



greenpreneurs

A handbook for trainers

LBD-R3E TRAINING PROGRAMME
INTELLECTUAL OUTPUT 2 (IO2)
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We would also like to extend our thanks to all the organisations and entrepreneurial individuals who contributed so generously to the pilot programmes and the learning experience of our Greenpreneurs. Last but by no means least, a big thank you to the ‘Greenpreneurs’ who participated so actively in our pilot programmes and whose questions have contributed to the development of the course. We wish you all every success in your new ventures.

We wish you happy reading and hope this Handbook for Trainers will help you to prepare and facilitate your own, successful Greenpreneurs course. For queries relating to this handbook, please contact the lead author Markku Rajala: Markku.Rajala@turkuamk.fi

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Part I: Introduction to the Greenpreneur Learning Model

1. Introduction

This handbook is for all tutors, teachers, mentors, team coaches who want to develop and deliver a highly interactive, exciting learning project aimed at helping people develop their entrepreneurial skills in the sectors of renewable energy and energy efficiency. The Greenpreneurs' approach is student-centred and student-led, based on learning-by-doing.

The handbook has been developed under the LBD-DECR3E project (Adaptation of the LEARNING-BY-DOING Methodology for the Development of Entrepreneurial Competencies in the sectors of Renewable Energy and Energy Efficiency – R3E) and is funded by The Erasmus + Programme from the European Commission.

The main objective of this programme is to train qualified professionals to be effective leaders in the creation of self-managed teams and start-ups, highlighting their capacity as agents of change, both in existing businesses and in the creation and development of new companies.

LBD-DECR3E is a transnational partnership between three Universities (MIK, UWE and TUAS) and a Training and Technological Centre (SNE-CENIFER) - a National Reference Centre in Renewable Energy and Energy Efficiency (R3E).

MIK (Mondragon Innovation & Knowledge) is a research centre dedicated to the specialized management of social and organizational innovation. It is part of the Mondragon University and Mondragon Cooperative Corporation, the biggest co-operative in the world.

The Employment Service of Navarre (SNE) is an autonomous office of the Government of Navarre (Spain). Its mission is planning and implementing the employment policies of Navarre. SNE gives opportunities to active employees and the unemployed to access new markets by developing competencies appropriate to R3E. In this, SNE partners with the National Centre for Training on Renewable Energy (Centro de Formación en Energías Renovables - CENIFER).

The University of the West of England, Bristol (UWE) is a partnership university and is the largest provider of higher education in the South West of England with around 30,000 students. UWE has a strong commitment to enterprise and entrepreneurship, with its Enterprise 2020 strategy committing to include enterprise and entrepreneurship in all programmes across the university. Through its Team Entrepreneurship Hub, UWE has pioneered the introduction of Tiimiakatemia (TA) (Tiimiakatemia Global, 2016) methodologies in the UK Higher Education sector and is actively involved in their wider dissemination.

Turku University of Applied Sciences (TUAS) is a multidisciplinary higher education institution, hosting 9 500 students studying for a Bachelor's or Master's degree. One of the main aims of TUAS is the development of higher professional education and expertise in Southwest Finland.

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The handbook is divided into two main areas: Chapters 2-4 describe the project, the background and the theoretical learning model. A good basic knowledge of the learning model provides a foundation for understanding the use and application of different methods and tools.

Chapters 5-7 provide more practical knowledge and detail different aspects of the learning model. These chapters also include descriptions of the main tools used in the learning model.

Throughout there are references where users can find more detailed information on the learning model itself and about supporting processes, methods and tools.

2. Greenpreneur Stories

...After 20 years in the telecommunications sector, working for large companies, Marcos was out of work and without prospects. After 5 years of unemployment, and at 55 years of age, the job search had become a succession of refusals that caused him frustration and despair.

...Her head was buzzing with new ideas and market opportunities that were being wasted because she did not know how to develop them on her own. Her experience as a sole trader had been revealing but also overwhelming. Anne had concluded that entrepreneurship is not so easy; not only do you need financial resources, but also good people around you.

...When Sara finished her studies in architectural technology, the job market did not offer good prospects and she felt that she did not have much to offer in the selection processes where she competed with better prepared and experienced people. She wanted to find a job that was well paid and professionally challenging, but she knew she would not have much to choose from.

...He had been working as a technician in temporary jobs for a long time, but lately these opportunities had been reduced. Jon's education level was basic; he had completed a vocational training course as an electrician, but had not returned to study. He had never considered setting up his own business; he was not that kind of person.

Marcos, Anne, Sara and Jon were amongst a number of enterprising people attracted by the opportunity to explore a new path called Team Entrepreneurship in the green sector - Greenpreneurs - a radical new approach to learning and teaching. They decided to try it. The first few days were very strange, they sat in a circle and shared their thoughts, how they felt about what they were doing, and how they should work together as a team. Team coaches encouraged them to start with 'action', to reflect on and learn from their actions (including the ones that did not work so well or resulted in failure) and to trust the new methodology that would help them to create something new and great.

Everything began to move very quickly, the 20 people who embarked on this process came up with dozens of business ideas. They decided to try some of them on potential clients, even without having the idea fully developed ... testing, jumping in at the deep end...

Three months later, full of expectations and enthusiasm, they set up a business association that allowed them to design and deliver together entrepreneurial projects that they might never have dreamed of. So much had happened in three months and their level of knowledge

and confidence in the team was such that it made them think that together they could do the impossible. They had developed an entrepreneurial mindset, and learned the basics of team entrepreneurship, the importance of dialogue and how to co-create projects with potential customers using the 'Lean Start-up' methodology (Ries, 2011). Obviously, they encountered problems along the way: setting aside personal interests for the advancement of the team was not easy initially, and it took patience to learn leadership and followership... But it was clear that the end of the programme was just the beginning of a great adventure.

3. Background to Greenpreneurs

The Greenpreneurs project focusses on enhancing team entrepreneurship skills in a real world setting for people qualified in renewable energy and energy efficient buildings (R3E). It is based on Tiimiakatemia, or Team Academy, expertise (Tiimiakatemia Global, 2016) which was developed in Finland in 1993, based on new insights into how people learn through practice.

In the following chapter, we will give you an overview of these changes in education and learning philosophy before explaining more about the birth of the Tiimiakatemia and its spin-off: Greenpreneurs. From here on in the English version of this Handbook, we will use the term 'Team Academy' or 'TA' in place of Tiimiakatemia.

Education changes: From teacher-centred to learner-centred education

Moving away from teacher-driven learning, education is more and more aware of the power of learning that comes from personal reflection, and the student's awareness of their own needs, plans and challenges. Change starts by empowering individual and team learning processes, and by creating learning environments that encourage learners to take responsibility for their own learning and performance. As Johannes Partanen says, "schools could serve as incubators and advise us, push us forward and enrich us with ideas and objectives. We learners would create companies, books, songs, sculptures and inventions" (Partanen, 2015).

