing number of researchers calling for more experience-based learning settings, such as outdoor education, with regard to sustainability skills (Caniglia et al., 2016; Heiskanen et al., 2016). Studies such as the work by Probst et al. (2019) show the positive effects of experiences on sustainability attitudes, skills, and agency underlining the value of transdisciplinarity. Creating real-world experiences can thus be seen as a promising approach for successful sustainability-oriented entrepreneurship education.

Three subcategories of experience-oriented education are receiving increasing attention: challenge-based learning, service learning, and practical seminars. Challenge-based learning is an approach focusing especially on the formation of an entrepreneurial mindset by creating a set of (entrepreneurial) challenges that students accept and reflect upon. By dealing with and solving complex challenges, they are preparing for similar situations in practice, gain (entrepreneurial) self-efficacy, and may as a result tend to act more solution- than problem-oriented (see Hölzner and Halberstadt, 2022 in this book for more detailed information). Service learning brings together academic learning and real-world problem solving that creates a benefit for society. It includes a wide array of experiential education endeavors from volunteer and community service projects to field studies and internship programs (Halberstadt et al., 2019b; Schank and Halberstadt, 2022 in this book). Practical seminars in which students work together with external partners are another form of experience-oriented education (see Unger et al., 2022 in this book). For example, students can actively take part in researching a particular

question within a transdisciplinary research project. The Sustainability Camps are based on the idea of merging these approaches in an international context to strengthen entrepreneurial competencies.

This chapter will report on the Sustainability Camps as an innovative teaching and learning format that we developed within the YEEES Training Center. With our Sustainability Camps we aimed to design and implement a new concept for sustainability-oriented entrepreneurship education that gives participants the opportunity to obtain real-life experiences by solving sustainability issues in an international context. We integrated various challenges, cooperating with partner organizations from practice, most notably sustainability start-ups and NGOs, meaning that our approach also falls under the umbrella of service learning. The following will briefly introduce the overall concept and framework conditions provided by the YEEES Training Center. Following that, we report on the four Camps that we have realized to date, identifying some lessons learned as we have further developed and tested them in different settings. We finish the article by sharing our experiences and thoughts on how to further develop sustainability-oriented entrepreneurship education.

2 The YEEES Sustainability Camps: Background and Concept Development

In 2016, the German DAAD- and BMBF-funded YEEES project (Yields of Evocative Entrepreneurial Approaches on Environment and Society) began under the guiding principle of sustainability. The project sought to bring together German and African researchers and lecturers, university students, and local actors through the mission of exploring solutions to urban problems via ICT and entrepreneurship. With its academic research, publications, conferences, community initiatives, and teaching formats, the YEEES project aimed to make a positive contribution not only to project-related academic fields of study but also strove to make an impact “on the ground” with the up-and-coming entrepreneurs themselves. It was through the project’s Sustainability Camps which were annually held by a different partner countries (Germany, Mozambique, South Africa, and Namibia), that the project was able to fuse academic research with real-world community-based entrepreneurial development initiatives. This chapter will focus on the experiences and learnings within the Sustainability Camps as an innovative learning format. Participating in the Camps was offered as an extracurricular activity to further advance international and interdisciplinary entrepreneurship education. Students from all partner countries were able to apply for these Camps, which took place once a year, rotating locations at the partner universities. The Camps had a mix of students from different countries working closely together to ensure international and intercultural cooperation and the exchange of ideas—supported by members of the YEEES training center as well as external experts. The Sustainability Camp was based on the idea of the

SCHub Camp, a format of the Social Change Hub (SCHub) which at the time was under the supervision of Prof. Halberstadt and the team at the Leuphana University of Lüneburg. This Camp format also was an extracurricular offer focusing on supporting students' social entrepreneurial activities by a composition of joint work (on specific ideas and existing student initiatives), coaching, and lectures taking place at a location outside the university, usually on weekends.¹ We experienced that intense work on a topic together with peers has several positive effects—including the generation of successful solutions and knowledge acquisition. This concept was further developed in several ways.

We opened the format for students as well as junior researchers from any discipline and did not focus on student initiatives. We also broadened the focus to include various sustainability solutions, not primarily social aspects. The aim was to develop sustainability-oriented entrepreneurial mindsets and acquire related skills by being part of the development of real-life solutions for social and/or environmental problems using entrepreneurial approaches in an international context focusing on the southern African partner countries and Germany. We employed an experience-based approach (Andresen et al., 2020; Williams Middleton et al., 2014) and included entrepreneurial challenges as introduced in Hölzner and Halberstadt (2022) in this book.

Furthermore, we designed the Camps for a longer period of time, because they are international activities that require traveling and address specific issues in the partner countries. Personal trainings and team-building units were part of the concept before starting with the main program of entrepreneurial solutions for sustainability with the international and interdisciplinary teams. This is why we decided to offer three- to four-week stays. We wanted to achieve a close connection to practical partners and work with them on real-life topics. The plan was to involve partners mostly from industry, such as incumbent companies or (sustainability) start-ups, while also working with stakeholders from politics or society. These participants were to be included as speakers as well as practical cases. The experts' selection would depend on the ideas of the students and their actual needs (e.g., regarding expertise in the field of marketing or business development). The YEEES Sustainability Camp therefore also had a transdisciplinary character.

The original design of the Sustainability Camps aimed to train students and junior researchers in developing and implementing their own innovative approaches that achieve sustainable change. As an extracurricular activity, participants had to apply, and a jury selected those who were extraordinarily motivated to contribute to ecological and social progress—regardless of whether their work ultimately led to the founding of sustainability start-ups, organizations, or student initiatives. The development of sustainable products or services was also possible. As shown in Fig. 1, the basic concept was framed by an opening and closing event. The opening events were important to make the importance of the Camp clear to all of the partner universities while generating attention for the project and the joint teaching. Most of

¹<https://www.leuphana.de/portale/schub/schub-camp.html>

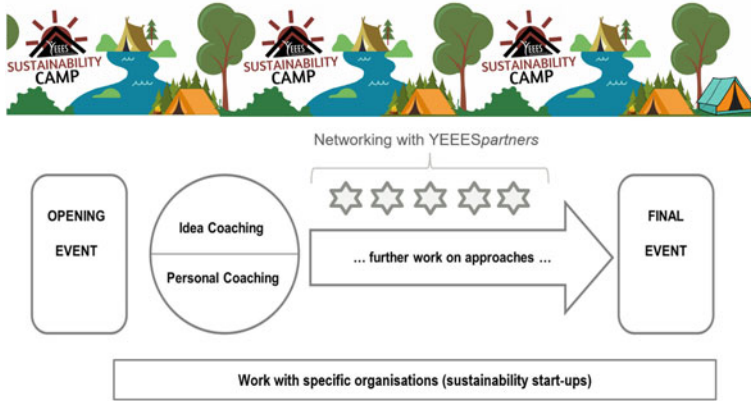


Fig. 1 Sustainability Camp—original/first structure

all, everyone got to know each other and the participating teachers and partners. After the opening event, we planned an intensive idea development phase and coaching where the participants received personal communication and presentation skills training. Within the next days (planned for about two weeks), the students had time to further develop their ideas and prepare for a final event focusing on presenting their concepts to a broader audience. These sessions were designed by drawing on pitch approaches, such as those found on popular TV shows where participants present their business ideas, with a prominent panel of experts evaluating and supporting the students.

The following section describes how this concept has developed over the years. We share not only experiences, but also provide learning cycles for a better understanding of the adjustments being made that have led to a new Sustainability Camp approach.

3 Experiences from the Camps in Four Countries

Despite all of the Camps being based on the same format, each Camp concept was part of an iterative process in which the learning from previous Camps were integrated into the next one. Given that each Camp took place in a new environment with new participants, each was unique.

The following section will offer brief summaries of the Camps, making special note of some of the distinctive aspects which made each one unique. Certain elements were present in all four Camps, which we will summarize here.

- *Intercultural Training*: A key element given the participants’ mixed backgrounds. It helped to bring awareness about differences in communication,

perspectives, and expectations within the group, allowing participants to better understand the culture in the country they were visiting.

- *Intensive exchange of the international students:* In all four Camps, the international students lived in close proximity, either in the same building or hostel. This had two main reasons. First, it made the logistics for the mobilization, catering, and group work easier. Second, it increased the interaction of the students and learning from other cultures, for example as they worked and cooked together.
- *Entrepreneurial thinking and competences:* All Camps had the goal of their participants learning or improving their entrepreneurial thinking and competences. Therefore, all Camps worked with actual problems and used a design thinking approach for their solution development. Another important aspect in this process was to genuinely understand the problems being worked on, and the people affected by them, something of the utmost importance when coming up with useful solutions.
- *Pitch training:* As important as it is to have great ideas, they have to be effectively communicated. Here, all participants profited from pitch training. At the final closing event they put this training into practice as they pitched their ideas.
- *Final evaluation and reflection session:* One important aspect included constantly reflecting with the participants—on their learning progress as well as experiences. After completing a Camp, a systematic evaluation took place. During an approximately two-hour session the participants could freely talk about their experience and learning, and give suggestions on what they thought could have been better. This is relevant for the participants as a reflection exercise, as well as for learning awareness. For us, it helped obtain insights from their experiences, with the goal of integrating ideas and improving future Camps.

