

Pedagogical Guide

Methodological material for effective teaching of social farming





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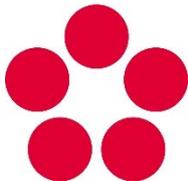
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Introduction

Social farming is a specific way of using an agricultural enterprise or productive garden as a safe and interactive setting for the wide social integration of vulnerable people. In order to provide this setting – a social farm – professional and qualified guides and managers from the agricultural and social sphere are a necessity. An international consortium of educators in agriculture and social work has developed the project “Social Farming in Higher Education” to create a set of teaching materials (to support universities in developing their own courses on social farming) to educate future successful social farmers.

The project “Social Farming in Higher Education” consists of four parts. The first one, Quality Standards for Teaching Social Farming, elaborates on the frame for high-quality education in social farming that ensures comparability across Europe. Based on interviews with stakeholders and practitioners in social farming, the characteristics of social farming in the participating countries were elaborated, then relevant professions in social farming were identified, and finally, key competencies of future social farmers were described.

The results from the first output serve as a basis for the second project output – Curriculum, Teaching Social Farming in Higher Education in which quality standards and study areas of social farming are transformed into a Social Farming Curriculum. The Curriculum consists of seven core units that ensure high competence gains in the fields of social farming, social work and farm entrepreneurship, professionalism, ethic values, social responsibility and sustainability, personal growth, development and leadership skills and quality educational and practical approaches to social farming.

Third project output – Abstract Book – proposes a list of seventy topics relevant in the field of social farming with the purpose of describing important areas when teaching social farming. Each abstract consists of a short description of the topic and its relation to social farming. It is related to sheltered educational discipline and it offers further literature and important links to broaden the teacher’s knowledge on the topic.

The last output of the project Social Farming in Higher Education – Textbook – presents the selection of seven Abstracts elaborated into practical teaching material. The choice of seven Abstracts was led by the recognition of the most relevant topics concerning basic knowledge for social farming in practice. The Textbook is accompanied by the Pedagogical Guide that gives ideas on how to elaborate the Abstracts according to the teachers and institutional needs into full and practical teaching material that is competency-based, and is consistent with the Curriculum and the Quality Standards for Teaching Social Farming.

Many of the chapters and the issues addressed by the Pedagogical Guide are accompanied by a selection of questions the pedagogue or a teacher may like to ask when creating a new course or just preparing teaching materials. These questions are always marked by the ⓘ sign. The authors of this guide wish that the readers do not only restrain themselves to the proposed questions because they cannot cover the entire field addressed by the theoretical part. These suggested questions or issues are included only to illustrate the theoretical explanation of the problem.

Purpose

The Pedagogical Guide contains methodological material to support teachers in creating their own training materials for their own courses and lectures in social farming.

Pedagogical Guide:

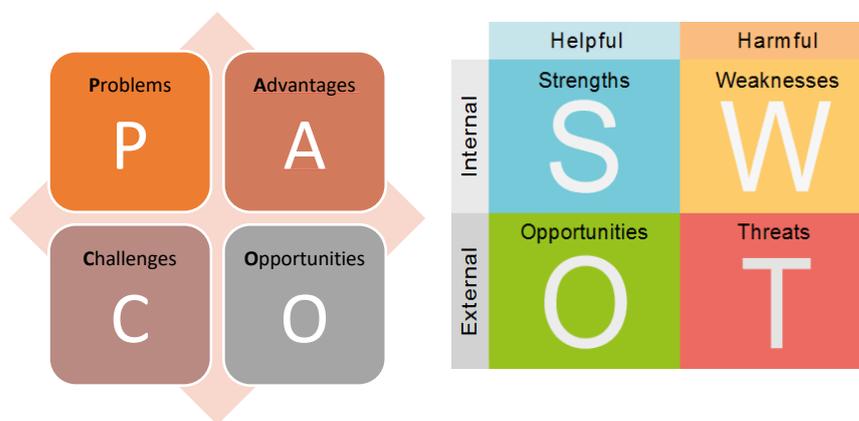
- supports teachers in achieving learning outcomes in social farming via high-quality teaching material,
- helps teachers develop teaching materials on the basis of Quality Standards for Teaching Social Farming and the Book of Abstracts,
- leads teachers on how to select Abstracts for their own courses,
- instructs teachers on how to structure social farming topic from the Abstracts,
- guides teachers on how to develop the social farming topic into full teaching material,
- shows teachers how students can embody social farming topics,
- presents teachers tips on how to assess gained learning outcomes,
- ensures the quality of transfer of competencies in social farming,
- prevents dull teaching in social farming.

1 Step one – Assessment

Step one leads the teacher to reflect upon the strengths and weaknesses

- of his/her own,
- of the institution/organization where he or she is based (it includes not only the equipment, service, support from the colleagues but also architectural setting – size of the classes, the possibility to use outdoor facilities, etc.),
- the target group (the specifics of the students, their needs and interests, etc.).

The above mentioned may be fulfilled thanks to SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), or more positively oriented PACO analysis (Problems, Advantages, Challenges, Opportunities) or any other similar technique.



Source: <http://guides.library.cornell.edu/HADM2720/SWOT>

1.1 Self-reflection

Every teacher prefers certain ways and methods of teaching and thus self-reflection may be a very good chance to identify one's own strengths and limits. These limits may be stretched by further education, learning new techniques etc., but it is important to know that the best results usually come when the teacher acts and teaches authentically, in other words, when he or she feels comfortable.

The students often cannot see the whole picture, they often do not understand why certain issues or topics are in a course, and why they have to learn this and that. Thus, self-reflection may bring the teacher to awareness of whether he or she pays attention to revealing the whole or linking the conveyed information to the whole as much as possible so that the students understand what and why they learn.

① Some of the questions a teacher may like to ask / some of the topics to consider:

- Am I focused more on the goal or the process?
- Do I prefer lectures with PowerPoint presentations (frontal teaching) or collaborative activities? Do I let my students take an active part in my classes?

- Whatever I teach do I focus on conveying the information (cognitive) or attitude (affective) or do I focus on skills?

