

A practical manual for educational institutions and civil society organizations



Participate in Sustainable – Development: Understand – Implement – Shape Sustainable Student Companies in Croatian High Schools

UDRUGA ZA PRIRODУ, OKOLIŠ I ODRŽIVI RAZVOJ
sunce



IMPRESSUM

Publisher:

Association for Nature, Environment and Sustainable Development Sunce, Obala HNP 7/III, 21000 Split, Croatia, www.sunce-st.org

Deutsche Gesellschaft für Umwelterziehung, Lindenstraße 6, 19406 Neu-Pastin, Germany, <http://www.umwelterziehung.de/>

Editorial team:

Margita Radman, Maja Golem

Authors: Domagoj Bajtal, Maja Golem, Helena Habdija, Blanka Horvat, Tea Kuzmičić Rosandić, Robert Lorenz, Gabrijela Medunić-Orlić, Margita Radman, Alexander Schabel, Miranda Šimac, Ana Nikol Šprlje

Proofreader: Maja Golem

Graphic design: Siniša Nosil

Print: ACT Printlab d.o.o., printed on recycled paper

Print circulation: 200 pieces

ISBN: 978-953-7810-06-1

CIP record available in the computer catalog of the University Library in Split under number 190317088.

Split (Croatia), Erfurt (Germany)

Pictures and graphics in the manual:

Alexander Schabel (p.29: Fig. 15, Fig. 16); Craft Technical School (p. 43: Fig. 40, Fig. 42, Fig. 43); PERMA-HORTI (p. 21: Fig. 6; p. 22: Fig. 7, Fig. 8); Robert Lorenz (p. 23: Fig. 9, Fig. 10; p. 24: Fig. 11, Fig. 12); Braća Radić High School (p. 43: Fig. 39, Fig. 41); School of Design, Graphics and Sustainable Construction (p. 43: Fig. 44, Fig. 45; p. 44: Fig. 46, Fig. 47, Fig. 48); School cooperative Ban (p. 19: Fig. 1; p. 20: Fig. 2, Fig. 3, Fig. 4 Fig. 5); Association for Nature, Environment and Sustainable Development Sunce (p. 25: Fig. 13.; p. 37: Fig. 17, Fig. 18, Fig. 19; p. 38: Fig. 20, Fig. 21, Fig. 22, Fig. 23; p. 39: Fig. 24, Fig. 25, Fig. 26, Fig. 27; p. 40: Fig. 28, Fig. 29; p. 41: Fig. 30, Fig. 31, Fig. 32, Fig. 33; p. 42: Fig. 34, Fig. 35, Fig. 36, Fig. 37, Fig. 38)

The manual was developed as part of the project *Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia* (2020 – 2022) funded by the German Federal Environmental Foundation (Deutsche Bundesstiftung Umwelt – DBU). The printing of this manual was co-financed by the Ministry of Science and Education of the Republic of Croatia. The owner of the publication can use this material for non-profit use for educational purposes, specifying the exact source. No part of this publication should be reproduced, made available, digitized, translated, included in compilations or transmitted without the written consent of the Association for Nature, Environment and Sustainable Development Sunce or the German Society for Environmental Education and Protection (Deutsche Gesellschaft für Umwelterziehung – DGU).

A practical manual for educational institutions and civil society organizations



Participate in Sustainable – Development: Understand – Implement – Shape

Sustainable Student Companies in Croatian High Schools

CONTENTS

FIRST WORDS	6
PREFACE	7
INTRODUCTION	8
ABOUT THE MANUAL	10
CHAPTER 1: SCHOOL COOPERATIVES IN CROATIA	11
1.1. Croatian Association of School Cooperatives	11
1.2. School cooperatives then and now	11
1.3. Organization and structure of the school cooperative	12
1.4. Goals and tasks of the school cooperative	14
1.5. Ecological education in the work of school cooperatives	14
1.6. Participation in school cooperatives – cooperatives as projects	16
1.7. How to form a school cooperative?	17
CHAPTER 2: SCHOOL COOPERATIVES IN PRACTICE	20
2.1. Examples of good practice in Croatia	20
Project <i>Ban's Mustache</i> (<i>Banov brk</i>)	20
<i>PERMA-HORTI – Zadar Initiative for Permaculture Design and Urban Horticulture</i>	22
2.2. Examples of good practice in Germany	24
Schmid's printing office	24
Mr Carrot's Sustainable Student Company Scheme	25
CHAPTER 3: FROM IDEA TO REALIZATION	26
3.1. Finding an idea	26
Massively Transformative Purpose – MTP	26
Moonshot Thinking	27
Double Diamond	27
3.2. Sustainable Business Canvas (SBC) – Design and test sustainable business models for sustainable student companies	29
3.3. Financing sustainable student companies – ways and possibilities	30
Sources of financing of sustainable student companies	30
Crowdfunding for sustainable student companies	31
3.4. Product marketing – student company's key to success	35

CHAPTER 4: PROJECT SUSTAINABLE STUDENT COMPANIES IN CROATIAN HIGH SCHOOLS – GREEN COMPANIES PROMOTE SUSTAINABLE ENTREPRENEURIAL THINKING AND ACTION OF YOUNG PEOPLE IN CROATIA	37
4.1. About the project – background and the goal	37
4.2. Project implementation	38
4.2.1. Workshop <i>Sustainable Student Company – Characteristics and Structure</i>	38
4.2.2. Workshop <i>Finding Business Ideas and Developing Business Models</i>	38
4.2.3. Workshop <i>Sustainable Economy on The Example of a Partner Company</i>	39
4.2.4. Workshop <i>Establishment and Financing of Sustainable Student Companies</i>	41
4.2.5. Workshop <i>Crowdfunding Campaign, Process of Creating Product Price and Market Launching</i>	42
4.3. Project results	43
4.4. Implementation challenges	45
4.5. Review of the project participants	46
CHAPTER 5: MATERIALS	48
5.1. Decision on the Establishment (Renewal) of the School Cooperative	48
5.2. Rules of the School Cooperative	50
5.3. Application Form and Credentials	59
5.4. Massively Transformative Purpose (MTP) – worksheet	61
5.5. Moonshot Thinking – worksheet	63
5.6. Sustainable Business Canvas (SBC)	66
LITERATURE AND LINKS	68
ABOUT THE PROJECT PROMOTER AND THE PROJECT TEAM	69
ACKNOWLEDGEMENTS	70





FIRST WORDS

Dr Cornelia Soetbeer, German Federal Environmental Foundation (Deutsche Bundesstiftung Umwelt – DBU)

The time has come for the Great Transformation of our current society into a sustainable one. Increasingly, people want to see a shift towards a climate-friendly future; however, at times, this change is fraught with uncertainty and fears, or is delayed or blocked.