3.1 *Camp 1: YEEES IDEA JAM*

Leuphana University Lüneburg, Germany

January 23rd to February 9th, 2018

Participants: Germany 4 (rotating), Mozambique 3, Namibia 1, South Africa 2

Experts in the areas of: design thinking, intercultural training, ICT, entrepreneurship,

personal approaches to sustainable development

3.1.1 **Overview and Key Content**

The focus of the first Camp was an introduction to the partner countries, developing an understanding of different challenges, problem analysis, and generating first ideas to overcome selected problems (sustainability business concepts). Table 1 shows the general structure of the first Camp. The participants received input sessions from both university and nonuniversity actors on design thinking, prototyping, IT

Table 1 Time schedule Camp 1

Monday	Tuesday	Wednesday	Thursday	Friday
22 Arrival	23 10:00 am - 4:00 pm Welcome Intercultural Training Evening Event: African Night with LASO (Leuphana African Student Organization)	24 8:00 am - 3:00 pm Seminar Connecting Science, Responsibility and Society Expo Female Entrepreneurs Workshop: Resilient Cities Problem Analysis I	25 10:30 am - 3:30 pm Workshop Resilient Cities Problem Analysis II	26 10:30 am - 3:30 pm Teamwork Day: Resilient Cities Task I
29 10:00 am - 4:00 pm IT Solutions & Entrepreneurship Crash Course: Start your own Website	30 Teamwork Day: Resilient Cities Task I	31 8:00 am - 12:00 pm Seminar Connecting Science, Responsibility and Society Presentation Task I Evening Event: Film Night & Discussion with Leuphana Entrepreneurship Hub	01 10:00 am - 4:00 pm Workshop Ideation	02 10:00 am - 4:00 pm Training: Personal approaches to sustainable development
05 10:00 am - 4:00 pm Workshop Prototyping Task II	06 10:00 am - 3:30 pm Workshop Pitch Training Task III	07 10:00 am - 3:30 pm Idea Pitches: Presentations Tasks II & III @City Lab	08	09 10:00 am - 12:00 pm Feedback & Closing Session

solutions, pitch training, and personal approaches to sustainable development, all intended to spark their entrepreneurial creativity and refine their business acumen. Bringing together the African students with the local German students provided fascinating exchanges regarding their differing approaches to entrepreneurship. While the German students saw entrepreneurship as more of “personal interest project,” or as an opportunity to do good in their community, the African students viewed entrepreneurship as a career path and as a path toward private success. Following the input sessions, and a discussion round about resilient cities and peri-urban areas, the participants talked about the different problems and challenges in each of the countries they come from. Based on this, they selected areas and issues they wanted to work with to come up with possible solutions. They furthermore broke into small groups where they devised a sustainability business concept that

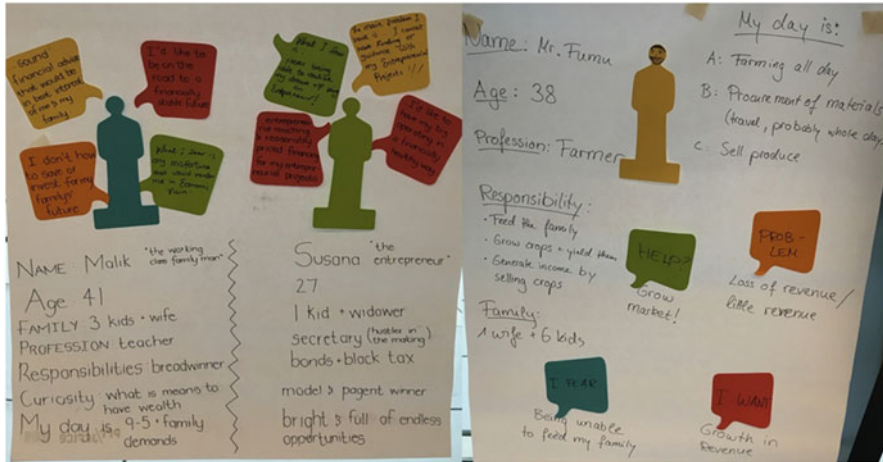


Fig. 2 Persona examples Camp 1

would be viable in one or more of the partner countries (Mozambique, Namibia, South Africa). All teams had a combination of students from different universities.

The students were able to develop the ideas via a design thinking process based on a user-centered approach by, e.g., creating personas (an amalgam of people affected by the problem in order to empathize and better understand the problem) as well as rapid prototyping (a method for visualizing the idea using different materials and quickly obtaining feedback on it). Figure 2 shows some examples of so-called “personas.” The persona tool is used to better understand certain people and their views, needs, or behavior (Nielsen et al., 2021; West & Di Nardo, 2016). Personas should be clearly defined, memorable representations of people, e.g., (potential) users, or in our case selected representatives of people experiencing country-specific challenges that remain conspicuous in the minds of others (Pruitt & Adlin, 2010). By using personas, the social role of a person in a specific context is identified and described (Aoyama, 2005). Figure 2 shows the personas of two of the teams: a “typical” farmer, an entrepreneur, and a middle-class man with limited financial literacy. This was a key first step into understanding problems from a target-group perspective, and creating empathy with them. As the core aim of these sessions was to trigger creativity and motivate students to reflect on problems and solutions, we used a mixed method approach. The teams worked using a pen-and-paper technique, summarizing the core results generated by prototyping sessions.

Along with empathizing, problem definition, and ideation, prototyping and testing are the most common stages of a successful problem-solving process in design thinking (Sarooghi et al., 2019). According to Tschimmel (2012, p. 4), prototyping “is a visual manifestation of concepts, the transformation of an idea in a testable model.” It is often used in (sustainability) entrepreneurship education contexts as a basis for concretizing and rethinking an innovation and receiving feedback from others (Brenner et al., 2016; Geissdoerfer et al., 2016). It is also shown to contain and



Fig. 3 Development of ideas and concepts

enhance creativity, while at the same time opening room for discussion and improvement (Bruton, 2011; Silveira et al., 2020). As seen in Fig. 3, each concept the teams ultimately developed was based on a goal the team wanted to reach, a short statement about their idea, and a prototype.

Following days of short presentations, observation/feedback sessions, and idea tweaking, the groups refined their concepts to a point where they could be presented. After a pitch training session, pitches were successfully made to a group of interested university professors and students, as well as local citizens. The final step was a feedback and a closing session allowing time for reflection and sharing the knowledge acquired.

At the end of the Camp, four sustainability business concepts were proposed that deal with different issues in the areas of education, agriculture, finance education, and health. One concept called “HIS” wanted to ensure that patients’ medical information would be rapidly and readily available for the patients to share with their doctor(s), with the control of this information still remaining in the patients’ hands via new technologies. Another team worked on the idea of a traveling school as they looked to tackle the problem of a lack of schooling in rural areas, particularly in Mozambique, and designed a fully equipped bus with all the necessary school

supplies that could be easily set up and taken down. This allowed teachers to travel to different rural areas and offer classes to children that otherwise did not have access to education. The so-called “FINC” concept looked into the problem of financial illiteracy and the need for credits. As a financial services company, they offered low-interest loans coupled with mandatory workshops designed to raise the financial literacy level in communities, while limiting the predatory lending practices sometimes seen there. “Agrinet” was the working title of a concept to create a network, both digital and locally, between farmers and other stakeholders to share knowledge to improve farming results and make the sale of produce more efficient.

3.1.2 Lessons Learned

The first Camp was conceptualized as an “idea jam,” a starting point for looking into resilient cities and peri-urban areas to seek solutions to problems in these fields. We did this with a particular focus on the southern African partner countries and were generally able to reach our objectives. However, we also noticed that, being in Germany, we were not able to work directly with the people affected by the problems selected by the participants in the southern African countries in question. In other words, this was more of a thinking exercise than an on-the-ground endeavor. We, therefore, decided to integrate various nonacademic partners into our subsequent Camps. Since the future Camps were planned in the African countries, it was easier to integrate partners when working locally. In addition, we wanted to add video conferences and pre-recorded videos to allow for an even more international exchange. Since the Camp took place in pre-corona times, however, video communication technology as well as the willingness to use it were not as developed as they are now.