1.2 Reflection upon the institution/organisation

SWOT or PACO analysis is particularly useful when assessing the limits of institutions (in our case mostly universities). The analysis should not only point at material resources and financial possibilities, but also at the people (colleagues and their qualifications), the administration of the institution and the individual freedom to make decisions, and the setting which may include the location of the institution, the variability of space and availability of facilities etc. Last, but not least it is important to reflect upon the social climate of the institution.

To put it short, the following aspects should be reflected upon: architectural setting; administrative, management and everyday operation; management structure; cultural and aesthetic; societal and community; educational approaches; social

- ① Some of the questions a teacher may like to ask / some of the topics to consider:
- My school is in the centre of a city so what practical skills can be taught here?
 - Could I invite any of my colleagues to make use of their expertise in my classes?
 - Is it easy to change anything in the curriculum of subjects or does it have to undergo complicated bureaucratic procedures?
 - Are there any facilities the students may benefit from? (i.e. library, fast and reliable Wi-Fi, school gardens, etc.)

1.3 Reflection upon the target group and its needs

This might be a tricky part as a reflection on students and their knowledge, skills and competences are based on experience. It is difficult to define the needs, interests and specifics of students / the target group as the SoFarEDU project aims to introduce a new field of study. Important factors include their age and prior experience. Thus, the reflection has to be based on the experience with students of agriculture/farming and students of social work.

- ① Some of the questions a teacher may like to ask / some of the topics to consider:
- Are my (future) students highly motivated to engage in social farming studies or is it just another field they have to touch upon?
 - What do my students really need to learn (what information, attitudes, values, skills ...)?
 - What do (social) farmers need to know to succeed?
 - What do farmers say that the students should be able to do/to know?

2 Step two – Learning outcomes and gained competences

When thinking how to prepare high quality and effective teaching material based on simple information (abstracts from Abstract Book on social farming) each teacher is recommended to go through basic national-specific methodologies, professional profiles and standards, learning content and assessment requirements for different qualifications. It helps to gain first insight and orientation with regard to the discipline, learning outcomes and required competences.

2.1 European Qualification Framework

The learning outcomes can be approached in many ways. The SoFarEDU project and the Textbook base their methodology on the European Qualification Framework, which defines a series of statements relating to knowledge, skills and competences – learning outcomes – of what a student knows, understands and is able to do upon completion of a learning process.

Learning outcomes are understood as follows (European Commission, 2008):

- *"**Knowledge** means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual."*
- *"**Skills** means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive or practical skills."*
- *"**Competence** means the proven ability to use knowledge, skills and personal, social and methodological abilities in work or study situations and in professional and/or personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy."*

In 2018 The Council of the European Union refined key competences (here understood as a combination of knowledge, skills and attitudes) for lifelong learning as those

„which all individuals need for personal fulfilment and development, employability, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship. They are developed in a lifelong learning perspective, from early childhood throughout adult life, and through formal, non-formal and informal learning in all contexts, including family, school, workplace, neighbourhood and other communities.

The key competences are all considered equally important; each of them contributes to a successful life in society. Competences can be applied in many different contexts and in a variety of combinations. They overlap and interlock; aspects essential to one domain will support competence in another. Skills such as critical thinking, problem solving, team work, communication and negotiation skills, analytical

skills, creativity, and intercultural skills are embedded throughout the key competences. (Council of the EU, 2018)

The European Qualification Framework proposes, in addition, eight reference levels in which learning outcomes are expressed. These levels describe widely recognised stages in mainstream education and training systems and are relevant in social farming higher education too. They define learning outcomes within an inclusive approach to lifelong learning.¹

2.2 Competency-based education and training

Following the Bologna processes, the SoFarEDU project puts emphasis on competency-based education and training so that everyone studying Social farming does not gain only certain knowledge, but also skills and especially competencies to perform well in everyday life on a social farm.²

The competency-based education and training closely intertwines theory with practical usage and it focuses more on concrete skills than abstract learning. Though the SoFarEDU project suggests clinging to a Social Farming Curriculum which is divided into subjects and topics such as Introduction to Social Farming, Basics in Social Work, Basics in Agriculture, etc., there are suggested desired competencies linked to every subject or topic which is required by the standards set in Quality Standards for Teaching Social Farming.

Even though there is the ambition to state the required knowledge, skills and competencies clearly, it is impossible to determine what level of competences should be reached in particular subjects. Had the project focused only on creating the standards and materials for different types of courses in social farming then setting the competences would be implemented. However, the SoFarEDU project aims at higher education, and therefore the standards, the curriculum and all the materials are only the means which should help create courses ranging from an inforamatory 8 hour course (just introducing the whole issue) to a bachelor or master degree course at university level.

In order to reach the desired outcome, the authors of a particular course and especially those who will teach the subjects and topics according to the standards of the SoFarEDU project have to consider the following principles:

- Every individual learning outcome is applied to any single learning unit
- It is efficient to focus on one competence at a time, yet long term goals should not be neglected
- Various subjects or topics should work in synergy to help the student acquire a new competence
- The student is evaluated or assessed on the individual competency and can only move on to other competences after they have mastered the current skill being learned. After that, higher or more complex competences are learned to a degree of mastery in isolation from other topics (This principle is described in chapter 3.2.)

¹ Descriptors defining levels in the European Qualification Framework. Available from: <https://ec.europa.eu/ploteus/content/descriptors-page> [Accessed 27th March 2019].

² More recent list of key competences for lifelong learning within a European reference framework are available from: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32018H0604\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32018H0604(01)) [Accessed 3rd January 2020].

- The evaluation or assessment has to focus on what has been taught. In other words, the authors of courses or modules should carefully consider the means by which the topic is taught and then choose the most appropriate form of testing.
 - E.g.: If the method of study is a short visit to a social farm, it is enough if the students get to know beforehand the basic information about the place and if they know what to look for while being on a farm. Following the short visit, the students may be required to write an essay reflecting on what they had seen and learned. (This example aims to point out that an appropriate form of evaluation of a short visit is, for example, the essay, but not a test.)
 - In terms of evaluation as well as a means of learning, strong emphasis is also put on reflection and self-reflection. Reflection is an important tool to learn about practical experiences and therefore growing a reflective stance needs to be pursued.