In 2011, the German Advisory Council on Global Change (WBGU) called for a *new Social Contract for Sustainability* in order to manage the upcoming changes to our infrastructure, manufacturing processes, regulatory systems and lifestyles. Moreover, they stated: "The modern era's global crisis can only be overcome through a profound, shared awareness of low-carbon value creation and sustainable development."

But how can we break down these immense, overarching goals into a concrete plan for action? How can young people be introduced to a shared awareness of *low-carbon value creation*?

Sustainable student companies offer the perfect learning environment for this purpose: The development of key skills in terms of responsibility for the future and equitable distribution is encouraged and, at the same time, students' future job prospects (employability) are strengthened. This is because working in a sustainable student company means that the adolescents design, produce, market and sell products or services as independently as possible. In doing so, they come into contact with different areas of business management and consider topics such as sustainable consumption, sustainable production, and questions of how to sustainably design the working conditions in their entrepreneurial endeavors.

The corresponding discussions about various aspects of sustainable business and the act of making decisions against a background of possible trade-offs, e.g. between maximizing profits and sustainability or social justice, teach these students valuable skills for the future, both in terms of their professional and private lives.

In this sense, the project to establish sustainable student companies at Croatian secondary schools, which is supported by the Croatian environmental organization Sunce in cooperation with the German Society for Environmental Education and Protection (DGU), encourages the entrepreneurial spirit and professional orientation of young people with a focus on environmentally-friendly and socially equitable economic activity, while at the same time establishing new, innovative teaching and learning methods at Croatian schools.

In this way, the project and, in particular, all of the students who participate in it are making a significant contribution to *the great transformation* in Croatia.

PREFACE

Gabrijela Medunić-Orlić, Association for Nature, Environment and Sustainable Development Sunce

How to change the paradigm from a linear model, which is guided by the principles of *take, make, spend and discard*, to an efficient and smart resource management? Still the concept of economic growth is instilled in the formal education system, while the prosperity of a country is too often measured by a rising GDP, although the latter does not say much about the quality of human lives. By changing the educational process and educating new generations about the notion of sustainability, one can certainly contribute through practical work to an abandonment of a blind attachment to economic growth, which can ultimately lead to a new form of economy that will take into account planetary constraints. It is the sustainable student companies that are the locales of participatory learning models whose application can contribute to more conscious new generations which are educated to participate in the creation of change. Although student companies in Croatia are traditional and operate in the form of cooperatives; cooperatives and their products, as well as the sustainable practices they apply, are still under-recognized and under-promoted to the general public and the business sector. Furthermore, unlike certain sustainable businesses in Germany, they often do not achieve true financial sustainability or profit. Cooperatives operate predominantly in elementary schools and there is a small number of cooperatives in secondary schools, despite the fact that high school students are closer to the labor market. Namely, the experience and knowledge gained from working in student companies can contribute to the further professional growth and development of high school students. We believe that this manual, the implemented project activities and activities that are planned after the project is completed, i.e. the sale of products of sustainable student companies at the very entrance to the touristy Marjan Forest Park in Split will contribute to the overcoming of these drawbacks.

Robert Lorenz, German Society for Environmental Education and Protection (Deutsche Gesellschaft für Umwelterziehung – DGU)

Sustainable student companies are places of applied learning that provide students with a (protected) space in which they can nurture their economic competencies and apply them in practice. Active work in student enterprises makes the economy tangible, and in sustainable student companies, economic activity takes place ecologically and in a socially responsible manner. Student companies in Croatia are a traditional practice in primary schools, but they are less often found in high schools. However, as high schools play an essential role in young people's transition into the world of work, the project focuses precisely on promoting sustainable student companies in high schools and attempts to promote sustainable entrepreneurial thinking and action, as well as sustainable business orientation, among young people aged 15 to 18. The concept of teaching and learning in sustainable student enterprises was applied in selected schools in Croatia, and the achieved results and examples of good practice have conveyed an entrepreneurial impulse to other schools.

The project evolved in cooperation between the German Society for Environmental Education and Protection (DGU) and the Association for Nature, Environment and Sustainable Development Sunce. The main contribution of the DGU was the existing knowledge and experience on sustainable student enterprises in Germany, while Sunce conducted the project locally in cooperation with various associates in the fields of education, non-governmental and business sector.

INTRODUCTION

Formal education rarely gives the opportunity to clearly apply the theoretical knowledge that would encourage students to play an active, responsible role and engage in a common decision-making process. On the other hand, today's society is increasingly emphasizing an innovative approach and developing ideas that are consistent with nature and sustainable development. In order to achieve the Sustainable Development Goals (SDGs), UNESCO has developed the *Global Action Program on Education for Sustainable Development* for the period from 2015 to 2019. It lists five priority areas of activity. One area deals with empowerment, activation and encouragement of young people to take on the role of a change broker. Young people are considered to be particularly interested in improving their future and the future of next generations and represent the driving force behind educational processes.

The *National Youth Program 2020 – 2024* aims to create societal preconditions for developing young people's potential to raise the quality of their lives and their optimal social integration. The measures planned to be taken during the period of implementation of the National Program are aimed at improving young people's skills, knowledge and competencies in order to facilitate their integration into the labor market and active and responsible participation in the development of modern and democratic society. Sustainable student companies, whose development is encouraged by the project, offer products or services and make real profits, and are led by students. They have much in common with real companies, e.g. company structure and market orientation. Nevertheless, sustainable student companies are a school project with pedagogical goals that provides students with a (protected) space in which they can acquire and apply economic competencies. Working in a student company provides an opportunity to experience the world of the economy. In principle, sustainable student companies represent a good method of transmitting educational content through practical action. Student company members develop key competencies, such as reliability, teamwork and independence. However, the activity of sustainable student companies is more than all that. Sustainable student companies not only strive to be successful in economic terms, but also pursue environmental and social goals, and one of the specific goals of the National Youth Program is to promote corporate social responsibility in young people. The economic activity of sustainable student companies is based on the principles of sustainable development. Entrepreneurial decisions are reviewed in terms of environmental, social, local and global consequences, i.e. from the aspect of impact on the environment, social unity and economic entrepreneurship. For example, students think about how to save work material and energy and whether they can use regional, biological products.