The reflections and evaluations showed that the participants were able to extensively learn from this experience. First, they were introduced to new tools and methods for problem solving and thinking entrepreneurially. Some stated that they can use this new knowledge for various future situations—in private as well as in job and study contexts. This is why we decided to stick with and strengthen ideation and prototyping. However, to better integrate real-life problems (as explained above), we changed the Camp concept toward selected problems being experienced in the countries of focus. Together with the host university, we selected manageable cases and arranged sessions around these topics and the participating partners, which enabled us to prepare meetings with people on-location. The students were prepared to talk to these people as a starting point, and had the possibility to arrange additional meetings with other local stakeholders (for more detail, see the description of Camp 2). Students were also able to increase intercultural competences by working together with international peers and discussing country-specific issues. The generation of normative competences and future thinking was furthermore enhanced via critically evaluating given situations and deriving future scenarios.

Expectations management was also a topic in which we learned from the participants’ feedback. Some needed more information on the topics and content, while others asked for an even clearer structure. The latter was quite challenging, because

on the one hand, it is easier to follow a clear structure and work task by task, which may increase the probability of a successful outcome in terms of working entrepreneurial ideas and easy communication. On the other hand, this does not create a realistic picture for entrepreneurial problem solving. And as we aimed to foster entrepreneurial competencies that enable young people to act as future change agents, they must experience challenges and find their own ways through them. Life is full of challenges and opportunities to choose from; dealing with this can be seen as an essential entrepreneurial skill. This is why we decided to leave sufficient room for experiencing challenges within the seminar, and freed up capacity for self-organized work, while at the same time offering a more detailed program and information about what was happening in terms of content. We also provided information about the structure and the reasoning behind it to prepare students for the idea that it is “normal” and “calculated” that they themselves would face opportunities as well as difficulties throughout their stay, and that they contribute and decisively codetermine the Camp.

On the logistical side, we also learned from the experience with the shared housing, seeing that there were different values and understandings about it. Here, we made sure to set clear, well-communicated guidelines and rules.

3.2 *Camp 2: YEEES Sustainability Camp—Solutions for Maxixe*

Universidade Pedagógica (UP) – Maxixe, Mozambique

November 18th to December 12th, 2018

Participants: Germany: 6, Mozambique: 6, Namibia: 2, South Africa: 3

Experts in the areas of: intercultural training, the Portuguese language, education, history and business environment in Mozambique, ICT, social entrepreneurship, team mentors

3.2.1 Overview and Key Content

The second Camp took place in Mozambique and focused on existing entrepreneurial efforts and how students can further develop them to be more sustainable from all three sustainability perspectives. In other words, the students’ task was to analyze specific problem areas and intensively work together with partners from the world of practice to enhance the partner organizations’ (young sustainability start-ups) long-term success—in terms of their social or environmental impacts, as well as their financial stability. Here, we pushed the participants to get to know and critically discuss different perspectives on sustainability while experiencing and further developing sustainability-oriented entrepreneurial solutions.

As shown in Table 2, this Camp began with an extended cultural and language training input session to prepare the participants for their month in an Afro-

Table 2 Time schedule Camp 2

Location	Mornings	Afternoons	Evenings	Locations	Mornings	Afternoons	Evenings
Aguateca	Arrival	History & Culture	Tour Dinner	Aguateca	Testing Day	Reflection & Time Training	-
Aguateca	Intercultural Training	Intercultural Training	-	Aguateca	Field Trip	Field Trip	-
Aguateca / Alux	Intro to Participatory Problem Presentations w/ guests	Travel to Alux	Team Dinner	Alux	Free day	-	-
Alux	Key Note & Problem Presentations w/ guests	Problem Presentations w/ guests	-	Alux	Implementation	Implementation	-
Alux	Team Experiences on site	Impact Gap, Cancer Research & Presentation	Opening Event	Alux	Implementation	Implementation	Peer Review
Alux	Key three Social Entrepreneurship & Impact NY Field	Alux	-	Alux	Implementation	Implementation	-
Alux	Alux	1. Pitch + Feedback	-	Alux	Implementation	Implementation	Peer Review
Alux	Free day Optional: work on ideas	-	-	Alux	Implementation	Implementation	-
Alux	Fieldtrip to Related Institutions	Revision Problems / Ideas Alux	-	Alux	Reflection Lessons Learned	Impact: Sustainable Contribution Perspective	-
Alux	Participatory	Social Business Model Canvas	Film Night: Pitch Ideas	Alux / Aguateca	Traveling to Aguateca	Traveling to Aguateca	-
Alux	Pitch Training / Prepare Pitch	Rehearsal & Feedback	Pitch Event (- Germany groups)	Aguateca	Social Entrepreneurship in Aguateca	Presentations Preparation	-
Alux	Free Training	Alux	-	Aguateca	Presentations	Presentations	Turnoff Dinner

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Portuguese nation. Empowered with their new understanding of the culture, the entrepreneurial training sessions began. During this Camp, we attempted to find a reasonable mixture of input sessions provided by experts from academia and entrepreneurial practice, and real-life experiences working together with those affected by entrepreneurial challenges or trying to implement first solutions. A series of presentations by UP professors to the Camp participants aimed to increase their understanding of the educational, history, and business environment in Mozambique. A workshop on social entrepreneurship was provided by the YEEES coordinator from Germany. A series of guest speakers from different challenge areas talked about the daily difficulties faced, and the Camp participants were free to ask questions about their specific fields. Following the presentations, the participants divided into three groups by choosing one of three “challenge areas” that they would like to work on for the next three weeks. These were determined in advance by the YEEES project team, together with students of the University in Maxixe. One was how to improve the financial literacy of the women working at the local market. Another addressed the issue of waste and trash collection in Maxixe, while another task involved providing children with skills that will help them in their future development.

Each group was assigned a university professor with a background in a related area to serve as a mentor for the challenge chosen by the Camp participants. During this time, the participants visited organizations and individuals in the Maxixe area which were the case studies for their work in the Camp, such as the “market mamas” vegetable sellers at the market, a fledgling recycling business start-up at the beach, and a small bilingual primary school attempting to offer private school teaching at an affordable price. Over the next two and half weeks, the groups used the mornings to conduct field research, make observations, and in the final week, implement ideas. The participants also spent time with their case analyzing all aspects of the business, including the problems and challenges, to come up with ways to make the business more sustainable and ultimately more successful. The participants spent the afternoons at the UP Entrepreneurship Center where the working teams could come together as a group to analyze, strategize, and plan.

Peer review sessions were conducted during the implementation to gain input and feedback from the other teams and stay in touch with the rest of the participants. We always included reflection time for the learning and cultural exchange of the participants. We provided input and guiding sessions as well as field trips, such as a cultural visit to a rural town where the Camp participants witnessed a traditional ceremony. Presentation sessions where each group presented their sustainable solutions were included to strengthen the students’ presentation and communication competencies. Here, the development of the concepts and ideas was not only theoretical; the students also pitched their suggestions and had the possibility to test their solutions in a real-life setting together with the partner (implementation phase). The final wrap-up event of the Camp saw the participants provide an oral presentation of their contribution to a group of local business people (including the partners they worked with) and university professors. The groups also had private sessions with the representatives of the cases they worked with, where they presented an extensive, written analysis of their findings and a road map to improvement, if they wished. The Camp ended with a reflection session.



Fig. 4 Field excursions connected to the three challenges

The concept ideas developed during the Camp included the following. For the first challenge area, the team came up with a practical, easy-to-use accounting system for the market sellers (see Fig. 4, left picture). This system will allow them to better control inventory as well as save for future investments. For the waste and trash challenge, the team presented a recycling strategy, making art out of bottles and cans. Figure 4 (the picture in the middle) shows a typical environment where bottles and cans can be collected. The remaining material can be sent to a recycling plant in Maputo. The team on the third challenge worked at the primary school together with the kids and teachers to develop an entrepreneurial mindset training for them. Figure 4 (the picture on the right-hand side) shows one of our students working with the children at the partner school.

3.2.2 Lessons Learned

The second Camp was conceptualized as a solutions-oriented format, addressing specific local challenges. Local students were involved in the selection of them, and also participated in the Camp. Here the participants worked on local problems, and were able to talk to the people affected, contributing added learning experience. In this sense, the priority set for this Camp was achieved. Evaluation and reflection have shown that the students specifically underlined that they gained entrepreneurial competences here. They learned how to deal with challenges from three perspectives: (1) tackling the overall challenges defined by generating entrepreneurial solutions, (2) dealing with specific daily challenges that the partners face, and (3) overcoming own challenges when, e.g., organizing meetings and preparing presentations. We as a result contributed to students' ability and willingness to act in a solution-oriented manner, while also increasing the participants' (entrepreneurial) self-efficacy.