The difference between traditional and competency-based education:

Traditional Education	VS.	Competency-Based Education	Examples of High-Quality Competency-Based Education with Equity at the Center
Students advance upon the end of a fixed period of time regardless if they fully learned the concepts and skills.		Students continue to receive instructional support until they fully learn the concepts and skills and then advance after demonstrating mastery. This requires additional instructional support, not retention.	Students' learning pathways and the amount of instructional support reflect a pace and rate of progress designed to result in students achieving mastery of college and career readiness by graduation.
Learning targets are organized around age-based grade levels and provide key skills/knowledge that may be used later in higher-level courses.		Measurable learning targets are transparent to students. Schools ensure students have the opportunity to apply or transfer a learning target to new contexts. Schools monitor student growth and pace within pathways to master standards and competencies.	Individual pathways take into consideration students' zone of proximal development, build upon students prior knowledge and experience, and address disparities in foundational knowledge.
The school and instruction are designed to deliver a single curriculum to all students based on age.		Districts and schools are organized with greater flexibility to provide instruction and learning opportunities to meet students where they are and take advantage of anytime, anywhere learning.	Instruction is grounded in personal relationships and curriculum is intentionally examined to address bias and create a culture of inclusivity. Instruction incorporates Universal Design for Learning strategies.
Students may receive targeted supports when their academic or behavioral needs are identified as significantly above or below the norm (i.e. SPED, gifted).		Students receive timely, differentiated support based on their learning needs.	Students receive culturally responsive support and instruction. Students who are off-track to graduation by 18 have an academic pathway that enables them to complete their secondary education.
Assessment is used principally for summative purposes. Assessments are conducted at pre-determined points of time or at end of unit and are administered to all students at the same time and in the same format on the same content.		Assessments are embedded throughout a student's learning cycle, and are used primarily to orient a student along their individual learning pathway, as well as inform next steps. Students have options for providing evidence of learning.	Assessments for learning include applying knowledge in novel contexts and providing evidence. Assessment cycles include coaching students on building the skills needed and increasing student agency including developing growth mindset, habits of success and learning skills.
Learning outcomes emphasize academic skills, memorization and comprehension of content. May or may not be aligned to higher order skills or require demonstrations of how to use skills and knowledge.		Learning outcomes emphasize competencies that include deep understanding of content knowledge demonstrated through application as well as the skills to be lifelong learners.	Students are recognized for the assets they already possess and encouraged to develop their interests and talents, while building academic knowledge, skills and competencies.
Grades reflect a combination of completing assignments, scores on tests and other assessments, and behavior. Grades are used to create grade point averages to rank and sort students.		Schools know the performance levels of each student and closely monitor growth and progress of students. Scoring is used to communicate with students about their progress in learning.	Monitoring how students progress is key to ensuring all students meet high levels of rigor. Teachers use data on student progress to collaborate and use research-based strategies to help students progress.

Source: <https://www.inacol.org/news/how-competency-based-education-differs-from-the-traditional-system-of-education/>

2.3 Social farming learning outcomes

The textbook on social farming is based on the overall goals of teaching social farming which is listed in the project output on Quality Standards of Teaching Social Farming (Nobelmann et al., 2018: 35-36):

- *Graduates are able to plan, process and evaluate comprehensive tasks in the complex field of social farming as well as to control and organise processes of subareas of social farming independently and under their own responsibility. They can appropriately respond to frequent changes by using professional and personal competencies.*
- *They are able to do so because they have a broad and integrated knowledge of social farming, including the scientific basis and its practical implementation. They are familiar with current professional developments and have developed a critical understanding of the theories and methods that set the frame for social farming.*
- *On a personal level, graduates are able to work in a team and have a sense of responsibility and entrepreneurial thinking. They are skilled in managing people, in assisting with the professional development of others and in reflectively moderating team-related conflicts.*
- *Graduates are able to present complex specialised problems and their solutions to external parties or develop them in cooperation with others. Finally, they are able to determine, reflect and evaluate goals for learning and work processes and to shape these processes independently and sustainably.*

To attain these general goals, the teacher should be familiar with their setting. In the Curriculum of social farming, in the Abstracts and in the Textbook, the content of what should be learnt is presented. Yet, the teacher and the students should be aware of why and with what purpose they teach or learn it. Let's explore goal setting more closely, beginning with the nature of goals.

Gaining knowledge, skills and competences is very tightly intertwined with chapter 4.2 dealing with the depth of educational goals. To simplify the matter a little, we can say that the levels (Basic knowledge, Deeper insight, Usage) may be linked to knowledge, skills and competences. To achieve the best results in education the teacher must deliver the needed information first and thus foster knowledge. Only then, he or she may move on to building particular skills which together with knowledge, abilities and values help to develop competence.