One of the problems we face locally is the lack of citizens' initiative of young people. This disadvantage mainly stems from a lack of self-confidence in one's own abilities. Likewise, sole focusing on content during schooling results in a lack of student insight and the ability to sympathize to a greater extent with social situations.

In a sustainable student company, students connect theory and practice, learn experientially and develop important skills. Participation in the work of student companies increases the motivation of students, resulting in a more thorough acquisition of knowledge and development of key competencies and, consequently, better professional qualifications upon completion of secondary education. Not least, working in a student company contributes to strengthening students' civic engagement, encouraging them to take responsibility and participate in innovative society design. Connecting educational institutions, the business and non-governmental sectors enables the transfer of knowledge among participants, whilst allowing educational institutions and associations to stand out and gain social significance.

With the quality shaping of new generations of young people, who will then invest in the next generations, and by investing in their personal and professional development, we are successfully closing the circle of community sustainability and therefore this is one of the main reasons for the implementation of the project *Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia (2020 – 2022)*. All project activities were

carried out in cooperation with the start-up Cidrani, which combines high technology with nature, the Impact Hub network of incubators for innovation and the Croatian Association of School Cooperatives (HUUZ), which, with help of teachers and school cooperatives, nurtures work habits and abilities, develops entrepreneurial skills, responsibility, innovation, creativity, independence, but also the need for cooperation in students. All the workshops that were carried out were based on participatory methods and have provided an opportunity for young people involved in the project, as well as their peers, to be the creators of their ideas and to actively participate in independent research work.

ABOUT THE MANUAL

The manual is intended for civil society organizations and educational institutions which intend to carry out activities related to sustainable student companies. It contains a brief introduction to the basic aspects of sustainable student entrepreneurship on the example of the implemented project and the educational institutions involved.

For the sake of easier readability of the text, the translator occasionally used gendered pronouns. Also, when talking about sustainable student companies, in Croatia this form of learning and teaching is officially not represented by the term student company, but by a school cooperative. Therefore, in some parts of the manual, especially in the first chapter, the term school cooperative will be used instead of the student company.

The manual focuses on the process and practical examples. The first chapter gives an introduction to the history of school cooperatives in Croatia, organization and structure, as well as the goals and tasks of school cooperatives with an emphasis on the topic of ecological education and participatory ways of working. For those who are yet to commence the founding process, all the necessary steps with the necessary documentation can be found here in one place.

The second chapter describes student companies in Croatia and Germany and their work in practice. Prominent student companies are prime examples of sustainable student companies and have been selected because of their connection to the environmentally responsible subject matter of this manual. However, it should be noted that these are just some of the great number of examples in Croatia and Germany.

In order to make the process from the initial idea to the realization of the student product as simple as possible, the third chapter describes several methods that make it easier to find an idea, with different sustainable ideas and activities being emphasized in the project, as well as in the manual. Monitoring of the process at joint workshops has been facilitated by the Sustainable Business Canvas (SBC) tool, which, as a canvas of a sustainable business model, supports the development of the idea into a sustainable business model by taking into account relationships inside and outside the enterprise. In addition to economic criteria, SBC focuses on environmental and social consequences.

You can learn more about the project itself, project goals and activities in chapter four. We hope that an exhaustive description of activities and results will provide you with examples and suggestions for work, if you decide to set up a student company, or just help you design additional activities in that direction. Also, part of the chapter is dedicated to implementation challenges as well as to the review of project participants.

At the end of the manual there is a collection of materials for practical use, literature and network links used when writing the manual. This is intended to further inform users and deepen the content of the manual.

CHAPTER 1: SCHOOL COOPERATIVES IN CROATIA

Domagoj Bajtal, Croatian Association of School Cooperatives (HUUZ)

Blanka Horvat, Croatian Association of School Cooperatives (HUUZ)

1.1. Croatian Association of School Cooperatives

The Croatian Association of School Cooperatives, the umbrella national organization of school cooperatives of Croatia, was founded in 2006. It acts as a non-profit legal entity and is a member of The Croatian Association of Technical Culture (HZTK). In brief, according to the Statute, the Croatian Association of School Cooperatives:

- works on the development and promotion of Croatian school cooperatives and nurtures a long and rich tradition of school cooperatives in Croatia
- is a co-organizer of the county and state displays of school cooperatives of the Republic of Croatia
- implements an education and training program for school cooperative leaders and associates;
- organizes publishing activities in the field of school cooperatives
- connects and directs the work of school cooperatives and encourages the development, cooperation and networking of school cooperatives as well as the development of inter-county cooperation in school cooperatives
- provides professional advisory assistance to school cooperatives
- cooperates with authorities of the State and regional and local self-government units with the purpose of representing the interests and promoting the school cooperatives
- implements a program of international cooperation with educational institutions

All these activities are carried out by the Croatian Association of School Cooperatives in order to create a positive attitude of students towards work and a positive entrepreneurial climate in schools. Today, 643 school cooperatives from all over Croatia are joined by the Croatian Association of School Cooperatives. The number of school cooperatives is significantly higher in primary schools where they are most often associated with the tradition of school gardens. On the other hand, in secondary schools their number is noticeably lower. For example, during the writing of the manual, 119 school cooperatives were established in 97 primary schools. In the area of Split-Dalmatia County there are as many as 54 school cooperatives in primary schools, while in 86 secondary schools there exist only 11 cooperatives.

The programs implemented by the Croatian Association of School Cooperatives are financed by the Croatian Association of Technical Culture from funds of the Ministry of Science and Education dedicated for public needs programs of the Republic of Croatia in technical education.