However, expectations management was still an issue. On the one hand, the participants had more information and a clear idea of what the activities during the Camp were going to be. On the other hand, a challenge of working with actual people came up, since participants were hesitant to offer hope (financial support, opportunities) to locals, only to leave three weeks later. Feedback rounds showed that much of this “hope” was based on the local perception that the “rich” foreigners will inject money, something the students experienced difficulties dealing with. This was probably also in relation to the lack of clarity as to whether the business ideas they came up with should be pursued, with the hope that one day they could become a reality, or if they were simply academic exercises. This is a challenge that real sustainability entrepreneurs often also experience, since they might get hopes up, while also perhaps subsequently disappointing upon failure. But the question then arises: should we refuse to try for fear of failure? This is not entrepreneurial, and an additional question to discuss, or a lesson to be learned based on the experiences the students were able to make during the Camp. It is seen here that even more transparency and exchange are needed with regard to communication with local partners as well as students. As a side note, it can be stated that all the ideas developed and implemented have led to positive impacts and motivation by the partners. The training developed for the elementary school is still in use today. One of the project partners is involved in both the school and the Camp, making a long-lasting implementation possible. In sum, the Camp combined learning success for the participating students with societal impact generation. In this regard, the Camp can also be seen as a form of service learning format (Erickson & Anderson, 1997; Schank and Halberstadt, 2022; Speck, 2001).

The concept was again adapted for the next Camp. The goal here was to work with actual start-ups and the challenges they face. Instead of working on bigger local challenges by developing solutions for and with entrepreneurial partners, the partners’ activities and challenges were the starting point for this Camp. By integrating established sustainability entrepreneurs, we aimed at enhancing the probability for the ideas to be implemented long-term after the Camp time, as we experienced in the case of the elementary school training. An international Camp in English in a Portuguese-speaking country was a challenge, albeit an add-on for the participants, both locally and internationally. The active participation of the local students was a key factor since they were able to communicate with the users and case personas, and translate for the international participants. Consequently, we tried to maintain this. On the logistical side, the set of living rules, and clearly communicating them before the participants arrived, as well as having two houses, were an improvement, which is why we decided to continue with this approach.

3.3 Camp 3: Sustainable Entrepreneurship in PE

*Nelson Mandela University, Port Elizabeth (today Gqeberha) South Africa
September 9th to October 8th, 2019*

Participants: Germany: 5, Mozambique: 3, Namibia: 1, South Africa: 0

Experts in the areas of: intercultural training, design thinking (including user research and tips for conducting interviews, ideation, and prototyping), ICT, gamification, storytelling, pitching and project management

3.3.1 Overview and Key Content


The third installment of the Sustainability Camp series took place in Port Elizabeth (PE), today Gqeberha, in South Africa, and was hosted by the Nelson Mandela University. The habitual input sessions as in the previous camps provided by university and practical experts were complemented by input in the areas of gamification, storytelling, a visit to a farm for a change in perspective, as well as user research tools and project management. The particularity of this Camp was that the participants worked hand-in-hand not only with a local challenge, but directly with two local start-ups (Figs. 5).

As shown in Table 3, we prepared a more structured schedule for the students. Even though we have argued that entrepreneurial competences are strengthened when overcoming challenging situations with less structured tasks, we were taking




Fig. 5 (Left) AfriKhaya Club: coding clubs in local township using the Tanks Children App designed and developed in PE (for more information on the Tanks App see Greyling, 2022). (Right) Red Band Barista Project: a small coffee shop start-up at the Nelson Mandela University attempting to offer better quality coffee to students at an affordable price

Table 3 Time schedule Camp 3



YEEES Camp South Africa 2019 Part I

Monday 09	Phase: Arrival		Tuesday 10	Phase: Recovery	
Wednesday 11	Phase: Interculturality		Block 1 + 2 Morning: Intercultural Training		Block 3 + 4 Afternoon: Intercultural Training (including local language intro)
Thursday 12	Phase: Discover Phase 1		Block 1 Morning: Introduction to the Camp, Tools and Design Led Approach		Block 2 Morning: Start-Up Challenges: 3 local Social or Sustainable Start-Ups introduce their project and also their challenge (30 Min Ppt + 30 Min discussion) (Groups Work Parallel)
Friday 13	Phase: Discover Phase 1		Block 1 Morning: Identify Problem, Stakeholders and define a Vision, Determine a Project Plan		Block 2 Morning: Group work
Saturday 14	Phase: Discover Phase 1		Block 1 Morning: Peer Review: Group Presentations		Block 2 Morning: Research Day: Interviews, Observation
Sunday 15	Phase: Recovery		Block 3 Afternoon: USER Research: the human centered approach.		Block 4 Afternoon: Group work.
Monday 16	Phase: Discover Phase 2		Block 1 Morning: Peer Review: Group Presentations		Block 2 Morning: Research Day: Interviews, Observation
Tuesday 17	Phase: Discover Phase 2		Block 1 Morning: Understanding the user		Block 2 Morning: Group work
Wednesday 18	Phase: Discover Phase 2		Block 1 Morning: Research is Key		Block 2 Morning: Group work
Thursday 19	Phase: Discover Phase 2		Block 1 Morning: GAMES: Understanding challenges better through games		Block 2 Morning: Field Trip: Playing Boats or Rangers at schools, learnings of how games help understanding concepts
Friday 20	Phase: Discover Phase 2		Block 1 Morning: Introduce your concept and game in the groups (peer review) and YEEES Team or local Prof.		Block 2 Afternoon: Play with ARTOMBO Kica and present concepts for art development of the game



(continued)

Table 3 (continued)

<p align="center">YEEES Camp South Africa 2019 Part II</p>	
<p>Goal Getting out of the comfort zone, rethinking the challenge from a different perspective</p>	<p>Saturday 21</p> <p>Phase Breakout Phase</p> <p>Block 1 Morning: Drive to the farm</p> <p>Block 2 Afternoon: working in the farm</p>
	<p>Sunday 22</p> <p>Phase Breakout Phase</p> <p>Block 1 Morning: working in the farm</p> <p>Block 2 Afternoon: working in the farm</p>
	<p>Monday 23</p> <p>Phase Breakout Phase</p> <p>Block 1 Morning: working in the farm</p> <p>Block 2 Afternoon: Drive back from the farm</p>
<p>Goal Develop ideas in an iterative process. Go through an idea to begin in case something is starting out.</p>	<p>Tuesday 24</p> <p>Phase Recovery</p>
	<p>Wednesday 25</p> <p>Phase Design Phase 1</p> <p>Block 1 Morning: Reflection Farm Work and the Challenge, how the perspective changed</p> <p>Block 2 Morning: Ideation 1</p> <p>Block 3 Afternoon: Group Work</p>
	<p>Thursday 26</p> <p>Phase Design Phase 1</p> <p>Block 2 Morning: Ideation Phase 2</p>
<p>Goal Work on Ideas, prototype and test fast in order to test them and refine.</p>	<p>Friday 27</p> <p>Phase Design Phase 1</p> <p>Block 1 Morning: Storytelling & Prototyping the idea</p> <p>Block 2 Morning: Group work</p> <p>Block 3 Afternoon: Group work</p> <p>Block 4 Afternoon: Peer Review Group Presentations</p>
	<p>Saturday 28</p> <p>Phase Design Phase 1</p> <p>Block 1 Morning: Testing</p> <p>Block 2 Afternoon: Testing</p>
	<p>Monday 30</p> <p>Phase Design Phase 1</p> <p>Block 1 Morning: Peer Review Group Presentations</p> <p>Block 2 Morning: Refining</p> <p>Block 3 Afternoon: Group work</p>
<p>Goal Go to the start-up phase in case something is working out.</p>	<p>Tuesday 01</p> <p>Phase Deliver Phase</p> <p>Block 1 Morning: Project Management Intro</p> <p>Block 2 Morning: Group work</p> <p>Block 3 Afternoon: Road Map to Implementation</p> <p>Block 4 Afternoon: Group work</p>
	<p>Wednesday 02</p> <p>Phase Deliver Phase</p> <p>Block 1 Morning: Time & Money</p> <p>Block 2 Morning: Group work</p> <p>Block 3 Morning: Group work</p>
	<p>Thursday 03</p> <p>Phase Deliver Phase</p> <p>Block 1 Morning: Putting it all together: Final Report</p> <p>Block 2 Morning: Group work</p> <p>Block 3 Morning: Group work</p>
<p>Goal Develop a plan of action for the start-up to continue after you are gone. Why is the solution your best? Presentation Skills and Pitching the project to the Start-Ups</p>	<p>Friday 04</p> <p>Phase Deliver Phase</p> <p>Block 1 Morning: Introduction to Pitching</p> <p>Block 2 Morning: Group work, Pitch Preparation</p> <p>Block 3 Afternoon: Group work, Pitch Preparation</p>
	<p>Saturday 05</p> <p>Phase Final Presentations</p> <p>Block 1 Morning: Group Work, Pitch Preparation</p> <p>Pitch Dinner & Game Night with StartUpe Atombia final presentation of the games, what have we learned, idea and results test and recommendations.</p> <p>Evening Event</p>