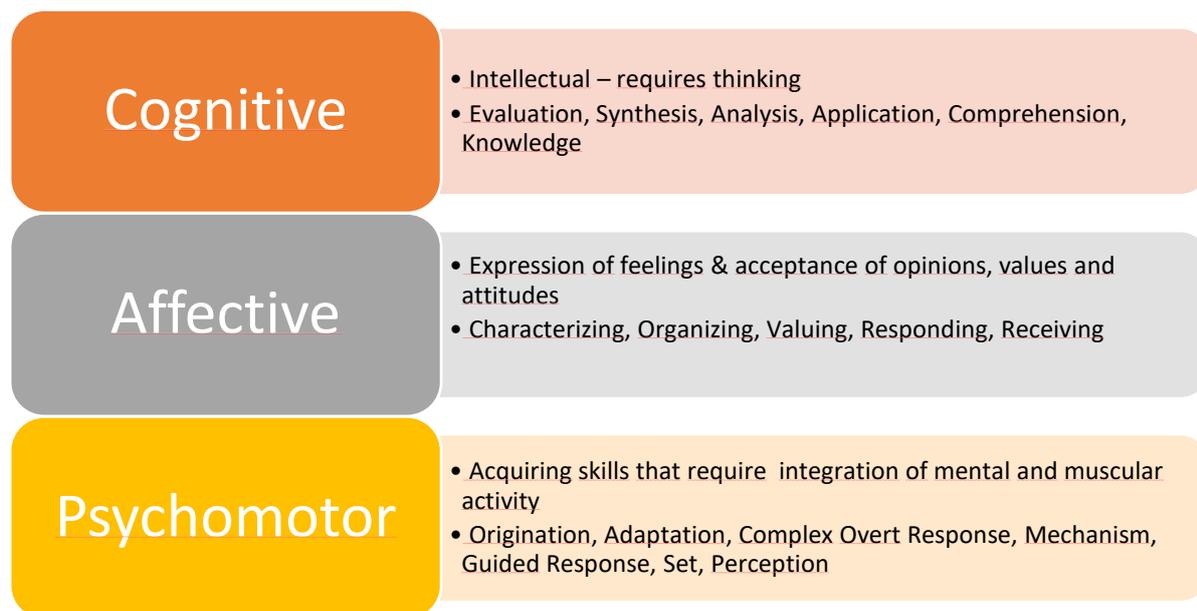
- ① Some of the questions a teacher may like to ask / some of the topics to consider:
 - Knowledge, skills and competences are like stairs ... you cannot aim at teaching competences if your students lack knowledge and skills.
 - To teach successfully, you need to teach knowledge first and only when the students understand the issue, you may move on to training skills and competencies.
 - Do not forget that in education there are the three basic categories -- knowledge, skills and competencies – as they are intertwined with the cognitive, affective and psychomotor sphere; see the next chapter, its visual interpretations and the examples listed there.

3 Step Three - Educational goals

It is also important for the teacher to be aware of the nature of the goal that is hoped to be achieved. Pedagogy as a specific discipline distinguishes among cognitive, affective and psychomotor goals. (The goal may aim at deepening the student's knowledge, skills or competences.) Only after determining the nature of the goal, can the depth of the goal be set. The goal setting is, in the case of the SoFarEDU project, stated on a general level in the Quality Standards of Teaching Social Farming and Social Farming Curriculum.

There are many approaches with regard to the setting of educational goals. In the SoFarEDU we suggest embedding our thinking on knowledge and skills, in other words, on the competence-based model of thinking consistent with the European Qualification Framework. This model is also advantageous as its methodology has been elaborated thoroughly thanks to taxonomies of Bloom, Kratwohl, Harrow & Dave, etc.

The first step of setting a particular goal is to determine the nature (Cognitive, Affective, and Psychomotor) of educational goals and its depth (Basic information, deeper insight, Usage) which is explained in the following chapters. But first, it is important to formulate the goal well.



Based on: Bloom, 1984; Kratwohl, Bloom and Masia, 1990; Simpson 1972, https://serc.carleton.edu/NICHE/qr_learning_goals.html

3.1 How to formulate an educational goal

The SoFarEDU project sets standards and offers a curriculum that is based on knowledge and skills the students must learn. In order to set these goals well, teachers need to formulate the educational goals in a certain way:

- a) The subject of the sentence is the learner and therefore he/she comes first.
- b) Verb (according to the level of the goal) comes second, after the subject.

c) Explanation of what has been learnt/achieved finishes the sentence.

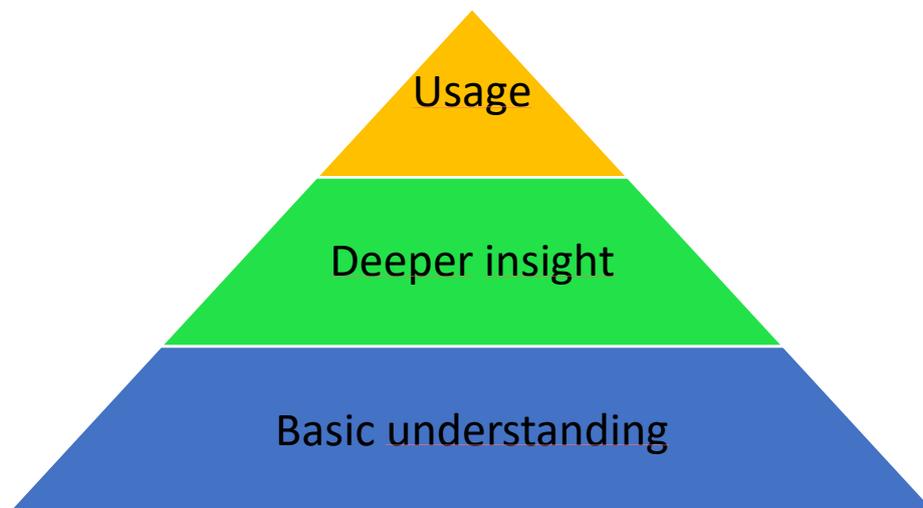
d) When setting particular/short term educational goals, keep it short and concise!

i.e. **Cognitive, Analysing:** The student differentiates between the learning difficulties of people with mental disabilities and people who come from a socially challenging environment.

i.e. **Affective, Valuing:** The student respects the cultural differences of clients at a farm.

3.2 The depth of educational goals

The second step in determining the educational goal properly is to determine its depth (the topic itself has been briefly touched upon in the previous chapter because the depth of educational goals concerns cognitive, affective and psychomotor spheres). The teacher must take into consideration not only what he or she wants to teach, but also how much time he or she has. The depth of goals ranges from the mere passing of information to practical usage in a farming environment. We may think of three levels of goals. The easiest to convey the goals is where the mere passing of information is the goal. The more difficult goals are whereby the students have to gain deeper insight. The most complex and most difficult to achieve are the goals when the student is required to use his knowledge and skills (competencies) in practice.