1.2. School cooperatives then and now

Like any pedagogical phenomenon, school cooperatives have their own development path from initial ideas to today's modern terms. The initial idea is often not identical to the existing modern shape, so it is difficult to recognize it and place it in an accurate time frame. This phenomenon also applies in the field of school cooperatives.

School cooperatives are not an original school invention of HUUZ. They emerged as a very strong, broad and diverse movement at the end of the 19th and early 20th century within the framework of the new school movement and reformed pedagogy. In 1881, the *School Association of Joint Work* was established in Paris, and in 1909 the *Federation of Society of School Mutual Assistance of Arable, Shepherd, Fruit-Grower Friends and Friends of the Forests* was established in Ani. Following the example of France, various forms of school cooperatives are being opened in Europe, America, Asia and Africa. The first school cooperatives in Croatia, as organizational forms of student gatherings in joint work,

also came forward at the end of the 19th and early 20th centuries. These were mainly student savings organizations, for cheaper purchases and sales of school textbooks and accessories, health, collection and similar actions. The initial ideas on which the school cooperatives were founded were in the field of savings and loans and humanitarian activities.

Today, school cooperatives are organizations involving several sections, i.e. groups, extracurricular activities, which are engaged in various production and production-and-art programs. Extracurricular activities form the backbone of the school cooperative. It has its own bodies and organs that coordinate the work of young cooperatives, make numerous contacts with teachers, technical and other employees, parents, external associates (professional staff from the local background), economic operators and other participants of the cooperative.

1.3. Organization and structure of the school cooperative

The school cooperative is a subsystem of the school that is achieving a significant educational task, so it requires networking of various program elements and coordinated activity of the human resource.

The work of school cooperatives is organized into sections, and sections are led by teachers-section leaders.

Examples of sections of a school cooperative:

AGRICULTURE	medicinal plants of the region, school orchard, school garden, flower growing, cultivation of native plants of the region...
DECORATIVE AND UTILITY OBJECTS	isouvenir making, tailoring section, jewelry making, medicinal preparations, cosmetics, ceramics...
NATIONAL HERITAGE	guardians of the heritage, lace, basket knitting, traditional handicrafts...
SERVICES	photography, video section, workshops for children and adults, recycling...

NOTE: the shool cooperative may name the section after the content of the work, but it is not binding

Students who engage in the work of the school cooperative become cooperatives. They select one or more sections to participate in. Cooperatives are gathered by section leaders (teachers) at the time provided for the work of the school cooperative. The work of the school cooperative can be held in the premises of the school (classrooms, workshops, kitchens, school gardens and orchards, etc.) or outside the school (premises of external associates of the school cooperative, events in the town, city, or county; fairs, exhibitions, etc.). The head of the school cooperative, in collaboration with section leaders and the school principal, can arrange and organize workshops, lectures, field classes, visits to institutions and other school cooperatives. The school cooperative can also have external associates. External associates of the school cooperative can be parents, associations, professional services, experts of a particular profession and all interested individuals. They help the work of the school cooperative with advice; they hold workshops or lectures, participate in the organization and conduct of the activities of a school cooperative as volunteers.

The school cooperative can sell its products and services. Proceeds from the sale can be used for the purchase of materials necessary for work, rewards to cooperatives or for humanitarian activities. The method of distribution and purpose of income should be agreed with the Board of the school cooperative, i.e. with the principal or professional services of the school. Proposals for distribution and purpose of income are made by the head of the school cooperative, section managers and cooperatives. The head of the school cooperative prepares a report on the work of the school cooperative, which he presents at the Teacher Council (semiannual, annual), and the report may be in free writing. The

school cooperative partly has a production significance that must first be confirmed in the internal school market (school fairs, festivals, exhibitions, etc.), but also in the real market, all in accordance with Art. 39. of The Law on Education in Primary and Secondary School (described in more detail on p. 18) according to which the school may market products and services created as a result of the work of students.

The school cooperative in its organization, and especially in its program and goals, surpasses the so-called leisure activities in schools, although it inevitably originates from them. They also differ in that the school cooperative's funds, regardless of their source, are kept in the school account, but are specially recorded and used exclusively for the needs of the Cooperative.

School cooperative curriculum

With regard to the way it operates, the school cooperative represents a very dynamic and open subsystem that can only function successfully if it is structured on a curriculum model. Otherwise, it would become a work site where everyone works for themselves, uncontrollably, without the right results, and the products of cooperatives could not cover all the costs of working in a cooperative, thus leaving the cooperatives to live off of few donations, without enthusiasm and the right perspective. In the mixed curriculum model, which can be found now in most advanced environments, it is not the encyclopedic completeness that is required, but rather the curriculum cores as a working unit are offered. They are creatively transformed by the teacher (with students) into performance material in terms of the project, research and work tasks. It is left to the teacher to freely choose the organization and methods of work. Such a curriculum is considered a document that needs to be implemented in practice and revived and its worth equals the extent to which it is accepted among students and teachers.

The planning and programming of the work of teachers is related to the immediate work of teachers and students in the sections of extracurricular activities of the school cooperative and their work in the school, which is realized by the school cooperative. It is the process of deciding on content design, the timing of content during the educational period, the process of designing procedures and methods of work taking into account the goals we need to achieve in relation to students. Planning and programming in the school cooperative is carried out in several stages, and it involves teachers, students and other participants interested in the work and results of work in the school cooperative.

Annual plan and program of extracurricular activities

The annual plan and program of extracurricular activities (sections) of the school cooperative is the base document of the school cooperative. It helps achieve the goals and tasks of education of young cooperatives. Other activities carried out cooperatives are derived from it. The first proposal of the school cooperative section program (general plan and program) is obliged to create a teacher-section leader. Such a proposal serves as a starting document on the basis of which a conversation is held with students, parents and other persons who participate in the work of the section in any way. Once a discussion with all interested parties in the work of the section has been carried out, the teacher will make a final proposal for the section plan and program, which becomes an integral part of the Annual School Cooperative Program. The following essential elements must be elaborated in the leisure program:

1. program goals and tasks
2. work content
3. methods and sociological forms of work
4. working conditions and teaching media
5. evaluation