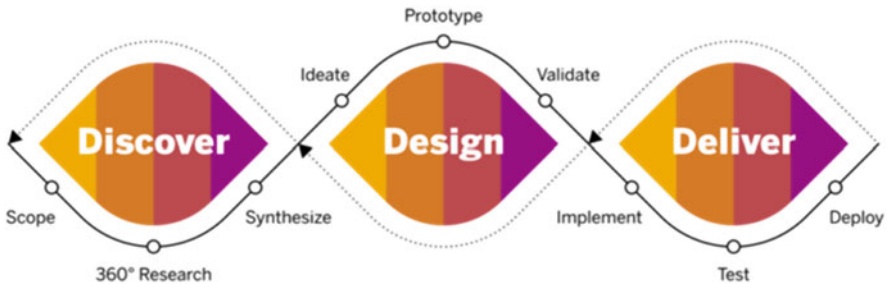


Fig. 6 The SAP design thinking approach. Source: Hauser (2019, July 1)

into account here the reduced amount of time and the particular need for a more detailed preparation when intensively co-working with external partners. The main steps we had in the previous Camps were now organized into stages based on the design thinking approach used by SAP as presented in Fig. 6. The discovery phase in which the goal is to understand the problem better, the background and possible solutions already being tested, followed by the design phase to develop ideas in an iterative process, going back to the beginning in case something is missing or not working out, including a prototype and testing phase to learn and revise, and the delivery phase to develop an action plan for the start-ups to continue after the end of the Camp. The plan includes a statement explaining why the solution is good, and how they are going to implement the solution as well as a timetable. In the last phase, as in previous Camps, presentation skills were taught, including a pitch training followed by a pitch event. As a key element of the Camp, there was a reflection and feedback session at the end. To integrate a personal challenge, we also included a “Get out of your comfort zone session” where the students visited a local farm to experience life there. This challenged them to see the problem of the start-up from a different perspective.

Working with the partners was the focus of the Camp. After the introduction of the participants to the two local start-ups, the students spent an entire day witnessing the daily operations of the start-ups, conducting interviews with both staff and customers. The Camp participants then divided themselves into two groups, choosing the start-up that corresponded best to their own personal line of interest. Over the following two weeks, they worked closely with the entrepreneurs, learning and analyzing the business operations, and looking for areas where they could make the business more efficient and sustainable. The following guiding questions were prepared for each partner start-up:

- Case 1 AfriKhaya: (1) How can the project be economically sustainable, not having to rely on grant money to survive? (2) How to monetize the project? (3) How to acquire more cell phones for the children? (4) How to further develop the game?
- Case 2 Red Band Barista Project: (1) How can an idea on profit sharing be further developed and implemented? (2) What can contribute to positioning the workers



Fig. 7 Transdisciplinary sessions with entrepreneurial core partners

and managers to becoming future owners (entrepreneurial thinking)? (3) How can the existing social business model be expanded beyond the university environment?

Both teams worked on these questions together with the entrepreneurs and had the added motivation that what they developed in the Camp had a good chance of being implemented by the start-ups. Figure 7 shows the students listening to the partners' presentations, and presenting their results to the partners in the final pitch event, as in the previous Camps.

As a result, the AfriKhaya team proposed a business strategy including for example an organization and management structure, a marketing plan, and a flyer for the coding clubs. The Barista project team worked in a twofold manner, further developing the business model, suggested a marketing strategy to gain more customers, and designing the Barista Ladder as a program to motivate employees to become owners themselves (Fig. 8). The South Africa Camp culminated in an event where the two groups presented the results of their work to the entrepreneurs, interested university actors, and other members of the business community.

3.3.2 Lessons Learned

The third Camp was also conceptualized to be solution-oriented, although in this case, the challenge was even more specific, coming from a local start-up, and not a general challenge in the community. Here the participants were able to work from a



Fig. 8 Presentation of the Barista team results

more user-oriented perspective and were in direct contact with possible users. As for the other Camps, we obtained feedback that this structure allowed the participants to gain intercultural and communication competencies due to the intensive work and exchange with various international partners. Evaluation and assessment also delivered hints that the students (further) developed significant entrepreneurial competencies. They got to know and discuss with different sustainability start-ups. The main factor, however, was that they were involved in the challenges these start-ups were facing. The Camp participants had an intensive look at the existing business models and potential room for improvement. They developed and suggested innovative ideas. In addition, they contributed to areas such as marketing, strategy, and finances—all traditional, however, important topics in entrepreneurship education

(Johnson et al., 2006; Kirkwood et al., 2014; Njoroge & Gathungu, 2013; Van der Colff, 2004). By acting entrepreneurially within existing organizations (such as start-ups), the students worked intrapreneurially as well (Antoncic & Hisrich, 2003; Rule & Irwin, 1988). Next to entrepreneurial knowledge, we observed increasing entrepreneurial thinking, especially solution and innovation orientation. The students also reported a noticeable openness to entrepreneurial activities—some even expressed that they had started thinking about their own entrepreneurial solutions. By addressing selected fields of managing a start-up, we also found management competencies such as strategic planning to be appealing.

We also took into consideration the Maxixe Camp participants' feedback regarding the expectations of the locals, and worked directly with the start-ups. Doing this helped any fears of false hopes in the community to be alleviated, achieving a sense of continuity because the start-ups could directly implement the ideas; it turned out that they actually did what was suggested. The lack of clarity about the implementation that we had in Maxixe as a result did not come to pass, because we had a clear player to follow up on the ideas developed during the Camp. This Camp also saw the academic exercise brought to life. Both start-ups implemented ideas developed at the Camp, and were actively doing so until the corona crisis began. The AfriKhaya project is currently not active. The Barista project is still open, and has used different strategies and creative ideas to stay open during the lockdowns in South Africa, for example, allowing customers to buy coffee, which the Red Baristas serve to medical personnel working at hospitals. This is a good example showing how a social start-up uses a challenging situation to act entrepreneurially and solution-oriented as they display and prove their resilience.

On the logistical side, the set of rules and clearly communicating them before the participants arrived was again an important point. This Camp had a larger one-house accommodation which helped reduce transportation costs. The teams here could also work at the house and did not need to travel to the university campus to do so. The integration of local students into South African society was not as easy; the dates during which the Camp took place were not very favorable, which will be important to keep in mind for the next Camp.

3.4 Camp 4: (ICT) Solutions for Sustainable Tourism in Namibia

University of Namibia, Windhoek and Swakopmund, Namibia

February 6th to March 5th, 2020.

Participants: Germany: 6, Mozambique: 3, Namibia: 1, South Africa: 3

Experts in the areas of: intercultural training, design thinking, ICT, sustainability and tourism, digitalization and ICT in tourism, pitching, ethics and responsibilities in development approaches and ICT4D, gamification

3.4.1 Overview and Key Content

The fourth and final installment of the Sustainability Camp series was the first and only “traveling” camp, taking place in two different locations in Windhoek and Swakopmund in Namibia. Other particularities of this Camp included taking all the learning of the previous three (solutions for local challenges, working together with start-ups and their particular challenges, developing solutions) and focusing on one topic area. We chose sustainable tourism as the main topic because tourism is an increasingly relevant topic in the Global South, and for Namibia in particular (Dowling & Pforr, 2021; Kavita & Saarinen, 2016). Tourism taking sustainability into account is of particular value here (Kimaro & Saarinen, 2019; Saarinen et al., 2013), and has been shown to attract more and more customers (Baporikar, 2022; Bagus et al., 2019). Tourism covers activities that directly influence the economy as well as the social and ecological environments. Information and communication technologies (ICT) are of growing importance to the tourism industry (Patwary et al., 2020). ICT innovations show the potential to transform the tourist industry, reaching new marketing channels, and providing new products and business models (Pencarelli, 2020; Ruiz Gómez et al., 2018). Beyond websites and booking systems, tourism start-ups can make use of social media channels for marketing to spread tourist-relevant information via mobile apps. This is why we integrated two post-doctoral students as experts and mentors into this Camp. One is an expert in sustainable tourism, and the other is an expert in digitalization and tourism. These individuals were both integrated during the Camp’s conception development into the YEEES team, and were also part of the recruitment of the two start-ups we worked with, as done in South Africa. The group of participants in this Camp were the most interdisciplinary of all, given the particular industry being examined, as well as the particularity of the ICT solutions involved.