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- basic understanding – The student only receives information (Understanding, Remembering)
- Deeper insight – The student should be able to distinguish and make judgements (Applying, Analysing, Evaluating)
- usage – The student should be able to apply the idea/method in real life (Creating)
- can decide what type of work will be assigned to people with special needs on the basis of their

The teacher should never forget that it is impossible to aim at the higher levels (deeper insight or usage) unless the lower levels have been learned first. Simply put, it can be viewed as a step by step process or visually, like a set of stairs, which every student must overcome and he or she must not skip any level along the way.

3.3 Cognitive goals

Cognitive goals – these goals are typically intellectual. They are about knowledge. They require thinking, evaluation, synthesis, analysis, application, comprehension or definitive knowledge

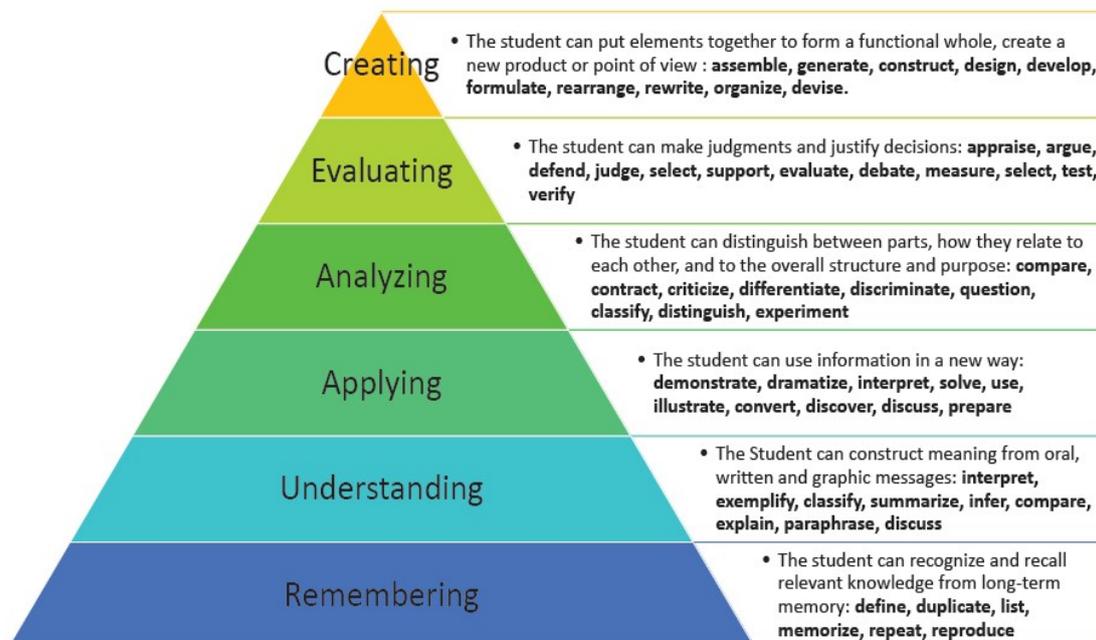
Benjamin Bloom has developed his taxonomy of cognitive goals in 1956, but in 2001, a group of scientists revised it and it is proposed to use this revised taxonomy in order to set cognitive educational goals. (The term cognitive relates to mental skills or knowledge.)

Bloom's Revised Taxonomy of Cognitive Goals consists of the following steps reflecting the depth discussed in the previous chapter (the easiest on the left, the most complex on the right):

Remembering → Understanding → Applying → Analysing → Evaluating → Creating

Bloom's revised taxonomy is particularly useful when working with cognitive educational goals as it also offers the verbs, which should be used to describe the goal the educator aims at (see below). The inspiration for using the right verbs below is taken from Bloom's revised taxonomy verbs for digital learning.

The order of levels in the taxonomy is intended in sequential order of difficulty and it focuses attention on the need to consider the learner's progression. Bloom's taxonomy categorises knowledge and skills and has a direct impact on framing approaches to learning outcomes. Learning outcomes then influence the suggestion of learning material and further learning activities elaboration.



Source: <http://morethanmethodology.blogspot.com/2015/03/blooms-taxonomy-refers-to.html>



- basic understanding – The student knows what weeding is;

- deeper insight – The student can analyse when weeding is most effective and what types of means can be used to get rid of weeds;
- usage – The student decides what kind of means for weeding will be used considering the state of the field, the weather, the abilities of the employees, etc.

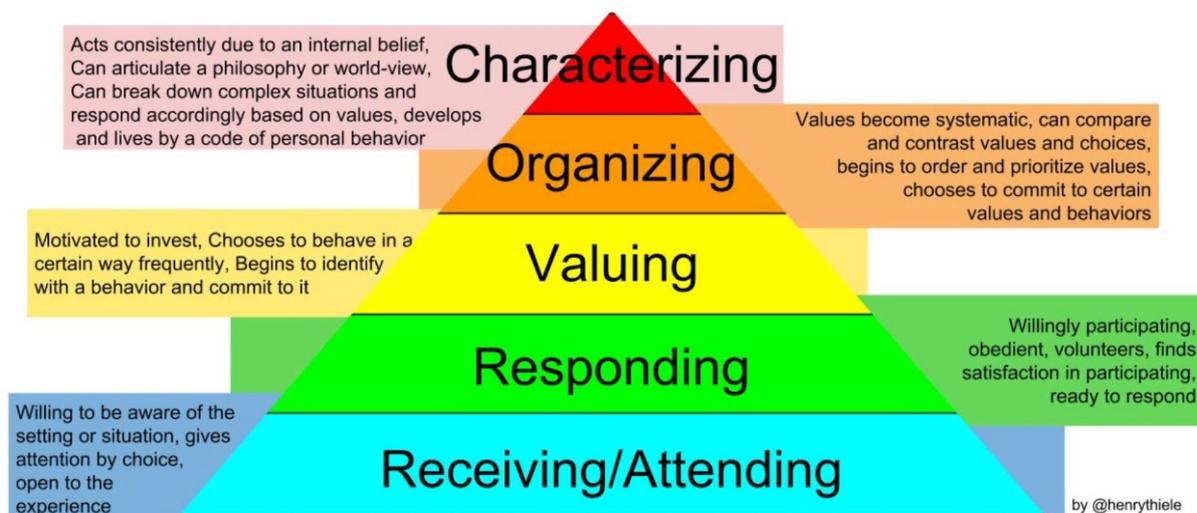
3.4 Affective goals

Affective goals – these goals express our feelings and acceptance of opinions, values and attitudes or they develop the skill to characterize, organize, value, respond or receive.