Creating the right learning environment for Greenpreneurs involves a significant change in mind-set (Tiimiakatemia, 2013):

It is the 'doing', the spirit of enquiry, and the consequent reflection that generates the learning. Neither the teacher, nor knowledge transmission, is the centre of attention in this model. Instead the learner takes the lead. Based on her interests, curiosity and needs she will go out to explore, discover and create the knowledge relevant to her project. Teachers are coaches, following and encouraging the learners - and not simply giving information and transmitting knowledge. This requires a different attitude and different skills: for example, strong active listening, coaching and feedback skills. Trainers need a flexible and confident attitude to working in a less structured environment, allowing needs and wishes to emerge and provide the context for learning, which is quite different from the requirements of a fixed curriculum.

Take a few minutes to reflect on what the TA approach to learning by doing means for you and your practice. The box below includes some questions to guide your reflection.

Analytic 1: My first impressions of what Team Academy may mean for me

Prompt	Your Response
Aspects of the approach that resonate with me are ...	
Aspects of the approach that I find challenging are ...	
How do these ideas relate to my own learning preferences?	
And how do they make sense of my own learning experiences?	
What are the main implications for the way I take up my role as educator?	

Team Academy

This way of learning has been tried and tested in Tiimiakatemia and Team Academies across Europe, South America, Australia and Africa.

The Greenpreneurs project and this handbook is based on the principles and learning approach of Tiimiakatemia Finland (Tiimiakatemia, 2016), where new methods have been developed and tested for more than 20 years. Now more than 6,000 people are using them in various ways, worldwide. Tiimiakatemia claims that one does not learn entrepreneurship, teamwork skills, leadership and innovation by sitting in a classroom and listening to lectures, but learners learn best by doing all the relevant tasks and relevant thinking themselves in the here and now, solving the challenges and problems they face, acting and reacting in their work environments.

This approach creates 'teampreneurs', or team entrepreneurs, people who work as entrepreneurs but in a team. Teampreneurship® emphasises teamwork, learning together, self-reflection, taking responsibility for one's own learning and pragmatism. The idea is to



solve real-life problems and get things done.

The Greenpreneurs project, outlined in this handbook, is based on these insights and ways of learning, encouraging the development of a different, more entrepreneurial, growth mindset (Dweck, 2012) and promoting a personal learning path in which the Greenpreneurs are the main protagonists and owners. For more on Teampreneurship®, please see the references at the end of this handbook.

The Greenpreneurs Project

The trigger for the Greenpreneurs project was the realisation that in 2015, according to Eurostat, the EU counted 26 million unemployed people (with unemployment rates of 23.4% in Spain, 8.8% in Finland and 5.5% in UK) while at the same time experts were saying that 23 million green jobs could be created (Valente *et al.*, 2015). In 2009, Spain for example, counted 530,000 green jobs, and according to projections could create one million new green jobs by 2020, mostly in the transport and building sectors. It became clear that there were not enough people with sufficient entrepreneurial and professional skills in the field of Renewable Energy and Energy Efficiency (R3E) and that the development of these skills was often ignored or paid scant attention in training provision.

The main objective of the Greenpreneurs pilots was to develop the entrepreneurial capacities of technologically qualified professionals to be effective leaders in the creation of high-performance, self-managed teams and start-ups, empowering them as change agents.

The full Greenpreneurs project ran over two years. Beginning in the autumn of 2015 with a planning phase, it was followed by a pilot programme from April to June 2016 in the three countries with up to twenty technically qualified participants in each country. The selected participants were either looking to develop their careers or to start their own business. The pilot also included a separate 'train the trainers' pilot programme designed to develop potential Greenpreneur coaches to lead new courses in other educational centres. Based on the learning and evaluation from the pilots, this handbook is published as guidance and support for those wanting to introduce team working and entrepreneurship into vocational education and training and higher education curricula in the R3E sector.

The Greenpreneurs Target Groups

The target groups for the Greenpreneur pilot programmes were unemployed and under-employed people, with relevant training and/or professional experience, or recent graduates with an active interest in the field of R3E.

The main aim is to create new entrepreneurial capability, by establishing a new, growth mindset, by building skill in the creation of new business models, and by introducing them to new tools and ways of working. We explore this in more detail in the chapters that follow.

4. The Greenpreneurs Learning Model

In this chapter we outline some of the most important underpinning theories that guide the Greenpreneurs approach. They are:

- Real Learning: experiential learning in a real world setting
- Team Learning: the importance of team and team learning
- Individual Learning: learning based on personal development and individual needs
- Shared Learning: learning as part of a community
- Knowledge Creation: the importance of reflection in moving from tacit to explicit knowledge

Real Learning: Experiential learning in a real world setting

Learning by doing happens in real world settings. It cannot be created in an artificial environment. In this sense work and training are intimately linked, and cannot be separated; the classroom becomes a laboratory of constant learning. Learners are expected to take responsibility for maintaining and developing know-how, and for maintaining their networks (Partanen, 2015).

To maintain motivation and a bias for action, skill development is connected to real entrepreneurship, not simulations, case studies or similar. The way we did it in Greenpreneurs was through real projects, put into practice. And with the technical skills and know-how the Greenpreneurs brought, there were plenty of ideas for new entrepreneurial projects and real prototypes.

Team Learning: The importance of team and team learning

In Teampreneurship® the team is the main vehicle for enhancing personal growth and learning. Not all groups are teams, there are several differences between a team and a group, as described in the illustration below.



Teams develop over time. Its members learn new skills and the team’s collective capability to operate as a team develops. Understanding the development cycle can help team members to understand their current phase and anticipate future challenges.

Katzenbach and Smith (1993: 84) created “the team performance curve”, a practical model that helps to assess team evolution. They claim that a team’s performance will depend on both the basic approach it elects to take and how effectively it implements the selected approach. In brief, the five small group types illustrated in the diagram to the right are characterised by:

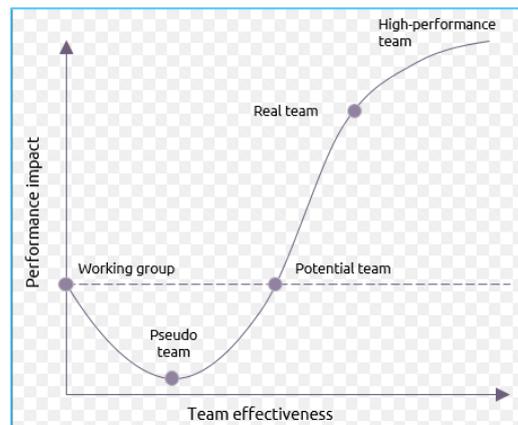


Figure 1 - Adapted from Katzenbach and Smith

Working group: The performance of a working group depends on “individual bests”, and has no collective work or goals.

Pseudo-team: Whilst pseudo-teams call themselves teams and may set a common purpose, shared goals and mutual accountability, they do not take the risks of conflict and collective action required to operate as a team.