As shown in Table 4, the first week of the Camp took place at the University’s campus in Windhoek, where the participants had their input sessions and the possibility to connect to other projects in the university related to sustainable tourism. This Camp also commenced with intercultural training. The students not only got to know each other and their countries or origin, but learned in particular about Namibia and its history, along with basic information about its tourism. There were additional input sessions that focused on tourism and the roles of sustainability and sustainable tourism. The didactical approach included those we experienced for developing, discussing, and structuring own ideas. Here, we allowed more time for meeting the company partners and experiencing Namibia and selected (sustainable) tourism offerings, while we shortened the problem analysis and ideation phases. Both teams still were able to present their ideas after their pitch training. Following this phase of the Camp, the participants traveled 200 km south to the seaside town of Swakopmund. In this integrated traveling format, we kept the focus on working with existing start-ups to achieve innovative solutions. The following two start-ups were selected as key partners:

Table 4 Time schedule Camp 4



YEEES Camp Namibia 2020

		Windhoek			
		Thursday 06	Friday 07	Saturday 08	Sunday 09
Morning		Arrival Students	Get-together/ Intro	Intercultural Training	Input Sustainable Tourism
	Afternoon				

		Windhoek		Swakopmund				
		Monday 10	Tuesday 11	Wednesday 12	Thursday 13	Friday 14	Saturday 15	Sunday 16
Morning		Tourism in Afrika & Namibia Tourism and ICT in Namibia	Research Input	Travel Day to Swakopmund	Case Experience Day	Case Experience Day	Case Experience Day	Day off
	Afternoon							

		Swakopmund						
		Monday 17	Tuesday 18	Wednesday 19	Thursday 20	Friday 21	Saturday 22	Sunday 23
Morning		Summary and Discussion of Cases	Input Ideas & Workshop	Methodical part	Presentation of Research Frame by students	Case Experience	On-Site Exploration (Interview, Stakeholder Analyse)	Day off
	Afternoon							

		Swakopmund				Windhoek		
		Monday 24	Tuesday 25	Wednesday 26	Thursday 27	Friday 28	Saturday 29	Sunday 01
Morning		On-Site Exploration (Interviews, Stakeholder Analyse)	Workshop	Group work & Peer Review	Group work & Peer Review	Travel Day to Windhoek	Group Presentation to complete group	Reflection Day: Feedback & Interviews of Students
	Afternoon							

- *Anchor Adventures*: is an agency providing historical tours of Namibia by local guides, exploring some of the local neighborhoods, including indigenous groups, where profits are split to improve their living conditions. The task for the students was how to implement corporate social responsibility (CSR) into their business plan and develop a communication strategy using ICT tools.
- *Aguagreens*: is a unique organic farming concept which sustains itself by the sale of its products, as well as consulting on their farming concept for others to use. The idea of providing farm tours and restaurant services to tourists interested in organic, sustainable agriculture was an option the entrepreneur was exploring, as she had recently received a piece of land. The main goal for the students was to look for ways to improve her business concept, particularly with ICT tools.

Morning trips to the start-ups were followed by rigorous afternoon sessions searching for ways and opportunities to increase their overall sustainability and business health. Once the participants had a strong grasp of the business operations and the ways in which they believe it could be optimized, they divided into two groups to work on each of the cases; other subgroups were created for, e.g., financing, market research, concept, or construction plans. The groups worked in constant communication with the mentors, the start-ups, and within their groups to obtain feedback while developing their ideas and not just at the end of the camp. The peer review sessions were used in this Camp to learn from the other teams, and provide active, constructive criticism. Furthermore, they received support from different international experts.

The participants returned to Windhoek where they polished their presentations under the guidance of the university staff. The entrepreneurs joined them in Windhoek for the final presentation session, where the participants presented their ideas to a group of university actors, local businesspeople, as well as to the start-ups themselves. The following figure gives some impressions from meeting the partners, and the in- and outdoor workshop sessions (Fig. 9).

This Camp also led to three concept ideas: In the case of *Anchor Adventures*, the team had the difficulty that, although the case was to come up with ideas for a communication concept for their services, the discussion about including indigenous Namibian culture as a tourism objective and its authenticity or remuneration turned into a more ethical and sustainability debate within the team. This was certainly a great learning experience, even though it made it difficult for the team members to be behind the service they were supposed to communicate. The team managed to present some ideas of other cases that might be applicable in Namibia, while also providing some interesting thoughts to the start-up, even though it did not present a communications plan using ICT tools. The *Aguagreens* concept development included ideas on how to integrate tourism into their concept to get the most out of the organic farming system. The focus turned to crowdfunding as a way to get investment to properly develop the farming system and the land.



Fig. 9 Impressions from the Namibia Camp

3.4.2 Lessons Learned

Evaluating the last Camp in Namibia also brought new interesting insights to the concept. This was the first Camp in which we picked sustainable tourism as the respective field, with specific preconditions and challenges. We found it difficult to find and select appropriate cases. Even though we carefully picked the topic and developed the input together with our partners from the University of Namibia (UNAM) and the two post-docs who worked with us as experts in the field, the acquisition of partners was difficult. We, therefore, recommend an even closer contact to local stakeholders and networks beforehand, being dependent on the very specific settings to ensure, or leaving the field and tasks more open so that the group of potential cases to work on would have a longer duration.

On the one hand, travel was certainly a highlight of this Camp, although it took its toll in terms of logistics and time, leaving less time for the teamwork and ideation compared to the other Camps. The main area of competences that were best (further) developed at this Camp was most likely the intercultural skills and knowledge. According to the students' feedback, the reflection and assessments from the participants underlined the experience they made with regard to getting to know the country. This may be traced back to the fact that the students had the possibility to see various places there. In addition, traveling together can have the effect of an additional intercultural training, making the participants experience different views and habits, and leaving time for private conversations. Interestingly, some participants and the mentors and trainers involved broadened the intercultural competence perspective by including cultural differences between areas of expertise. The

interdisciplinarity caused by the mixed group of students and trainers and external experts in the fields of tourism, entrepreneurship, sustainability, and ICT also contributed to a better understanding of other disciplines' perspectives, orientations, and approaches.

On the other hand, we saw mixed results concerning the (sustainability) entrepreneurial competence acquisition via our last Camp format. This can be traced back to the fact that we did not have enough time remaining for problem analysis, or for idea-generating workshops due to travel and additional meetings with partners. However, there were nevertheless positive results for entrepreneurship orientation and strategic thinking and planning competencies, although this appeared to be less pronounced than in the other formats. This is in line with the difficulties the students experienced coming up with and concretizing their ideas that they presented. However, we did observe growth in sustainability competences, as the participants discussed different perspectives of sustainability and the impacts of the possible effects in one area might have on another. For example, a tourism offer may focus on environmental sustainability, while not considering its possible negative social effects (or vice versa). As always, there were additional factors that might also have had an influence on the participants' competence development during the Camp—from personal factors (precondition, existing knowledge, and motivation) of the participants as well as the trainers (responsible organizers and external partners), to the environmental setting connected to the topic, or the mix of disciplines. What can be a plus for acquiring a specific set of competencies can at the same time be counterproductive with regard to others. The overall tasks might also have been too ambitious, given the reduced amount of time and the vast amount of preparation, knowledge, and skills needed. However, by adding the experience of this Camp, we were able to derive some implications for educational practice when comparing our experiences. It became obvious that preparing a format like this Camp needs to have an in-depth analysis of the preconditions and resources (with regard to personal expertise being available, as well as country-specific preconditions), a careful decision on what the main competencies are that should be developed, and what resources are then needed.

We also did not have the same type of accommodation in a house setting, so there was no easy access to certain things such as working rooms. This Camp had to deal again with the topic of expectations. In this case, the entrepreneurs, particularly one, had expectations about the results from the team, expecting them to have the same quality as those from a consulting firm, even though it was clearly communicated that this was a team of students performing the work. The students also had interesting discussions, debating in terms of tourism's authenticity when it comes to visiting tribes, not invading their culture or land, whether they should receive remuneration for tourism visits, and if doing so made this tourism inauthentic. A final lesson from this Camp was to have a follow-up with the start-ups. This was possible in Maxixe in the case of the school, and in South Africa given the direct contact from our partner. In Namibia, the cases were not directly connected to the partners, so there should have been a mechanism put in place to allow a follow-up

meeting with them. A helpful idea here might be for the entire Camp participants to revisit their learning after a time of reflection upon returning home.

4 Final Thoughts About Camps as Teaching Formats and Recommendations for the Future

After experiencing four Camp formats, we emphasize that the hard work was worth it. While developing and implementing innovative teaching in international contexts is always demanding and risky, it can contribute to improving competence development, as seen in our Camps. Testing new approaches also shows what works and what does not. Negative experiences help to further develop educational offers, and may also help others to avoid the challenges faced in early adoption phases of a format.

Our work showed that different competencies were stressed depending on how the Camp was designed. As expected, using a design thinking approach to (further) develop sustainability-oriented entrepreneurial ideas worked well. The students gained entrepreneurship knowledge about different forms of entrepreneurship, as well as tools and methods to use for designing, structuring, and discussing possible entrepreneurial solutions. They were pushed to critically discuss current situations and analyze selected problems (systems thinking and normative competence). This understanding is key to developing entrepreneurial answers. In the process, the students also had to discuss which kinds of societal contributions should and could be made (e.g., social, green, sustainability, and transformational entrepreneurship). This can contribute to further developing the competences mentioned above, as well as future-thinking competence. By deciding on the kind of entrepreneurial activity being used to address a societal issue, the students again gained entrepreneurial knowledge regarding, e.g., revenue or business models. Since we worked on real-time scenarios, the Camps included experiences in essential parts of business modeling and management, such as project management, financial planning, or marketing. The latter underlined the importance of targeting group definition and orientation, which is of particular importance because sustainability-oriented work often has to address different target groups such as the beneficiaries of social activity, as well as customers generating income to finance it.