Bloom’s taxonomy of cognitive goals served as the basis of thinking on how to apply the same approach on affective (motive) skills. Therefore, Kratwohl and Bloom developed Affective taxonomy. To introduce it, we begin with the basic skills and finish with the most complex:

Receiving/Attending/Being Aware of → Responding/Participating → Valuing →
Organizing/Prioritizing → Internalizing values/Characterizing

The affective (emotive) goals are a lot more difficult to evaluate in comparison to cognitive goals, so the more concise the goal, the easier it is to find a way to evaluate it well.



Source: <http://henrythiele.blogspot.com/2015/03/in-response-to-grant-wiggins-5.html>

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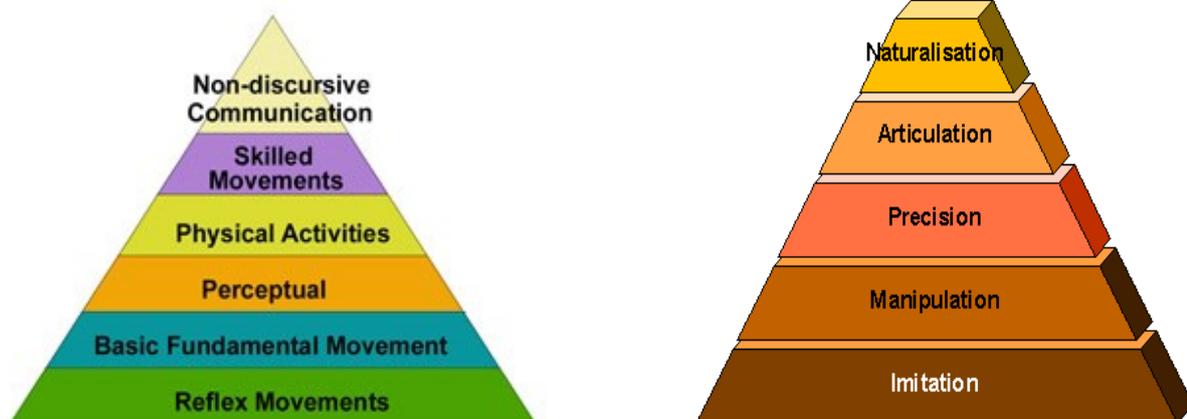
- basic understanding – The student is willing to collaborate with people with special needs.
- deeper insight – The student can characterize the needs and preferences of people with special needs in a farming environment.
- usage – The student can decide what type of work will be assigned to people with special needs on the basis of their needs, skills and preferences, and implement it.

3.5 Psychomotor goals

Psychomotor goals – these goals require integration of mental and muscular activity, and they are mostly connected to issues including origination, adaptation, complex overt response, mechanism, guided response, set or perception

In a similar way as Kratwohl and Bloom, Harrow and Dave created their psychomotor taxonomy. It stretches from attempting very basic movement patterns including imitation (the learner is very unsure of him/herself) to very complex ones when the learner naturalizes the movement skill.

Perception → Imitation/Reflex movement/Set response → Manipulation/Basic fundamental movements/Guided response → Perceptual/Precision/Mechanism → Physical activities/Articulation/Complex overt response → Skilled movement/Naturalisation/Adaptation → Non-discursive communication/Origination



Sources: <http://cehdclass.gmu.edu/ndabbagh/Resources/IDKB/harrowstax.htm>,

<https://www.lucidway.com/the-psychomotor-domain-get-physical/>

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- basic understanding – The student can perform basic tasks just by imitation – e.g. using a shovel, loading and walking with a wheelbarrow, etc.
- deeper insight – The student can use various tools and operate machines.
- usage – The student uses various tools and operates machines almost automatically and effectively (concerning their size, weight, weather,) to meet the needs.

4 Step Four – Strategy of goals setting

In Step Three, the teacher sets a long-term strategy and goals, which are necessary to pave the path towards the horizon. These goals are difficult to evaluate in the short term, yet they bear fruit in the long term and they are important indicators for the intended direction.

4.1 Strategic planning and setting a general direction

These long-term goals must express the identity of the organization, be in accord with its mission and should be strongly focused on the needs of the target group (in case of the SoFarEDU it is the students, the farmers and the clients at farms).

- ① Some of the questions a teacher may like to ask / some of the topics to consider:
- What is the mission of my school/faculty? Do we educate future scientists, or do we focus on students who need to master everyday skills in farming and dealing with other people? In other words, this is about the balance of theory and practise in the future course.
 - While thinking of creating a new course on social farming - how is the course on social farming going to fit with the needs and goals of my school/faculty? Is it possible to engage many current colleagues in the new course? What about the reputation of the school?

4.2 Setting mid-term goals

The mid-term goals (usually not exceeding the length of one year) should ensure that guidelines and appropriate methodologies are used for the preparation and teaching within a social farming study programme. In addition, suitable ways of evaluating students' achievements in a wider perspective should be considered here.

The assessment or evaluation is always based on the type of the course and its goals; an informative course based on lectures delivering information might be assessed by a test ... but that would not be suitable for a course focused on practical skills (such as driving a tractor or dealing with a tired person with special needs).

- ① Some of the questions a teacher may like to ask / some of the topics to consider:
- An appropriate mid-term goal may include words like communication, cooperation, etc. The mid-term goal may be formulated in the following way: The student can successfully communicate with people who are diagnosed with autism.
 - Do I want to grade students for what they have learnt, or use a Pass/Fail system?
 - Is my subject one of the most important ones and therefore the requirements should be set high or is it just a supportive and not so important course where credit is granted just for active participation?
 - When do I want to assess my students? After finishing a certain topic (Continuous Assessment) or only at the end of the semester (Summative Assessment)? How to assess them – by means of a test, working on a project, writing an essay, showing that they have mastered certain skills? The assessment or evaluation is tightly intertwined with the goal(s) and the general direction of the programme of study.