Potential team: Once they have begun to take the risks associated with collective action, potential teams emerge. Those that can overcome the inevitable obstacles may develop into **real teams** and at the highest level of effectiveness and performance impact, into **high-performance teams**.

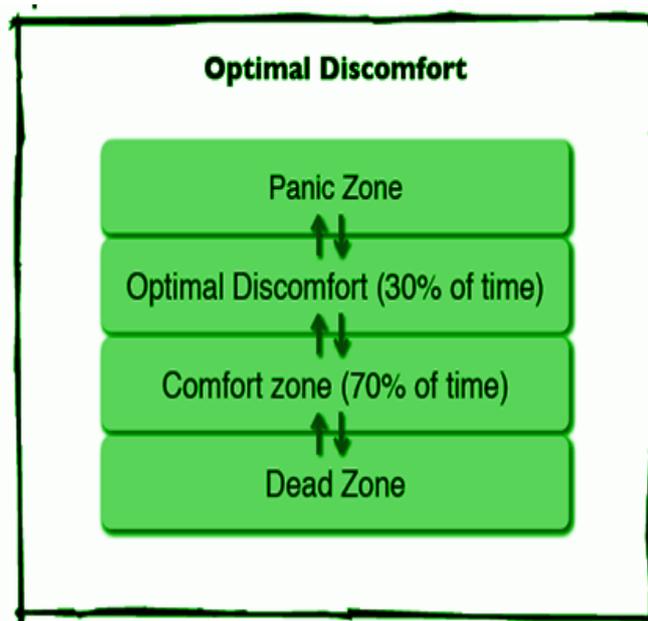
The highest performing teams invest time and effort exploring, shaping and agreeing on a purpose that belongs to them both collectively and individually. As Katzenbach and Smith (1993: 86) put it:

“The wisdom of teams lies in recognizing that any person, whether previously an autocrat or a democrat, who genuinely believes in the purpose of the team and the team itself can lead the team toward higher performance.”

Individual Learning: Learning based on personal development and individual needs

Despite the team being the main learning vehicle, the learning journey is different for everyone. Every individual brings different expectations, needs, personal goals and challenges. An alignment of those elements, or at least a basic understanding of them, is needed for a team to find a common purpose, aligned to individual goals. Inner motivation comes from personal ambition, aspiration and passion. In this learning approach, personal commitment is crucial and a core ingredient in the individual learning process which informs and supports the team learning process.

Learning by doing requires learners to face their own weaknesses and barriers to a higher level of achievement. The optimal discomfort theory (Palethorpe and Wilson, 2011) explains the optimal discomfort zone, which is the place from where often the most and best learning emerges. In the traditional classroom, we spend most of our time in the comfort zone, just sitting down and waiting for the teacher to deliver. Learning by doing requires the learner to push his/her limits in search of higher performance and transformational learning.



Shared Learning: Learning as part of a community

Learning by doing and Teampreneurship® learning approaches require a context where

knowledge will flow and meaningful learning will happen.

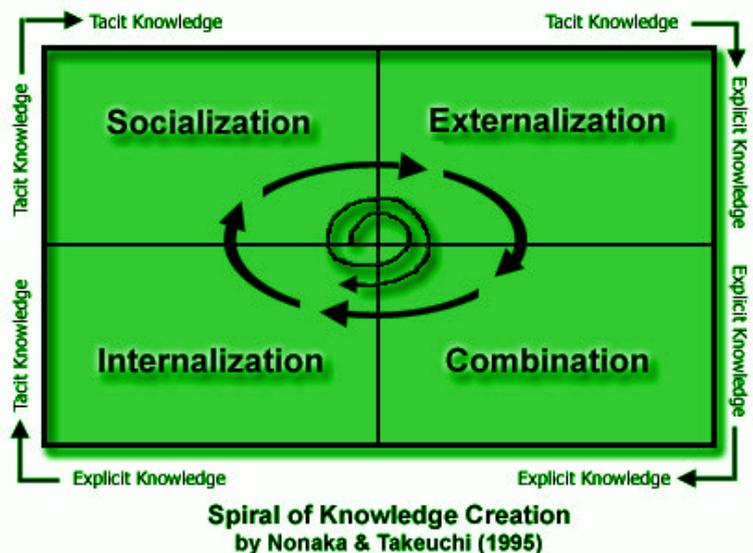
In the Greenpreneur course the context is set by the green economy. It is against the sum of wants, needs and requirements of the green economy that Greenpreneurs can reflect on personal and professional competencies and personal awareness of their own strengths, weaknesses, needs and learning aspirations. Learners commit to their own, the team's and the community's objectives. And site/customer visits to other companies help to build up the network which is essential to work as a member of the community.



The Knowledge Creation Model: The importance of reflection in moving from tacit to explicit knowledge

In this handbook, we are using the Knowledge Creation Model from Nonaka and Takeuchi as a reference for understanding learning and knowledge creation (Nonaka and Takeuchi, 1995).

In this theory, tacit knowledge, which is often difficult to formalise, and which may be time and space specific, is transmitted through shared experience (socialisation), of doing things together. Turning tacit knowledge into explicit knowledge



requires reflection and the development of concepts, images, documents to enable its communication (externalization). Explicit knowledge is integrated, and edited or processed into new knowledge, for example, by creating prototypes (combination). Then explicit knowledge becomes tacit again through adoption and use (internalization). The spiral illustrates how each cycle deepens learning and creates new knowledge.

Creating and acquiring knowledge for meaningful learning is a continuous process, and

requires all parts of the spiral. Traditional educational processes in the West focus on explicit knowledge and underplay the role and importance of tacit knowledge. For subjects like entrepreneurship, that cannot be learned just by listening, reading or analysing concepts, the traditional educational approach is not enough.

Analytic 2: Your own experience of learning in teams

Prompt	Your Response
Describe a really positive experience you've had of working in teams? How did it feel? And what made it so positive?	
Describe an unsatisfactory experience you've had of working in teams? How did it feel and what made it so unsatisfactory?	
What do you see as the main advantages and disadvantages of learning in and with a team?	
What is your opinion, and what is your expectation, of using the team as a vehicle for learning?	
What actions and changes to your delivery style will facilitating learning in team require of you?	

Analytic 3: Your own experience of individual learning

Prompt	Your Response
Describe your best individual learning experience so far and analyse why it was such a good learning experience?	
What if anything, did you notice about the alignment of the learning objectives to your own motivation and aspirations?	
How will you bring your learning from this into your own work with your Greenpreneurs?	