We experienced that focusing on entrepreneurial idea generation works for free processes as well as intrapreneurial activities derived from working within existing organizations such as partner schools or start-ups. Integrating practical partners into real-life settings to design and test ideas broadened the overall understanding of sustainability entrepreneurship and its specific contexts, and allowed own entrepreneurial activity to be experienced in different forms. It also increased the students' motivation to act entrepreneurially. However, this requires an even more structured process that, on the one hand, leaves enough room for exchange with the partners and the entrepreneurial experience, but on the other hand leaves space for input

sessions that introduce and test selected methods, e.g., within the design thinking process in an effort to not forget to further develop entrepreneurial ideas. While for some formats, a free process without any basic or intermediate input (pure experience-based formats) can be the recommended choice, we feel that this does not suit a context that already is very complex and limited in time. Our Camp setting needed a structured plan and at least a certain amount of guidance when working with the ideas.

All Camps contributed to enhancing communication skills. This can be traced back to their pitch training sessions and several settings where the students had to present themselves and their ideas, and was also due to being pushed to talk to people with various backgrounds (different culture, different language, different field and stage of expertise, etc.). The format increased intercultural competencies in several ways: by experiencing different countries and the diversity of cultures within them, and meeting and getting to know and closely work with or even live together with people from different cultures. This was a great way to determine the differences as well as similarities between people, and reflect on own perspectives, values, and approaches. One interesting side effect seen here was how we not only spoke about international differences, but interdisciplinary cultures as well—because we provided interdisciplinary formats, we attracted and therefore formed mixed groups of participants for disciplines with noticeable cultural differences, e.g., students and researchers from management, sustainability sciences, sociology, and computing science. Therefore, along with the joint work with the partners and the guided entrepreneurial idea generation, a reasonable mix of side events, excursions, and spare time is recommended.

With regard to our experiences, we have derived some recommendations for further implementation of the Camp format:

Preparation

Designing a format like our Camps needs sufficient preparation time. It is critical to prepare a structured process with regard to the challenging tasks and the high dependency on external partners and structures within a limited amount of time. In addition, we had to rely on (new) international partners and plan for possible scenarios that the organizers would not be familiar with. Therefore, we stress that it is important to find the right partners (at the university cooperation level, as well as concerning the local practical partners to work with). On-site, responsible contact persons are also very important. We recommend pre-camp online meetings to discuss and determine the overall topic and related tasks, as well as the structure, responsibilities, and travel/accommodation. Pre-camp online sessions can also be offered to the participants to get to know each other and do some up-front preparation work. This is something that might be easier now that we have expanded the experience of and a willingness to use video conferences (one of the positive side effects of the corona pandemic). This by the way could also have great potential to further include experts into various settings during the Camps.

Communication and Expectation Management

A Camp format requires careful communication when preparing and implementing it. First, it is important to clearly define the overall topic, and state a clear and achievable goal and work on jointly developed sub-goals. For example, in our case we had to make sure to derive a common understanding of what sustainability orientation is or can be, and how entrepreneurial activity can contribute to it. To ensure that the communication between the students and the partners worked properly, additional agreements with the partners were required in advance. Expectations played a major role—including those regarding the expectations of others, e.g., students expecting their partners to ascertain a certain result from their work, and who were worried about disappointing them. This is why clear and transparent communication must be the basis of an educational format like this. This applies to participants as well as organizers, and should include partners from research and practice. What is my role? What are my tasks? What if I have a problem? We recommend creating room for exchange whenever possible, meaning that constant exchange and feedback during the whole process should be provided—not only at the end of a Camp. This is important for creating an open atmosphere, avoiding misunderstandings, and supporting networking.

Content and Arrangement of Sessions

The structures that we introduced here all had advantages and disadvantages. Depending on the core aim and the competencies the participants should develop, certain structures are worthwhile. In sum, we recommend a mix of input sessions and practical experiences. Our experience was that this needs time and guidance to lead the participants through the idea generation process, while it at the same time is necessary to leave space for interacting with local partners and experiencing entrepreneurial activity in a real-life setting. While idea-generating workshops, in general, can also be offered at home, the international experience is what counts in this format. Thus, the stay should be accompanied by supplementary events like dinners, excursions, and free time activities. It is also advisable to frame the camp with a starting event and an intercultural training at the beginning, and a closing session that, e.g., presents the ideas to a broader audience.

Timing and Flexibility

We suggest that a camp format should not be designed for less than two weeks. We expect a longer period of time to show greater positive learning outcomes. Four weeks sometimes still resulted in busy, full schedules. However, we are aware of the fact that the length of the stay depends on several factors such as financial support, structural specifications of the participating universities (e.g., nonoverlapping semester and vacation times), and available personal resources (time and expertise). If the duration is too short, we believe that it is then not sustainable—in terms of social sustainability (experiencing the country, building networks, and acquiring competences) as well as environmental and economic sustainability (relation between environmental as well as the financial costs of, e.g., flights compared to the expected outcome). In addition, even the best plans and structures sometimes do not work out as expected, meaning some level of flexibility is required, especially

when working in intercultural contexts. However, this can also contribute to experiencing and learning different ways of handling situations when plans do not work out; this is a great competency that can be developed by international work.

Since the core aim of this chapter was to introduce our Camps as an innovative format, it has to be stressed that the recommendations we make concerning the design and implementation of such a format, and the statements we make concerning the targeted competencies are based on our own experiences. Even though we executed feedback rounds with all stakeholders, and used assessments for observing the participants' competence development, these have yet to be systematically analyzed. Doing so will be one of the next steps toward contributing to research on entrepreneurship education done within innovative formats. We think that it is an important contribution to research as well as educational practice to conduct empirical work in this field, and therefore call for more attention to this exciting area. We look forward to seeing others following up on our work—especially as they further develop the Camp concept and/or adapt it to additional settings, such as other countries or with other topics. This format is not only relevant for business students, but for participants from all disciplines. Entrepreneurship is truly a relevant competence for everyone. Future change agents are needed in so many fields, and those having sustainably entrepreneurial competencies will not only be able to identify, discuss, and understand societal problems, but will also be equipped to derive solutions to overcome them and create positive social, environmental, and economic impacts as they do so.

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References

- Andresen, L., Boud, D., & Cohen, R. (2020). Experience-based learning. In G. Foley (Ed.), *Understanding adult education and training* (2nd ed., pp. 225–239). Allen & Unwin.
- Antonicic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7–24.
- Aoyama, M. (2005). Persona-and-scenario based requirements engineering for software embedded in digital consumer products. Proceedings of the 13th IEEE International Conference in Requirements Engineering; 85–94.

- Bagus, S. I., Imade, S. U., Nyoman, S. I. A., & Putu, W. S. N. (2019). Community based tourism as sustainable tourism support. *Russian Journal of Agricultural and Socio-Economic Sciences*, 94, 10.
- Baporikar, N. (2022). Strategic framework for innovative tourism and sustainable development in Namibia. *International Journal of Tourism and Hospitality Management in the Digital Age (IJTHMDA)*, 6(1), 1–16.
- Biberhofer, P., Lintner, C., Bernhardt, J., & Rieckmann, M. (2019). Facilitating work performance of sustainability-driven entrepreneurs through higher education: The relevance of competencies, values, worldviews and opportunities. *The International Journal of Entrepreneurship and Innovation*, 20(1), 21–38.
- Blanka, C. (2019). An individual-level perspective on intrapreneurship: A review and ways forward. *Review of Managerial Science*, 13(5), 919–961.
- Brenner, W., Uebernickel, F., & Abrell, T. (2016). Design thinking as mindset, process, and toolbox. In W. Brenner & F. Uebernickel (Eds.), *Design thinking for innovation* (pp. 3–21). Springer.
- Bruton, D. (2011). Learning creativity and design for innovation. *International Journal of Technology and Design Education*, 21(3), 321–333.
- Caniglia, G., John, B., Kohler, M., Bellina, L., Wiek, A., Rojas, C., et al. (2016). An experience-based learning framework: Activities for the initial development of sustainability competencies. *International Journal of Sustainability in Higher Education*.
- Chesbrough, H. W. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Harvard Business Press.
- Conchado, A., Carot, J. M., & Bas, M. C. (2015). Competencies for knowledge management: Development and validation of a scale. *Journal of Knowledge Management*, 19(4), 836–855.
- Dowling, R., & Pforr, C. (2021). Geotourism—a sustainable development option for Namibia. *Journal of Ecotourism*, 20(4), 371–385.
- Erdil, N. O., Aktas, C. B., & Arani, O. M. (2018). Embedding sustainability in lean six sigma efforts. *Journal of Cleaner Production*, 198, 520–529.
- Erickson, J. A., & Anderson, J. B. (1997). *Learning with the community: Concepts and models for service-learning in teacher education*. Stylus Publishing.
- Farny, S., & Binder, J. (2021). Sustainable entrepreneurship. In *World encyclopedia of entrepreneurship* (pp. 605–611). Edward Elgar Publishing.
- Fidalgo-Blanco, Á., Sein-Echaluce, M. L., & García-Peñalvo, F. J. (2014). Knowledge spirals in higher education teaching innovation. *International Journal of Knowledge Management (IJKM)*, 10(4), 16–37.
- Fischer, J., Dyball, R., Fazey, I., Gross, C., Dovers, S., Ehrlich, P. R., Brulle, R. J., Christensen, C., & Borden, R. J. (2012). Human behavior and sustainability. *Frontiers in Ecology and the Environment*, 10(3), 153–160.
- Gast, J., Gundolf, K., & Cesinger, B. (2017). Doing business in a green way: A systematic review of the ecological sustainability entrepreneurship literature and future research directions. *Journal of Cleaner Production*, 147, 44–56.
- Geissdoerfer, M., Bocken, N. M., & Hultink, E. J. (2016). Design thinking to enhance the sustainable business modelling process—A workshop based on a value mapping process. *Journal of Cleaner Production*, 135, 1218–1232.
- Gloet, M. (2006). Knowledge management and the links to HRM: Developing leadership and management capabilities to support sustainability. *Management Research News*, 29(7), 402–413.
- Halberstadt, J., Timm, J. M., Kraus, S., & Gundolf, K. (2019a). Skills and knowledge management in higher education: How service learning can contribute to social entrepreneurial competence development. *Journal of Knowledge Management*, 23(10), 1925–1948.
- Halberstadt, J., Schank, C., Euler, M., & Harms, R. (2019b). Learning sustainability entrepreneurship by doing: Providing a lecturer-oriented service learning framework. *Sustainability*, 11(5), 1217.