4.3 Using SMART methodology to ensure the desired objectives

The SMART(ER) methodology is a very well-known approach to ensure that the educational goals we set to achieve are the desired objectives. There are also many SMART approaches that put emphasis on various features – we choose an approach which fits the needs of the SoFarEDU best (some other approaches are in brackets). Therefore, every particular goal we set (even a long-term goal) should be:

- **Specific & Simple** (Strategic)
- **Measurable** (Motivating, Meaningful)
- **Ambitious** (Agreed, Attainable and Achievable, Action-oriented)
- **Realistic** (Reasonable, Relevant, Results-based)
- **Time-bound** (Time-limited, Trackable)

Some authors add two more aspects:

- **Evaluated** (Exciting)
- **Reviewed** (Recognize mastery, Recorded)

① Some of the questions a teacher may like to ask / some of the topics to consider:

- A SMART goal is usually easy to understand. Such as: the student knows what kind of waste does not belong to a compost, or, does the student know what types of work are not suitable for people with Down's syndrome, or, the student can reverse with a tractor with attached equipment, or, (if the long term or mid-term goal is communication) the student can argue clearly for his or her cause/the student knows when reaching consensus is more suitable than voting.
- A not SMART goal is usually too vague: The course intends to touch upon chosen issues of organic agriculture. The impact of organic agriculture is going to be discussed. This descriptor is not specific enough – it does not tell either the teacher or student what they will actually be learning.

How to design SMARTER Objectives?

Specific & Simple	Meaningful	Ambitious	Reasonable	Tackable	Ecological	Rewarded & Rewarding
S	M	A	R	T	E	R
Clear, precise, powerful, contextual and factual (purpose, resources and constraints, contributor), without complications potentially complex, systemic and interdependent	Significant, emotionally engaging, with a clear purpose, triggering joy or pleasant surprise, addressing contributor's logical levels (spiritual meaning, identity, values or beliefs)	Challenging, focused on efforts rather than on results, offering learning and development opportunities, not oversized compared to competencies, allowing to challenge comfort zone	Set depending on resources, competencies, and commitment, not excessive, not putting any stressful burden on contributors while allowing them to stretch their comfort zone	Providing measurable and trackable elements, using KPIs and feedback loops, allowing to avoid drifts and to manage rhythm and energies depending on constraints and resources	Respectful of the system's ecology, with no negative externalities on other parts of the system, in sync' with the system, taking into consideration consequences on others	Sanctioned according to agreed upon ground rules, highlighting rewards which come with achievements, focusing on rewards and creating pleasant conditions for attaining them
						



To be more efficient on the long-term, these SMARTER Objectives should be co-constructed and co-opted by the actors directly in charge of achieving them ;-)

Source: <http://leadingdynamicstability.com/en/how-to-design-smarter-objectives/>

5 Step five – The aim of the course

Now, a teacher has in his or her hands the Quality Standards of Social Farming, Curriculum Social Farming and Abstract Book of relevant topics in social farming. He/she has engaged in basic reflection upon the nature and extent of the educational goals. Then, he/she must think about the aim of the course according to which, he/she will make the basic choices from the Abstracts, which contain different levels of detail:

The length of the course:

- It is one seminar/lesson?
- It is a semestral course?
- It is an integral part of an official study programme?
- It is a lifelong learning course?

The type of course:

- It is an introductory seminar within the BA programme?
- It is a specialised course in the MA programme?
- It is a specialised course with certification?
- It is a theory-oriented course?
- It is a practical course?
- It is a mixed proposition of the course (excursion, practical exercises)?

The target group of the course

- BA students
- MA students
- Practitioners farmers / social workers / social pedagogues
- Public
- Number of participants

6 Step six – The teachers

The teacher influences the form of the subject taught. Depending on the above considerations, think about who will teach the course. It is recommended to consider teaching staffing carefully:

- One teacher for the whole course?
- Tandem teaching (in pairs)?
- Inviting guest lecturers to individual blocks; other teachers or practitioners?

The place of the educational process

It is important to consider a teaching place in the educational process. It depends to what extent the course aims at obtaining theoretical or practical competencies. Some examples include:

- Classroom
- School farm
- Ordinary farm
- Social service provider
- Another place

Tools and equipment needed for the course

The teacher has to know what means and tools will be needed in order to reach the educational goal

- Notebook, flipchart, overhead projector?
- Wheel barrel, shovel and rake?
- Tractor and plantation machinery?
- Nursery space for planting, etc.?

The procedure

The goals concerning the whole course or just one meeting within the course are the ultimate driver of what we do, yet it helps very much if the educator/teacher thinks of the beginning and the conclusion of every meeting. (Those of you who play musical instruments know that when performing, the first and the last tone count the most.)

7 Step seven – The structure of teaching material

The final form of the full chapter in the Textbook is influenced by all above-listed variables and leads to a different level of detail and composition of the teaching material. We propose the following structure of teaching material as a basis for training courses in social farming.

Structure of the full chapter



Title

A title should be short, clear and attractive. It should be descriptive and say in a few words about what is in the course. It should give general info about the topic to the teacher as well as the student.



Subtitle

A subtitle can be added. It should specify the content and perhaps the context of the teaching material. A subtitle gives more information about the focus.



Practical info: time requirement, place, tools and materials

This section covers practical information for the teacher. It can be described in bullet points, whether the material is prepared for 90 minutes of lecture or for 8 hours. The teacher should reflect the place and material used (e.g. flipchart and data-projector or farm tools and machinery).



Learning Outcomes/Objectives and level

The teacher should note the educational goals (cognitive, affective, and psychomotor) according to learning outcomes and he/she should use the verbs from Bloom's taxonomy table. The detailed content of each part of the course must reflect its Learning Outcomes and Objectives. A teacher should be aware of the target group of learners.