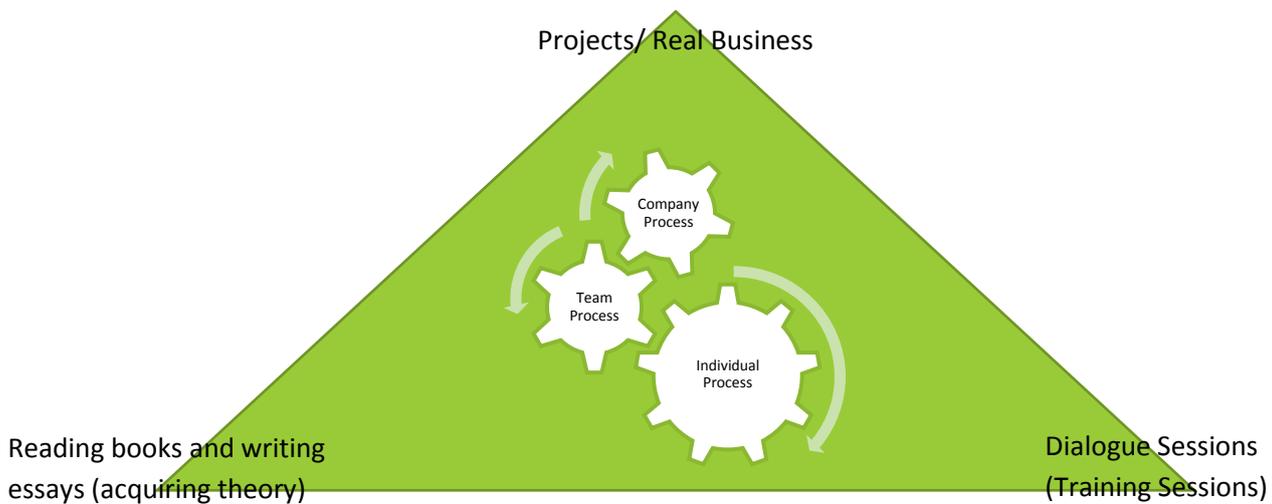
Part II: The Greenpreneur Learning Model in Practice

5. Key Greenpreneurs Learning Activities and Tools

The Greenpreneur learning model is based upon team entrepreneurship and an associated set of learning activities and tools. This approach builds on a philosophy of learning by doing where learners learn best and fastest through real experience. In the Greenpreneur learning model we give team members opportunities to learn through experience within the area of energy efficiency or renewable energy. The same learning model can be applied anywhere regardless of the industry sector. Learning by doing does not mean abandoning learners to the situations they find themselves in. Rather, it is about using those situations to drive learning. Greenpreneurs and team entrepreneurship come with a bag of tools for the coaches and students to maximize learning in a safe and productive environment.

One example of these tools is pre- and post-Motorola. This is the method for preparing for a meeting, an event or a project and reflecting upon it afterwards. This helps learners to go into a learning situation or task having thought about what they want to achieve, having their eyes open to the learning opportunities as they go through it, and knowing at the end they are going to capture and record what they learned, with a view to doing differently or better next time. These tools are set out later in this manual to help trainers create learning by doing situations, and support learners through their own personal learning journey.

The essence of the Greenpreneur learning model is illustrated in the picture below. It shows the learning triangle where learning happens on three separate levels simultaneously (individual, team & company). All three learning levels or processes are based on three learning activities: real projects, training sessions and engaging with theory, ideas and concepts. These form the core of the Greenpreneurs approach. In this chapter, we explore the learning triangle and review key learning activities and how they relate to the separate learning levels.



Learning Activities

Real Project Work, Real Business



Greenpreneurs work typically in small project teams, and train in larger teams of up to 20 team members. In the whole team there may be several projects running at any one time. A project is not a project without a project plan, a budget and a customer. Project ideas come from a

variety of sources, including: ideation sessions with the team, customer visits, and meetings with partners. The first project can be difficult, because the new team might feel they do not have the skills and competencies needed. That is why projects should start small, based on realistic and practical ideas. The key thing is that they are done with real customers, and not through simulation.

The projects happen at the team's office, typically a co-working, open space. The office may even be at the customers' premises. The physical space is important in providing an environment free to create, to think out of the box, to challenge previous learning prejudices. Spaces where chairs and tables can be moved without restrictions are central to setting a different learning environment.

In projects, students learn in a variety of ways: from practical activities (learning by doing), experimentation (doing things they haven't done before, in a spirit of open enquiry, where

the precise outcome may be unknown at the outset) and working in multidisciplinary teams. And they learn from their teammates, their customers and project partners, through sharing knowledge, which accelerates individual learning.

Pilot experience

Project work forms the basis of the whole learning process, so it is important to start work on projects from day one.

The best case is where a team has at least two separate projects ongoing, because then participants can explore best practices and learn from early mistakes.

An example might be: starting with a small sales project where the project team innovates a simple product or service. Greenpreneurs must produce an offer and sell to identified customers. This might then be followed up by a bigger project where Greenpreneurs can use the experience gained from the sales project.

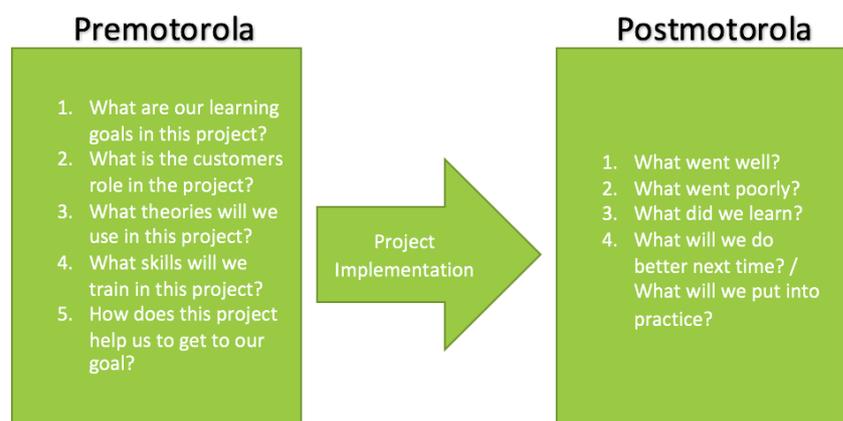
Tools Supporting Project Work, Real Business

Pre-Motorola / Post-Motorola:

Pre- and Post-Motorola is a simple tool (Leinonen, Palviainen and Partanen, 2004) for planning and assessing projects. It was originally created in the American company, Motorola, for following up ongoing projects in an easy and consistent way. Using the Motorola tool helps Greenpreneurs to focus on the right things when planning and building up the project (Pre-Motorola). What is our goal? What kind of skills are needed, or must be learned?

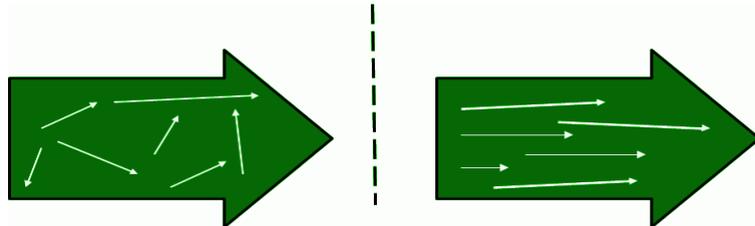
Pre – and Postmotorola Frameworks

(Postmotorola adapted from the project report of Motorola company, premotorola developed by Tiimiakatemia)



Goal setting:

Goal setting is important to guide the actions of the individual, team and the company. The main objective of this is to build learning situations and create an environment that supports collective, target-oriented learning (Partanen, 2015). Goals are expressed in individual and team learning contracts.