- Hauser, A. (2019). Unleash your innovation power: Combining design thinking, Agile and Lean (Part 1). Blogsap. <https://blogs.sap.com/2019/07/01/unleash-your-innovation-power-combining-design-thinking-agile-and-lean-part-1/>
- Heiskanen, E., Thidell, Å., & Rodhe, H. (2016). Educating sustainability change agents: The importance of practical skills and experience. *Journal of Cleaner Production*, 123, 218–226.
- Hözlner, H., & Halberstadt, J. (2022). Challenge-based learning: How to support the development of an entrepreneurial mindset. In J. Halberstadt, A. A. de Bronstein, J. Greyling, & S. Bissett (Eds.), *Transforming entrepreneurship education* (pp. 23–36). Springer.
- Johnson, D., Craig, J. B., & Hildebrand, R. (2006). Entrepreneurship education: towards a discipline-based framework. *Journal of Management Development*, 25(1), 40–54.
- Kassean, H., Vanevenhoven, J., Liguori, E., & Winkel, D. E. (2015). Entrepreneurship education: A need for reflection, real-world experience and action. *International Journal of Entrepreneurial Behavior & Research*.
- Kavita, E., & Saarinen, J. (2016). Tourism and rural community development in Namibia: Policy issues review. *Fennia-International Journal of Geography*, 194(1), 79–88.
- Kickul, J., & Lyons, T. S. (2020). *Understanding social entrepreneurship: The relentless pursuit of mission in an ever changing world*. Routledge.
- Kimaro, M. E., & Saarinen, J. (2019). Tourism and poverty alleviation in the global South: Emerging corporate social responsibility in the Namibian nature-based tourism industry. In *Natural resources, tourism and community livelihoods in southern Africa*, Routledge, 123–142.
- Kirkwood, J., Dwyer, K., & Gray, B. (2014). Students' reflections on the value of an entrepreneurship education. *The International Journal of Management Education*, 12(3), 307–316.
- Kreuzer, C., Weber, S., Bley, S., & Wiethe-Körprich, M. (2017). Measuring intrapreneurship competence as a manifestation of work agency in different educational settings. In *Agency at work* (pp. 373–399). Springer.
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7(1), 25–43.
- Nielsen, L., Larusdottir, M., & Larsen, L. B. (2021, August). Understanding users through three types of personas. In IFIP Conference on Human-Computer Interaction. Springer, Cham., 330–348.
- Njoroge, C. W., & Gathungu, J. M. (2013). The effect of entrepreneurial education and training on development of small and medium size enterprises in Githunguri District-Kenya. *International Journal of Education and research*, 1(8), 1–22.
- Patwary, A. K., Chowdury, M. M., Mohamed, A. E., & Azim, M. S. (2020). Dissemination of Information and Communication Technology (ICT) in tourism industry: Pros and cons. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 1(8), 36–42.
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology & Tourism*, 22(3), 455–476.
- Probst, L., Bardach, L., Kamusingize, D., Templer, N., Ogwali, H., Owamani, A., Mulumba, L., Onwonga, R., & Aduagna, B. T. (2019). A transformative university learning experience contributes to sustainability attitudes, skills and agency. *Journal of Cleaner Production*, 232, 648–656.
- Pruitt, J., & Adlin, T. (2010). *The persona lifecycle*. Keeping people in mind throughout product design, Morgan Kaufmann.
- Robinson, J. (2004). Squaring the circle? Some thoughts on the idea of sustainable development. *Ecological Economics*, 48(4), 369–384.
- Rodríguez Perez, J., & Ordóñez de Pablos, P. (2003). Knowledge management and organizational competitiveness: A framework for human capital analysis. *Journal of Knowledge Management*, 7(3), 82–91.
- Ruiz Gómez, L. M., Rodríguez Fernández, L., & Navio-Marco, J. (2018). Application of communication technologies (ICT) within the tourism industry in the European Union. *Tourism: An International Interdisciplinary Journal*, 66(2), 239–245.

- Rule, E. G., & Irwin, D. W. (1988). Fostering intrapreneurship: The new competitive edge. *The journal of business strategy*, 9(3), 44.
- Saarinen, J., Rogerson, C. M., & Manwa, H. (Eds.). (2013). *Tourism and the millennium development goals: Tourism, local communities and development*. Routledge.
- Sarango-Lalangui, P., Santos, J. L. S., & Hormiga, E. (2018). The development of sustainable entrepreneurship research field. *Sustainability*, 10(6), 2005.
- Sarooghi, H., Sunny, S., Hornsby, J., & Fernhaber, S. (2019). Design thinking and entrepreneurship education: Where are we, and what are the possibilities? *Journal of Small Business Management*, 57, 78–93.
- Schank, C., & Halberstadt, J. (2022). Teaching transformative service learning. In J. Halberstadt, A. A. de Bronstein, J. Greyling, & S. Bissett (Eds.), *Transforming entrepreneurship education* (pp. 3–21). Springer.
- Silveira, C., Reis, L., Santos, V., & Mamede, H. S. (2020). Creativity in prototypes design and sustainability. *Advances in Science, Technology and Engineering Systems*, 5(6), 1237–1243.
- Speck, B. W. (2001). Why service-learning? *New directions for higher education*, 2001(114), 3–13.
- Spiegler, A. B., & Halberstadt, J. (2018). SHEstainability: How relationship networks influence the idea generation in opportunity recognition process by female social entrepreneurs. *International Journal of Entrepreneurial Venturing*, 10(2), 202–235.
- Tschimmel, K. (2012). Design thinking as an effective toolkit for innovation. In The International Society for Professional Innovation Management ISPIM Conference Proceedings, 1.
- Unger, A., de Bronstein, A. A., & Timoschenko, T. (2022). Transdisciplinary learning experiences in an urban living lab: Practical seminars as collaboration format. In J. Halberstadt, A. A. de Bronstein, J. Greyling, & S. Bissett (Eds.), *Transforming entrepreneurship education* (pp. 135–151). Springer.
- Van der Colff, L. (2004). A new paradigm for business education: The role of the business educator and business school. *Management Decision*, 42(3/4), 499–507.
- Walsh, G. S. (2017). Re-entry following firm failure: Nascent technology entrepreneurs' tactics for avoiding and overcoming stigma. In *Technology-based nascent entrepreneurship* (pp. 95–117). Palgrave Macmillan.
- West S, Di Nardo S. (2016). Creating product-service system opportunities for small and medium size firms using service design tools. Proceedings of the 8th CIRP Conference on Industrial Product-Service System, 96–101.
- Williams Middleton, K., Mueller, S., Blenker, P., Neergaard, H., & Tunstall, R. (2014). Experience-based learning in entrepreneurship education—a comparative study of four programmes in Europe. In *RENT (Research in Entrepreneurship and Small Business) XXVIII*, 1–15.
- Zomer, A., & Benneworth, P. (2011). The rise of the university's third mission. In *Reform of higher education in Europe* (pp. 81–101). Brill Sense.

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