Abstract (the content of the chapter/lesson plan)

The abstract is a short and very condensed summary of the chapter. It is a short report about the purpose and the content of the chapter. It should contain essential points of the text and should include information that is also included in the body of the chapter. The length of the abstract should be between 150 – 250 words. Be aware that an abstract is the first thing most will read



Keywords

Keywords are ideas that determine what the content of the chapter is.



Content

This is the main section of the teachers' material. It should describe the topic by using key terms. A deep description should contain an introduction where the reasons for writing about the topic are explained and how the text is organised. The conclusion should provide a clear summary of the content.



Main activity

The lesson is not in many cases simple face-to-face classroom teaching. Additional materials and activities should support students with the purpose of instilling their acquired knowledge or skills. The extent of additional materials and activities is wide and variable, for example:

- illustration cards
- exercises
- articles
- photos
- videos/movies
- board games
- crosswords
- role-play cards
- drawing
- peer group presentations
- discussions in groups
- pair-work
- individual/group work with tools
- Theatre of the Oppressed / Forum Theatre
- brainstorming



Ideas for homework

This section contains tips for homework by which students perform their ability to use or to reflect on gained knowledge. It can be in the form of a written essay, elaborating of the project or strategic plan, case study or some practical demonstration.



Evaluation and assessment

The purpose of evaluation and assessment is to test both the knowledge and the skills students are expected to have attained during the learning process. The assessment should match the curriculum and the standards and should contain a high degree of validity, reliability and usability. It should directly address the Learning Outcomes and Objectives as the assessment is the means by which both teacher and student will know if they have accomplished these. Evaluation can be external; there are also self-evaluation processes or value-added models, and evaluation can be *formative* (in-process) or *summative* (final).

When assessing or evaluating the students, the teacher (and student) should know beforehand what will be assessed.

The methods of evaluation should be adjusted to the various participants of the course. Different knowledge, skills and competencies might be required from a student than a practitioner or a professional.

This topic is also dealt with in chapter 3.2.

- The assessment can be summative and external in the form of a written standardised test.

- Teacher-based assessment refers to continuous assessment that is designed by the students' own teacher, conducted internally in the classroom.
- Classroom-based formative assessment is frequent, interactive assessment of student progress to identify learning needs and shape teaching.
- Guided reflection



Links to other topics and bibliography recommended reading, videos, websites, and documents

These are the sources the teacher has used and referred to. This section also contains the links to other social farming topics in the Textbook and/or the Book of Abstracts and in other information channels.



Tips and notes

This section should contain other teachers' tips and notes that were not mentioned above.

Structure and visual information

The written part should be logical and have a clear structure. Well-structured paragraphs help the reader understand the topic more easily by dividing the argument into convenient sections. Visual information such as graphs and tables display large quantities of information in a form that is easy to understand. It should be used in relevance to the described topic.

The lesson plan step by step

The educator is encouraged to prepare a lesson plan that enables him/her to mark timing, and the division of the lesson into theoretical and practical parts. It can take the form of a table or of points.

Some tips to create an interesting course

- Be systematic, organized, focused on your goals, ...
- Proceed in logical sequences
- Let your students be active and encourage social contact
- Aim slightly above the student's current knowledge, skills and competencies (adequacy)
- Make your course diverse and attractive
- Pay attention to assessment, evaluation and feedback

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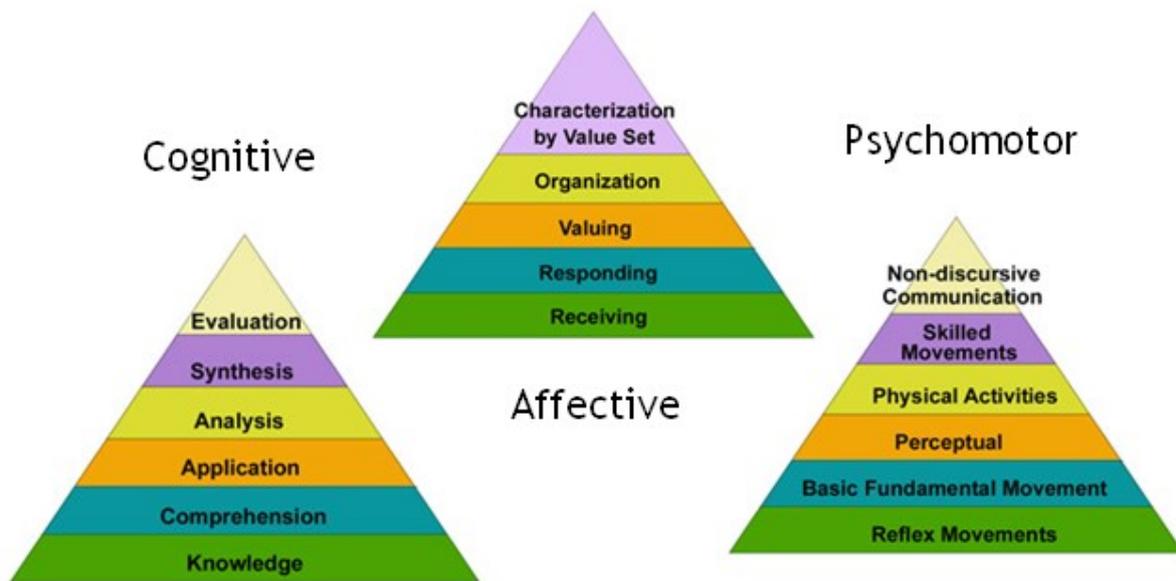
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Supplement – The three taxonomies concerning types of goals



Source: <https://i1.wp.com/www.harapnuik.org/wp-content/uploads/2015/01/Blooms-Taxonomy-domains.png>

Please, note that the cognitive triangle shows the taxonomy from 1956 (not the later, revised one)

A good resource on the web: <https://thesecondprinciple.com/instructional-design/threedomainsoflearning/>