Workshops and bootcamp: Workshops allow Greenpreneurs to learn from industry experts in identified areas. These experts often come from outside of the coaching team and help to introduce more external perspectives. Some programmes condense these workshops into a single, intensive ‘business bootcamp’ that immerses the Greenpreneurs in a hands-on, learning-by-doing approach to developing business start-up ideas. It is based on a Lean Startup methodology (Ries, 2011) and uses the Business Model Canvas (Osterwalder, 2010) as a tool to develop an overview of their enterprising project.

Training Sessions



The team meets for half-day (3-4 hours) Training Sessions twice a week. All team members attend the Training Session. These sessions support team development, business development and the sharing and crystallising of learning from both projects and books read and other engagement

with theories, ideas and concepts. After the first few sessions where the team coach may lead them, the team is responsible for setting the topics, leading and facilitating the Training Sessions and ensuring the team gains full value from them. Training Sessions are also the most important touch-points for the Team Coaches, where they gain deep insight into the development of both the team and the individuals that make it up.

Training sessions always start with a check-in and finish with a check-out. Typically, training sessions

aim to follow the principles of dialogue (Isaacs, 1999). Dialogue helps to avoid the pitfalls of pseudo-teams as described by Katzenbach and Smith (1993) by placing the emphasis on growing shared understanding, rather than reaching consensus. This seemingly small shift in emphasis is crucial to the development of real and high-performing teams.

Pilot experience

To invest in training session pays off. It is important that there is enough preparation time reserved for the Greenpreneurs who are facilitating the training session. This means that you need to fix the training schedule at least one or two weeks ahead. However, training session topics cannot be set too far in advance as the training session is an excellent forum to handle hot topics emerging from team and project work.

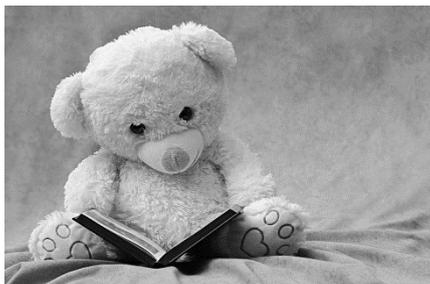
Tools supporting Training Sessions

Check-in/Check-out: Usually check-in is a temperature check, or level-set, ie where are we at, what state are we in coming into the training session? Check-in can also be an open question which encourages each participant to give a preliminary view on the topic of the training session. The purpose is to open the dialogue.

Check-out draws the training session to a close and makes sure that everyone's voice is heard. A good check-out question helps the team to finish on a high. As with check-in, time management is important; even one word or one breath check-outs can be really powerful.

Feedback: Acquiring the skills of giving and receiving constructive feedback is central to team learning and the Greenpreneurs approach. Feedback skills are introduced from the outset and are practiced regularly in training sessions.

Acquiring Theories, Ideas and Concepts



Engagement with theories, ideas and concepts helps Greenpreneurs to reflect critically on

and learn from their actions and experiences. Much theory is gained from reading books and articles, though Greenpreneurs also make use of a wide range of web-based resources. Central to drawing on diverse sources is learning to evaluate the rigour and applicability of different sources – a core skill for making well-informed decisions in a knowledge-based society!

Many Greenpreneurs find they do a lot of reading, maybe more than in traditional courses. There is no set reading list and learners choose their own material, including from a list of recommended books and journal articles. Greenpreneurs make their selection based on interests and needs that arise in projects, business, and teamwork and learning techniques. You will find some useful suggestions for texts and other sources, by topic, in Chapter 2 of the Curriculum Design Guide, available in the ‘intellectual outputs’ tab on the Greenpreneurs web pages: www.greenpreneurs.eu.

Reading and engaging with theories, ideas and concepts is important in its own right, but the real value comes when the learner writes a ‘knowledge review’ connecting the theory, idea or concept to their own experience and reflecting on if and how it created new value or insight. Sharing this learning with fellow team members both increases the ‘knowledge pool’ of the whole team and helps to cement learning for the individual.

Reading in particular is something that comes harder for some individuals, and sometimes has to be started by strong encouragement. Later, when the value of reading is seen more practically, typically reading becomes less intrusive. Reading is well known to accelerate the process lived in entrepreneurial projects and business.

Pilot Experience

Some participants on the Greenpreneur course have limited prior experience of engaging with theory, and particularly of reading books. This particularly true of reading a text critically and with a view to understanding its application in practice and its reliability as a source in relation to other material. It has been an eye-opening experience for several participants and opened the world of books to several Greenpreneurs. Reading circles were important, encouraging team members to share learnings with the rest of the team.

Tools Supporting Engaging with Theories, Ideas and Concepts

Reading Plan: Each Greenpreneur creates a concrete list of readings and other materials which supports the achievement of their learning targets. As well as books, it can contain, articles, studies, market reports, series of TED talks, etc

Knowledge Reviews: Theories, ideas and concepts are summarised in knowledge reviews where main learnings and findings are captured. Greenpreneurs explore how they have used these ideas, theories and concepts to inform and develop their practice. In reflecting critically on their usefulness, they learn how to contextualise and apply their learning in different contexts. In sharing their knowledge reviews with their team mates, they encourage different perspectives on the ideas they have explored and contribute to growing and strengthening the team's knowledge base.

Reading Circles: This is about sharing knowledge reviews in a live forum. These may happen within Training Sessions. The 'snowballing' technique outlined in the Curriculum Development Guide is another way of doing this.

Learning Levels

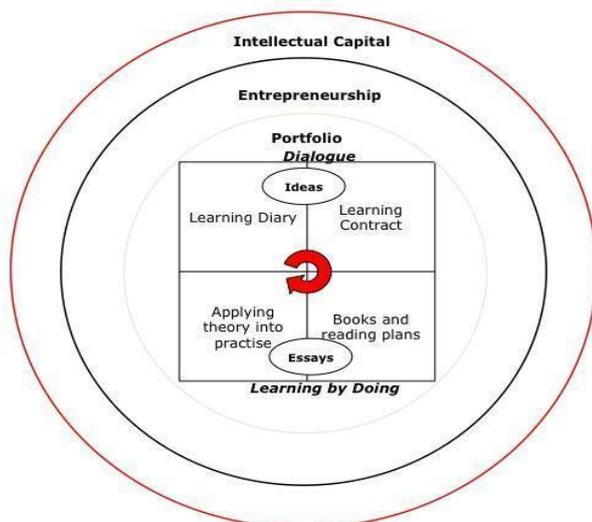
In the previous chapter we looked at learning activities along with the tools supporting them. To complete the picture we will now look at the learning activities happening at three separate learning levels:

- Individual Learning Process
- Team Learning Process
- Company Learning Process

The idea of learning levels as adopted in Greenpreneurs is based on the SECI Knowledge Creation Model (Nonaka and Takeuchi, 1995) which was presented in Chapter four. Adopting this lens, learning is created in a spiral through the use of dialogue, theory, application and testing. At each level there are specific set of tools and techniques which support the learning spirals. It is also important to bear in mind that learning spirals at each level happen in parallel, not separately.