The design of program goals for topics to be achieved during the year in the school cooperative section must be extremely precise and concrete. In order for the teacher to choose the objectives and shape them appropriately, he must also take a close look at the existing program of the section in question, working conditions, professional literature, didactic means, the annual program and calendar of the school and the goals of the school cooperative. As part of the annual plan of the section, the teacher-leader will foresee the main methods for the implementation of the program. Within the framework of daily preparation, the teacher will provide for an algorithm of small methodical steps, without which there is no realization of tasks. If the students are really motivated to work and if the work is well organized, the students will find their own methods of work that were masked by the creative task. For those activities or actions that students are not able to perform on their own, they need help or guidance offered by the teacher. Leadership requires well-developed methodical templates in which different teaching procedures will be represented. Work activities, teaching and learning occur in the circle of different social connections and relationships, and therefore it is necessary to foresee different organizational forms of work. According to whether the student works alone, with the student next to him, or another student from the group or in a larger group, the teacher anticipates different forms of work. In individual work, the student is active, works independently without direct guidance from the teacher or the help of other students, and his individual abilities absolutely come to the fore. Such tasks and modes are quite common in sections engaged in the manufacture of handicrafts, utility and decorative items. In sections engaged in agricultural production, work in groups or partnership relationships are more used.

1.4. Goals and tasks of the school cooperative

The process of creation in school cooperatives starts from an idea, and cooperatives are guided by ideas on how to be better, different, and ultimately – more satisfied. Thereby, the focus is on creative expression, working together, exploring the market and looking for a sales channel for a particular product. All the principles listed are equally important because they bring working in a cooperative closer to real life and market processes which students adopt precisely through the practice of working in a school cooperative. In other words, the goal is to realize the idea in a satisfactory and high-quality manner, affordably, in an appropriate quantity and on time.

The school cooperative is established as an extracurricular activity, with stressed voluntary cooperation between students and teachers-section leaders in achieving the goals. Although the production importance of cooperatives is emphasized, there are many different goals and activities. Activities that are certainly worth mentioning are *nurturing the tradition of home and native land, providing opportunities for cooperatives to learn in smaller groups through teamwork, stimulating creativity and nurturing a culture of work*. Cooperatives, with the guidance of section leaders, are already learning, since elementary school, how to translate a particular idea into the final product. They are encouraged to be ready to take risks, and innovation and entrepreneurship are especially nurtured in the educational process. By participating in numerous exhibitions, fairs and festivals, cooperatives develop communication and presentation skills and learn their first entrepreneurial steps. The second component, woven into the basic principles of cooperatives, is the attitude towards nature and environmental protection as well as awareness of the ecological method of production.

1.5. Ecological education in the work of school cooperatives

Of particular importance in the choice of activities in school cooperatives with agricultural orientation are the different forms of plant production, which is quite represented in the current practice. In this area, works on so-called test lots as well as on larger or smaller production areas are well recognized. Of particular value are those experiments which examine factors that influence plant growth and development to full fertility with different plant crops. In doing so, the students independently, through research procedures and relevant agrotechnical methods, adopt new knowledge and draw quality conclusions that can then be applied in broader practice. Numerous examples of student research papers based on various current topics in the field of economy, and especially plant and livestock

production, have had a positive impact on the improvement of the local environment. Students often earned awards and commendations for such works.

The students are introduced to various forms of agricultural production through direct work in school cooperatives and usefully apply them in school gardens and on cooperative lots and in smaller farms, especially in the countryside. Thus, by working in cooperatives that nurture agricultural production, students acquire knowledge that agricultural soil is the basis of life on Earth because only on it can green plants, with the help of solar energy, water and carbon dioxide, create the biomass necessary for the food of all living beings. They learn that the soil as a substrate should be carefully maintained because it is the center of numerous beneficial organisms that make up a harmonious ecosystem. They are introduced to intensive industrial production, which, in order to achieve maximum results, adds artificial mineral fertilizers, pesticides and various veterinary-pharmaceutical products to the soil, which often destroy the living world in the soil (earthworms, snails, insects and their larvae, fungi, bacteria, etc.) and thus adversely affect the fertility of the soil and its structure. They note that such agricultural production consumes too many non-renewable energy sources, causes significant soil erosion and impoverishes the natural landscape. All of the above leads to health problems caused by the presence of harmful and toxic substances in foodstuffs, of which children suffer the most. The students will learn the most about these details from a theoretical point of view, while in the practice of school cooperatives a special place is given to ideas and instructions arising from the so-called organic-biological agriculture, which is mostly used on smaller lots of school cooperatives as well as on family farms. Also, precious and rich experiences from eco-farms are frequently used. The latter produce certified organic food and are gathered in the Croatian Organic Farmers Associations Alliance. Therefore, agricultural school cooperatives are places where knowledge and practical experience are acquired in the field of the highest quality agricultural production based on the processes most regulated by nature itself, that is, the coexistence of all living beings in accordance with ecological legalities. There the quantity does not come at the expense of quality in order to avoid as effectively as possible the severe consequences for the overall life in nature. In these circumstances, with immediate and appropriate research and production work of students in any form of agriculture and other activities, young people develop a more modern attitude in relation to the contradictions that exist today in the economy, especially in agriculture and the environment. It should also be expected that many students, who have gained a certain economic, environmental and practical agricultural education by working in the school cooperative, will themselves become good farmers or will grow into sustainability-oriented professionals and scientists in their further education.

Important components of environmental education are also acquired in other activities that school cooperatives are increasingly engaged with. This is reflected in products based on the nurturing of the national heritage of its region (lace, gold embroidery, etc.), the manufacture of utility and decorative items, especially ceramic products, the refurbishing of discarded objects (glass bottles, ceramic tiles, textiles, etc.) that thereby acquire a new value. Especially noteworthy are the actions of collecting secondary raw materials, especially paper, from which new products are obtained by recycling. There are also efforts of some school cooperatives to revive old crafts and to preserve the monumental heritage and customs of their region. We could list many more activities that cooperatives are engaged in, such as the production of fruit seedlings, growing potted plants and flowers, fruits and vegetables, beekeeping, greening and afforestation of the environment. They also conduct various thematic workshops, organize exhibitions and create commemorative posters for events like Earth Day, World Environment Day, International Biodiversity Day, World Water Day, etc.

These activities, actions, incentives and supports in the design of ecological education mean a lot in acquiring useful knowledge and experience, but they cannot independently lead to desirable ecological behavior unless young people build strong attitudes and beliefs that would act as bridges between knowledge and behavior. Personal interest in current problems and the behavior of individuals and groups in the student's environment (parents, teachers, media...) can greatly contribute to the creation of these attitudes. Also, some newer principles, approaches and procedures should be used more in the work. There should be an aspiration for the implementation of the concept of comprehensive

ecological education that necessarily integrates natural sciences, social, aesthetic, health, sociological, psychological and other aspects. Therefore, students should be as much as possible in the position of an active participant in monitoring and drawing effective conclusions about environmental problems, by means of participation in various studies, actions of community service and the like.

1.6. Participation in school cooperatives – cooperatives as projects

Global social and economic changes over the past few decades have led to the realization that new methods must be used in learning and teaching. These methods have one thing in common: interactivity, i.e. an effort to reduce the mechanical transfer of knowledge from teachers to students (passive learning) and to increase active learning in which students acquire new knowledge. This type of learning is also called a democratic form of learning. The method of project teaching certainly is one of the new teaching methods that is to be implemented in modern schooling. A modern school without this method of learning is unthinkable, and in many schools project work has become commonplace. Project learning means self-determined and independent confrontation of students with subject matter and problem. Finding topics, planning, organizing and carrying out work are primarily the responsibility of students.

The student connects knowledge about a single phenomenon, i.e. about a given topic, by means of independent activity: by observing, watching, reading, measuring, collecting data, interpreting and aggregating various data obtained into a whole (picture, picture book, story, article, scheme, model, photo album, billboard...). Integrated teaching is any teaching that is organized in such a way as to enable the linking of the content of different areas (subjects) in order to better explain, understand and study, and therefore adopt, a particular topic, concept or content of learning. Modern interest in integrated teaching is justified by new brain research because it is aligned (compatible) with the activity of individual brain areas and focused on simultaneous activation and use of multiple brain regions. In addition, we can say that the project is the most open form of teaching that is entirely focused on the student's interests.

The advantages of project learning are:

- encouraging of creativity
- independence in the approach to problems and in drafting the solution
- developing independence and self-entrepreneurialism
- self-organizing and planning
- developing and empowering of social behavior: social competence is promoted through thoughtfulness, participation, understanding, attention, willingness to help and emotional warmth
- competitive learning
- ability to criticize and confront
- strengthening your sense of self-worth
- change of school routine
- encouraging the realization of extraordinary ideas

Advantages of school cooperative projects:

- reduced organizational difficulties
- increased readiness of teachers to participate in the project
- shared learning of teachers and students
- school administration support for project teaching
- implementation of the project throughout the educational period
- independence of students in noting differences in working methods
- fostering a positive attitude towards work
- fairs of school cooperatives that are a unique and original way of presenting the project

Within the framework of what is said, we can determine that the school cooperative itself is a project. The project implies an intention, an elaborate plan, i.e. a written document describing who, what, how, when, with whom and with what means is it intended to achieve a certain activity. In general, the school cooperative works towards the desired change in human behavior; towards the way the system works or the way an institution works. In the example of a school cooperative, it is important to present to the donor the need or the problem of the cooperative that a specific project wants to solve. Most often, projects that seek to achieve financial support are implemented. On the other hand, although it is often pointed out that the biggest problem is the lack of funds, experience has shown that funds exist, but one must need to know how to find and use them. This precisely points to the need for quality design of the project, of its planning and, finally, of its implementation.

1.7. How to form a school cooperative?

Establishing a school cooperative or restoring one that once worked is simple, and all the information about how to establish it, together with the documents needed, can be found on the Croatian Association of School Cooperatives (HUUZ) website (www.huuz.hr).

The Register of School Cooperatives of the Republic of Croatia is a public data bank on the basis of which registered school cooperatives exercise their rights at the state level. The Register is maintained by HUUZ, and in order to make a registration, the following documents should be submitted to HUUZ:

1. Decision on the Establishment/Renewal of the School Cooperative
2. Rules of the School Cooperative
3. Minutes of the Founding/Renewal Assembly of the Cooperative
4. Work program of the Cooperative and section programs

In order for the school cooperative to become a member of HUUZ, in addition to these documents it is necessary to provide HUUZ with an Application Form and Credentials. These documents (Decision on the Establishment, Rules of the School Cooperative, Application Form and Credentials) can be found on HUUZ's website (www.huuz.hr) and in Chapter 5 on pp. 47, 49 and 58. A decision on renewal should be taken if the school cooperative discontinued its work, provided that it is possible to identify and reestablish its continuity. Respecting one's tradition and establishing continuity is a nice custom.

Steps in establishing a school cooperative:

1. When the perennial interests of pupils are observed within the framework of the existing leisure activities and where there are spatial, material (equipment, accessories, tools...) and human (competent leaders) resources and conditions, **the school principal shall put on the agenda of the teachers' council a discussion on the establishment of a school cooperative**.
2. After discussing the possibilities, sections, activities and objectives **at the teachers' council, a positive opinion shall be adopted for the establishment of the school cooperative and shall be referred to the school board as a proposal**. A proposal shall also be made **for the members of the interim three-member committee of the cooperative**.
3. The school board shall consider the opinion and proposal and **decide on the establishment of a school cooperative**. This decision is delivered to the Croatian Association of School Cooperatives, the Ministry of Science and Education and the department of social activities or the state administration Office in the county, or in the City of Zagreb, and the social services department of the city. At the same time, **the school board appoints an interim cooperative board**.

4. The interim cooperative board shall carry out preparatory work until the establishment and commencement of the cooperative is declared: it shall organize a founding assembly adopting the rules of the school cooperative and the plan and work program of the school cooperative.

Any student of the school/institution can become a member of the school cooperative after completing the first grade of primary school, and parents of student-members can also become members. Mentor teachers and other participating professionals are regular members, and student members are called cooperatives. Members of the cooperative can also be students who have graduated from school as well as their parents, external associates, donors and patrons, experts and individuals who promote school cooperatives. These members are supportive members, and the cooperative can also appoint honorary members. The circle and the number of supporting members is not limited. However, this does not mean that this group of members should be recruited for no reason (i.e. without formal reasons or prestige). The criterion of their reception is the support to cooperatives (regardless of form: monetary, material, professional, etc.; and amount) and promotion of cooperatives and its members. Those whose membership is due to a certain form of respect should belong to the honorary members.