Individual Learning Process

The Individual Learning Process is based on Self Leadership (Covey, 2004) - leading yourself to learn and develop towards goals. In a Greenpreneur course environment, individuals need entrepreneurial goals, passions and dreams to initiate the process.



In the Greenpreneur course, an individual Learning Contract is developed with every team member before the start of the project and revisited throughout. Learning gained during the program is documented in a Learning Diary. This helps to crystallise learning gained in training sessions, in project meetings, in customer meetings. In the Learning Contract, real, tangible goals accelerate the learning. These two steps serve to create new ideas (tacit knowledge) at the individual level.

The individual needs to read and engage with a wide range of theories to increase their individual knowledge capital. (S)he also needs a strategy for reading: what kind of theory would support the skills needed in the team, leading myself, for projects etc. This theoretical knowledge is combined with the ideas emerging from his/her Learning Diary and Learning Contract.

Finally, as part of the team company and different project teams, the individual is learning through doing and through brave experimentation.

Tools supporting the Individual Learning Process

The Learning Diary: The Learning Diary is a notebook – a journal or electronic record – where the Greenpreneurs record all their learnings, everything the learner thinks is important to record. This is not just a description but a basis for critical reflection and growing self-awareness. The learning diary does not simply record what happened but also the emotions felt, how it was experienced, resonances and dissonances, ideas that emerge, etc. The learning diary also provides an important record of the individual’s learning journey on the course.

The Learning Contract: The importance of self-leadership and the need to align

individual, team and company goals makes the Learning Contract an essential tool (Cunningham, 1994). In the Learning Contract the individual's goal is firstly to gain self-knowledge and awareness and to set goals accordingly. But then, Greenpreneurs often improve their goal setting skills whilst on the course which in turn leads to clarification and amendments of previous goals. Without these goals, the individual learning process is not effective. The key questions in the learning contract are:

1. Where have I been? (learning history)
2. Where am I now? (current moment)
3. Where am I going? (future, goals)
4. How do I get where I want to go? (means to reach goals)
5. How do I know I have reached my goals? (measurement)

Coaching Discussions: Individual discussions between coach and team member enhance the individual learning process - setting learning targets, encouraging learners to take challenges where the learning is most effective (in the learning zone outside the comfort zone).

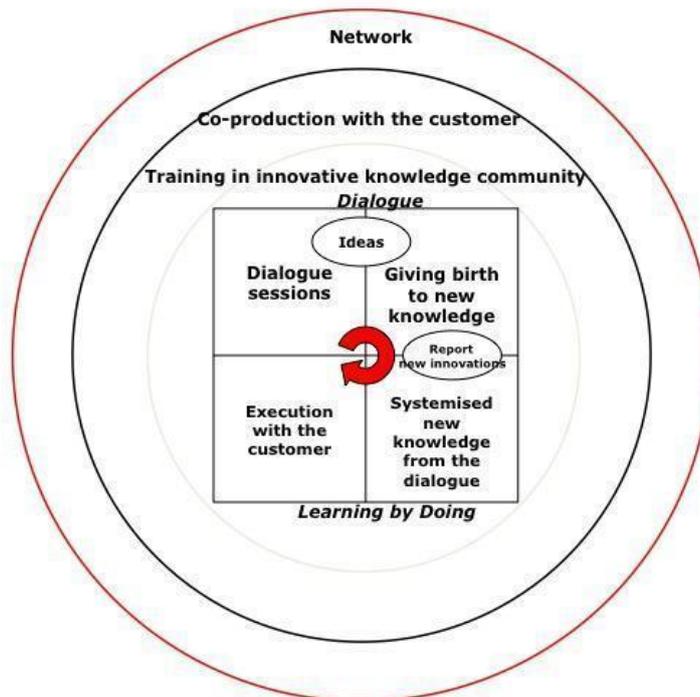
Team learning Process

In Teampreneurship® and the Greenpreneurs methodology, the team is an important vehicle for learning and a high performing team improves learning greatly. As the old African proverb says: "If you want to go fast, go alone. If you want to go far, go together." Equally it is important to set realistic expectations for yourself and your Greenpreneurs about what can be achieved in the 12 week timeframe of the course.

The learning processes on different levels are very interdependent. To initiate and inspire individuals to learn is really important, but the embodiment of that learning comes in working as part of a team. And the biggest accelerators for individual learning besides having individual and clear goals, are having clear team and company goals. Actually, one of the most defining things about Teampreneurship® is the presence of shared team goals and the motivation to achieve those goals together as a team. It increases the commitment of Greenpreneurs and the learning and achievement levels of all in the team.

Usually the team is referred to as a community, as a group of people committed to common goals. Being a real team is far from easy (Katzenbach and Smith, 1993). A real team is based on an environment of trust and transparency, equality at the highest level, and it takes time to be a real team. It will be a rare team of Greenpreneurs who achieve this in 12 weeks but

during the course the learning methods and team coaching approach will set a firm foundation for future development. Team members learn a lot by working on issues like commitment (or lack of it), setting common goals, measuring, challenging each other to set high standards in order to accelerate learning, using theory and practice to learn about business and management.



In this example before a training session, a project team visits various customers and gains a new idea for a project, which they share in the training session. The idea is crystallised in the training session minutes. They start a new project, with more customer visits related to the new project idea. In addition to customer visits they have read books combining new information and knowledge with the original project idea. The new project is refined through an iterative process. A pilot project is executed with a few customers gathering and testing new ideas and knowledge. The process has come full circle. The team brings the new knowledge back to the training session and the process starts again.

Tools Supporting Team Learning Process

Training Sessions:

Dialogue is an essential tool for the team and forms the basis of a good training session. Dialogue is an art that is often messy in new teams, and requires practice to get working, with everyone speaking at the same level and in a safe environment. But to

create a real team - and ultimately a high performing team-you need to be willing to invest time. See Appendix 4 in the Curriculum Development Guide for a more detailed handout on dialogue.

Team Learning Contract: The individual Learning Contract can be adopted for team use, answering the questions from a team perspective.