The number of members of the Cooperative Board depends on the development level of the Cooperative and on the factors which are explained in *the Program of School Cooperatives in Primary and Secondary Schools* (Messenger of the Ministry of Education and Sports, Number 12, Zagreb, November 14, 1995). The method of proposing and delineation of the representatives of the Cooperative Board is explained at pp. 19 and 20 of the Program. However, it is worth drawing attention to the following:

- a) a member of the Cooperative Board, as well as the head of the Cooperative, may also be the principal of the school, in particular, because of the nature of activities and the purpose of school cooperative and the role of the principal in creating the conditions for work of the Cooperative
- b) a representative of the local authorities (municipality/city) or district (in Zagreb) is appointed a member of the Cooperative Board if this is deemed advisable and if he will actually participate in the work and contribute to achieving the results

Additional clarifications about documentation

The name of the Cooperative is a question of recognizability, and in Croatia it is most often related to: a toponym (the name of the place where the school is based), the name of the school, the activity of the cooperative (sometimes expressed by a detail of peculiar meaning) or to the concept that symbolizes the place and role of the cooperative in the education and life of the student. Dialectal names are very common. Stamp, flag and emblem (cooperative insignia) are optional and Article 5 in the Rules of School Cooperative may be omitted. They are used because of the stressed need of young people for recognition and diversity. As a result, the cooperative may have its own logo. Also, the provision in both paragraphs can also be supplemented with a logo. Stamp, flag, emblem (and logo) can be completely original, but it is recommended to make a clear affiliation with a specific educational institution.

Certain types of educational institutions can adapt part of the rules *The goals and tasks of the Cooperative* to their basic tasks. This applies in particular to kindergartens, education and training centers for children and young people and student dormitories, as the previous two groups use the workshop in a basic methodical form.

If the number of sections in article 12 of the Rules is greater than four, they are added under new ordinal numbers. The names of sections are entered in accordance with the activity (e.g. florist section, plant preparation production section, mushrooming, beekeeping section, student savings section, desktop publishing), but can also be given a specific name. We do not recommend giving personal names.

Legal framework for the activities of school cooperatives

The legal establishment and activities of school cooperatives are defined in Article 39. of the Act on Education in Primary and Secondary Schools (OG No. 87/2008):

Article 39

(1) The school may establish a school cooperative as a form of extracurricular activity in accordance with the school statute and specific regulations.

(2) The school may market products resulting from the work of pupils.

(3) The funds acquired through the turnover of the products and services of the school cooperative shall be specially registered and may only be used for the work of the school cooperative and the improvement of the educational work of the school¹.

¹ <https://www.zakon.hr/z/317/Zakon-o-odgoju-i-obrazovanju-u-osnovnoj-i-srednjoj-%C5%A1koli> (January 31, 2022)

2. CHAPTER 2: School cooperatives in practice

2.1. Examples of good practice in Croatia

As already noted, there are as many as 643 school cooperatives in Croatia, a large number of which can serve as a model for successful work and student engagement. Nevertheless, for the purposes of this manual, we had to choose two high school examples that match their theme and work mode with the project. Other examples of the activities of school cooperatives can be found on HUUZ's website (<https://huuz.hr/>).

Project *Ban's Mustache* (*Banov brk*)



Figure 1: *Ban's Mustache*, the product of the school cooperative

1) Brief description

Name: project *Ban's Mustache* of the School Cooperative *Ban*

School: *Ban Josip Jelačić* High School, Zaprešić

Age of pupils: 14 – 18 years

Number of students involved: 70

Number of teachers involved: 15

Duration: entire school year 2021/2022

2) Implementation method and objective

How the project is implemented:

- a) finding data about Ban Josip Jelačić and storing it to a shared Google Disc
- b) discussing the choice of shapes and materials of each product based on environmental principles within sections
- c) making a ceramic souvenir on the theme of ban's mustache: Ban's chain, Ban's brooch, Ban's wand
- d) making Ban's cup on a potter's wheel
- e) making Ban's soap and Ban's bath soak with a commemorative mustache logo, based on the soap ingredients from the times when Ban lived
- f) making Ban's cookies
- g) face painting during product promotion
- h) making Ban's bags
- i) making Ban's keychain on a CNC machine
- j) designing and manufacturing packaging for all products
- k) production of marketing materials for the promotion and sale of products (Ban's leaflet, Ban's poster...) in agreement with the Zaprešić Tourist Board and the City Library of Ante Kovačić
- l) keeping a purchase and sales register and selling products
- m) including the *Banov brk* project in the eTwinning project on environmental self-sustainability #mojkrajija (#myregionandme) and in Erasmus+ projects at the school

The aim of the implementation is to encourage students of different sections of the cooperative Ban, and thus of different educational profiles, to creatively interpret the local heritage based on ecological principles; explore the information about Ban Josip Jelačić in the Regional Collection of the Zaprešić Public Library; make souvenirs on the topic of Ban's mustache in various ecological materials and forms; promote souvenirs at the Zaprešić Tourist Board and the Ante Kovačić Public Library in Zaprešić; arrange the purchase of souvenirs with the Tourist Board; sell souvenirs at various events; foster the cooperation of students of different orientations and sections; encourage local cooperation on the eTwinning project #mojkrajija and internationally on Erasmus+ school projects; develop soft skills; use an interdisciplinary approach; promote its own cultural heritage as part of the European heritage; develop appropriate, innovative and environmental solutions; encourage active action in school and community; increase the visibility of the school; develop the creativity and independence of students; practice teamwork; strengthen the relationship between pupils and teachers.