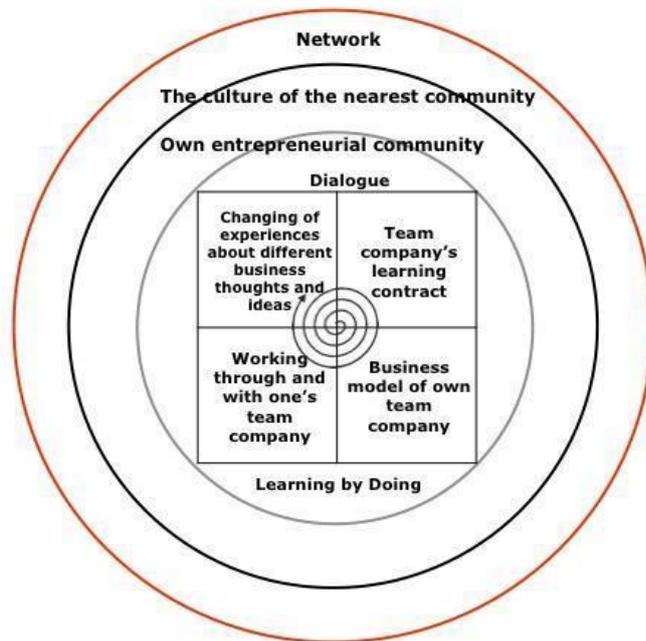
1. Where have we been?
2. Where are we as a team now?
3. Where are we going as a team?
4. How does our team get to where we want to go?
5. How do we know when we have reached our team goals?

Team Discussions: Same perspective as in individual discussions between coach and team enhancing team learning process. Good place to challenge the team.

Venture or Project Learning Process

The venture or project learning process is the main fuel of the Teampreneurship® approach that underpins Greenpreneurs.

Setting up the team as a community is good, but training together as a temporary organisation and having customers gives the team business goals and needs, which focuses their learning. The team is working together, but the goal is not only to perform; the goal is for the team to be fast, consistent and continuously learning. A good Greenpreneurs team will thrive on experimentation, trying out new things and ways of working, making mistakes, learning from those mistakes, constantly co-creating and learning together with customers, constantly improving working methods and working towards the common vision of the team. In short, creating new value. But to get to this stage, time and effort are required.



The project or venture learning process is the most challenging learning level in the Greenpreneur course, not least because of the time constraints. The project team/venture learning process is about creating their team's unique culture and business model with long lasting customer relations and networks.

Not every Greenpreneur project or venture team achieves this level, or at least not within the 12 week timeframe of the course, but it is important to understand the philosophy behind it and to aim to achieve it.

Tools helping the venture/project team process:

- Team tools:** In the main, the tools used for the team learning process can also be applied for the venture/project team learning process
- Site visits:** Helping Greenpreneur teams to benchmark how other organisations have built their business culture, business model and customer relationships
- Customer Visits:** Helping the Greenpreneur team to understand their customers better, in order to build long lasting customer relationships and to create new value for customers
- Experimental Projects:** Developing new concepts

Analytic 4: Your experience with relevant tools and techniques

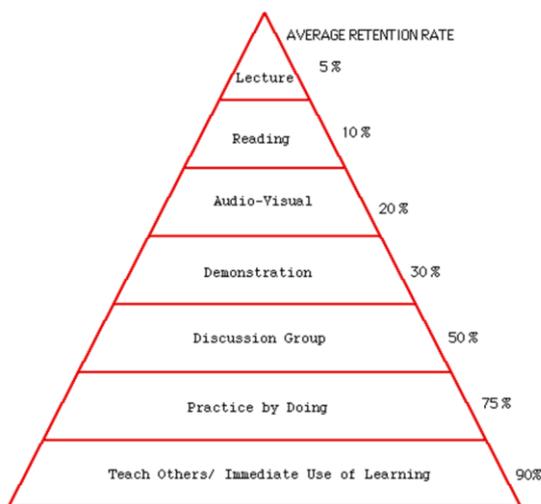
Prompt	Your Response
What tools and techniques have you used that would fit the Greenpreneurs course?	
At what level are these tools and techniques relevant? List each tool/technique and where it is most appropriate to use it.	
How would these tools and techniques contribute to the learning experience of your Greenpreneurs?	
What, if any, tools and techniques do you need to find out more about/learn to add to your portfolio?	
How will you address these learning and development needs?	

Analytic 5: Connecting the levels

Prompt	Your Response
How do you view the interconnectedness of the three levels?	
In what other ways can you imagine connecting these or other levels to linked to accelerate the learning for your Greenpreneurs?	

6. The Greenpreneurs Team Coach

The Greenpreneurs do not have a teacher, they have a team coach. Team coaching is a way of working that supports the development of the team in a non-directive manner, unlocking the potential of individuals and teams (Whitmore, 2009), following their agenda, wishes and aspirations as opposed to an agenda determined top down. As Partanen pointed out: entrepreneurial learning is not theoretical by nature (Partanen, 2015). On the contrary, team coaches/ mentors/ tutors /teachers provide learning environments where Greenpreneurs learn, practice and reflect on new ways of doing things. Greenpreneurs must be active parties in the learning process and even in planning it. The learning process emphasises applying theories and models into practice. “It means that the teacher’s role shifts ever more clearly from a conventional conveyor of information to a constructive guide of the knowledge acquisition process – more in the direction of coaching” (Partanen, 2015)



The Learning Pyramid (Sousa, 2001) argues that the more freedom for doing, experimenting and practicing learners get, the more meaningful and long lasting knowledge acquired is. The teacher’s role must therefore include a different range of activities, such as listening, reflecting, rephrasing, asking questions and offering alternatives and is less about instruction and direction...

Instead of simply transmitting information, the main objective of team coaching should be to discover and enhance learning experiences in a team working environment.

Cunningham established some mandatory qualities for the team coach in “The Wisdom of Strategic Learning” (Cunningham, 1994):

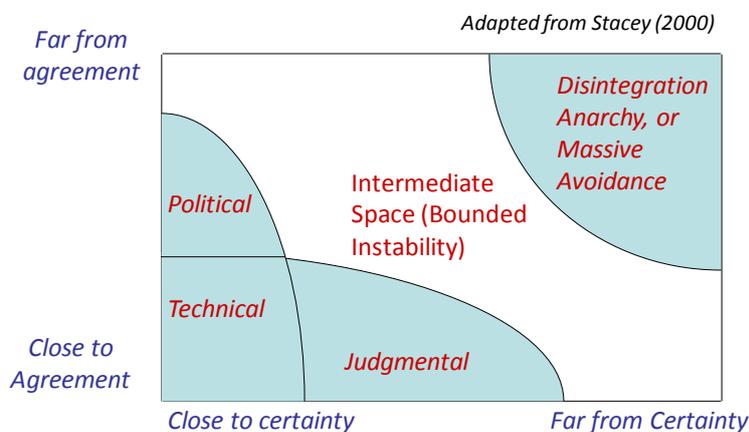
1. High self-esteem.
2. Generally positive attitude
3. Ability to cope with uncertainty.
4. Belief in learning.
5. Basic competencies in social skills.
6. Patient nature.
7. Trustworthiness.
8. Sympathy towards the fields of interests of the learners.
9. Enough time for the learners.
10. Understanding that the team coach does not get the credit, but the learners do.

This may require some “unlearning” and fresh consideration of professional practices and mental models/mindsets needed to guide the team learning process. Some things to consider:

- We must go beyond academic traditions. We need theory, information and understanding, but they are the means to an end and not the end itself.
- The main objective is to help build situations and learning environments that support goal-based learning.
- Learning does not happen without previous experiments and experiences. The teachers, team-coaches, should not stop the students from having their own experiences.

Team coaching skills

The team coach should be useful, not helpful, allowing the time and space for Greenpreneurs to develop, pushing them out of their comfort zone – but not so far that anxiety impedes their learning. This is the intermediate space of bounded instability, shown in the diagram below.



The Art of Asking Questions

Questions are the simplest stimulants of creativity in science, arts, and other aspects of life. The questions awaken both thought and action, creating a dynamic tension that makes it difficult to forget the question until the answer or solution is found.

The Art of Building Trust

- In a learning model, where the student is the main protagonist, and the team coaches

are the "partners" or educational partners that will help find the way, the development of trust proves to be one of the fundamental aspects in the practice of team coaching.

- The confidence of the Greenpreneurs and the teams must be continuously strengthened. Respecting them is not enough. We need to behave in such a way that they feel our respect, for example, by asking about their thoughts and opinions about events. It is not about giving what is asked for, but about understanding what they need and supporting them to achieve it.
- Learning by doing often amplifies uncertainty and if not sufficiently contained, can provoke anxieties, fears and doubts. In the face of change and uncertainty, we need to provide a visible and transparent enabling structure that provides sufficient scaffolding to contain the risks associated with learning and team development, without removing them.

Continuous Feedback

- Feedback that is both constructive and challenging is an important element of the learning process and should always evaluate performance, not the person (Goldsmith, 2011). It is also important to give feedback continuously and in a timely fashion, not wait for success or failure to happen again. You can find an example feedback template in Appendix 12 of the Curriculum Development Guide.
- Being a good team entrepreneur, a good leader or a good team-coach is a process, not a simple event. From the beginning, people should be encouraged to address change processes.

Analytic 6: Trust

Prompt	Your Response
Think of somebody you trust. What encourages you to trust them?	
What about somebody you don't trust or are wary of. What makes you wary?	
How can you use these insights to strengthen your work as a (team) coach?	

Analytic 7: Feedback

Prompt	Your Response
Describe an occasion when you gave someone some feedback they really appreciated. What was it you said or did that made it so effective?	
Now describe a situation where you received some important feedback. How was it given and how did it make you feel?	
What actions did you take as a result of this feedback and what implications did it have for your professional reputation?	
<i>Suggested activity: A simple 360</i> Ask 6-10 people you work with and who know you in different work capacities to complete the feedback form in Appendix 12 of the Curriculum Design Guide for you. What themes emerged and what actions will you take as a result?	

7. Course Preparation

Introduction

Each learning by doing course is different in nature, but the duration needs to be a minimum 12 weeks in order to get the team learning in place. It is difficult to give exact instructions about what kind of things need to be considered when setting up the course. Here we list tips collected from our experiences in three different pilots: in Navarra, Bristol and Turku. These are divided in two parts:

- General Preparation and
- Recruiting Participants

General preparations cover all practicalities such as organising the facilities, partners in cooperation, and the timing of the course. Recruiting participants is also one of the most crucial elements to focus on for a successful course. Usually there are several ways of recruiting. Here we describe one which has been tested on several occasions. The process contains five stages: info sessions, applications, casting sessions, interviews and final selection.

The Curriculum Design Guide available in the intellectual outputs tab on the Greenpreneurs web pages (www.greenpreneurs.eu) takes a more detailed look at the make-up of the curriculum and course design.

General Preparations

Facilities

Facilities must serve a different level of learning, using basic learning activities. Greenpreneurs need a space where they can create their own environment and their own identity: hanging out posters and logos on the walls and using a range of visual elements to enable effective projects and business.

Second, Greenpreneurs need a space where they can set up a training session: comfortable seats placed in a circle, no tables. The purpose of this is that nobody can hide behind tables or other team members. The circle also symbolises there is no hierarchy; no-one in the circle is more important than anybody else. Thoughts and ideas are shared openly, working as a team.

Partners in Cooperation

It will help to deliver a well-run course if there are partners at least in the following areas:

coaches, specialists for workshops, partners in the operational field.

- An effective team coach needs to be familiar with team learning methodologies, and to be competent in a range of different team learning techniques to support the overall learning process at the individual, as well as at the team and project/venture levels.
- Specialists for workshops. The purpose of workshops in the course is to provide learning on certain themes or topics which are needed in the project. Examples of general themes are: innovating and problem solving.
- A person who helps to map networks, or has networks, for recruiting possible participants to the course.

Timing

The timing really matters. Do not try to arrange the course at a time when participants are in a busy season. For example, summer is the worst time for construction workers for training; it is peak time for building and they may not have time for training.

Recruiting Participants

Info sessions

The information sessions are the first step to recruiting people. The purpose of these is to give a general overview of the course and provide an opportunity for potential participants to discuss the course and ask questions. What good looks like for the information session:

- Hold the event at the programme delivery site
- Provide a general overview but in an interesting and engaging way
- Be brief, make good use of time
- Run multiple sessions to maximise coverage at least three sessions
- Deliver them together with the coaches
- Ensure potential participants can ask questions

Applications

- Applicants can apply either in writing or using video
- Personal statement shows who really wants to participate in the course
- Use internet applications if possible (easier to manage)

Casting

- Applicants to casting are selected based on application forms (motivation based)
- Opportunity to try out different challenges to screen applicants' characteristics in different situations. For example:

- o Team challenge: sell as much as possible: Time 3 hours
- o Team challenge: solve problem in round table
- o Individual challenge: Belbin test
- o Individual challenge: to solve challenge on team's cohesion

Interview

- Getting deeper understanding of the person
- Objective to discover the level of motivation
- Basis for final selection

Final selection

Where possible, the final selection of participants should be done with all coaches involved in the course taking part. This way all the team coaches get a first impression of the participants.

Key points in Preparation

- Facilities should be like an office environment - not a classroom environment.
- Supporting activities in open dialogue and project/business work
- Motivation of participants is everything.

8. Conclusions

In this handbook, we presented the main aspects of setting up the Greenpreneur Learning by Doing Course: the Greenpreneur learning model with three levels of learning (individual, team and company), knowledge creation model where knowledge is acquired using whole cycles of the learning spiral, three basic learning activities used in all learning levels, together with tools and techniques. It has been impossible to include everything in this handbook, but we have included a lot of valuable references where additional information can be found. References which have been listed in the handbook have been used extensively by experienced coaches.

The key ingredient for this kind of course however, is to enjoy the challenges and learning together, and to have a sense of fun. Undoubtedly learning is a serious matter and deserves a serious approach to the learning on offer, but it is the enjoyment and the fun experienced that makes this kind of course unforgettable and incredibly enriching.

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