3) Results

Results of the work of the School Cooperative Ban:

- 1) satisfaction of students and other participants and their review of the project
- 2) material results of work that permanently remain in school and serve to refine the premises, for further education and for sale
- 3) writing reports to the school, the tourist board, the public library
- 4) presentation of the results of word locally, regionally, nationally and internationally
 - a) Christmas exhibition of school cooperatives organized by the Croatian Association of School Cooperatives
 - b) charity auction of the Zapreščana Club
 - c) participating in an Erasmus+ project – *STEAM and Robotic; a New Learning Approach*
 - d) national Zoom webinar *Creative leaders of school cooperatives* organized by HUZ, where our leaders Zvonimira Špoljar, Anita Kola Brundić and Zdravka Kramarić exhibited on the topics of *creativity, humanitarian work and entrepreneurship in the school cooperative*
 - e) article on the *skole.hr* portal
 - f) organization of the Inter-County Conference *Entrepreneurship in school cooperatives with Banov brk theme*



Figure 2: The presentation of products of the School Cooperative Ban



Figure 3: Ban's soap



Figure 4: Ban's bath soak



Figure 5: Ban cookies

- g) article on the project in the journal *Struka zove*
 - h) post on the srednja.hr portal
 - i) presentation of *Ban's mustache* at the 8. days of cooperatives in Zagreb County
 - j) presentation of the project at the Days of Zaprešić Town
 - k) participation in the eTwinning project #mojkrajija
- 5) presenting the project to the wider community with an exhibition at the Public Library at the end of the project
- 6) media coverage of the project (Zaprešić TV; Zarazno dobar radio, Zaprešić; Večernji list; Journal of Education *Zrno*; Informative monthly magazine *Zaprešić*; Zaprešić town official website)
- 7) presentation of the project at the *Projekt Građanin* fair
- 8) presentation of the project on the portal skole.hr on both Edutorij and digital journal for educational experts *Pogled kroz prozor*
- 9) project results are part of the final reports of Erasmus+ projects

PERMA-HORTI – Zadar Initiative for Permaculture Design and Urban Horticulture



Figure 6: Formed permacultural garden prepared for sowing and planting, autumn 2019

1) Brief description

Title: PPERMA-HORTI – Zadar Initiative for Permaculture Design and Urban Horticulture

School: Agricultural, Food and Veterinary School Stanko Ožanić

Number of students involved: 80 students of the Agricultural, Food and Veterinary School Stanko Ožanić and 10 students of Elementary School Voštarnica

Duration: May 14, 2018, to May 13, 2020

2) Implementation method and objective

PERMA-HORTI – Zadar Initiative for Permaculture Design and Urban Horticulture is aimed at strengthening the local partnership for employment in Zadar County, with two project goals. The first one is to contribute to increasing the employability of the most vulnerable groups in the labor market by developing and implementing an innovative interdisciplinary training program for jobs in the field of permaculture design and urban horticulture. The second is to enable the effective implementation of the county's strategy on human resources development by adapting the existing and introducing new educational methods and content in partner schools.

The project leader is the Agricultural, Food and Veterinary School Stanko Ožanić, while the partners are the Agency for Rural Development of Zadar County AGRRA, the Association of Abstinentes for Assistance in Resocialization *Porat*, the University of Zadar, *Elementary School Voštarnica Zadar* and Nasadi d.o.o.

As part of the project, part of the innovative program regarding jobs in the field of permaculture design and urban horticulture was implemented in school curricula. With its application in practical work, with additional education on entrepreneurship, 80 students of the Agricultural, Food and Veterinary School Stanko Ožanić acquired new knowledge and skills and improved their competencies. By developing extracurricular activities and by involving ten students with developmental disabilities from *Elementary School Voštarnica* in horticultural works, the project uses the therapeutic effects of horticulture.



Figure 7: Presentation of the School Cooperative *Vridne ruke* at the 32nd Fair of School Cooperatives of the Republic of Croatia, September 2020



Figure 8: Raising the Permaculture Garden

open to citizens, which means that they will be able to harvest vegetables, herbs and spices, as well as to enjoy its space. Solar and wooden benches are also installed in the garden.

The project is extremely humane and brought together participants with the same goal: helping each other, encouraging solidarity, healthy living, empathy, enjoying the fruits of our own labor, and preserving our planet for the next generations.

3) Results

School Cooperative *Vridne ruke* participated in the realization of the project by building a permaculture garden, participating in its continued maintenance and presenting the project at the County Fair of School Cooperatives of Zadar and Šibenik-Knin Counties. The theme of the exhibition was *Permaculture plant cultivation on raised flower beds in urban environments*.

On this occasion, they presented the first permaculture urban garden on raised flower beds, set up on the New Campus of the University of Zadar. The garden is

2.2. Examples of good practice in Germany

Robert Lorenz, German Society for Environmental Education and Protection (*Deutsche Gesellschaft für Umwelterziehung – DGU*)

Schmid's Printing Office



Figure 9: Work at Schmid's printing office



Figure 10: Students at Schmid's printing office

damaging industries. Only fair-trade and ecological textiles are used in the work of the printing office. The sustainable student company has two departments. The textile department works on the printing of fair and ecological textiles, and the other department refines cups and thermos cups and/or works on the sublimation of other products.

All 9th and 10th-grade students must choose an elective subject, and about 20 students choose a school sustainable student company. For 12th graders, the student company offers a supplementary course Digital Worlds in which the existing equipment is used.

The student society initially used school funds and premises, but due to its success it can now fully self-finance and has its own building near the school.

3) Results

By working in this sustainable student company, students learn in detail about the sustainable production of raw materials, transfer of special IT knowledge and experiences, and business models, public relations and marketing of their products. Furthermore, they usually present their products in various school competitions. One of the success factors is the hardware designed for small orders, which is an advantage over competitors. Marketing is aimed at schools, organizations and businesses across Berlin. Due to its work on public relations, the sustainable student company is very active in school competitions and is frequently inviting media and political representatives to workshops.

1) Brief description

Name: Schmid's Printing Office (*Schmid's Druck Studio*)

School: Carlo-Schmid-Oberschule, Berlin

Age of pupils: 15 – 17 years (secondary education)

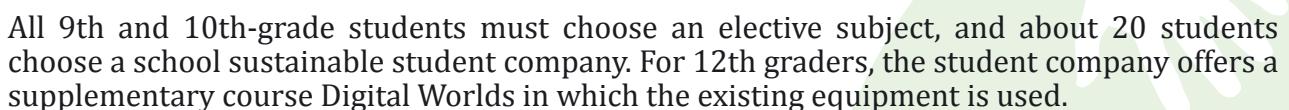
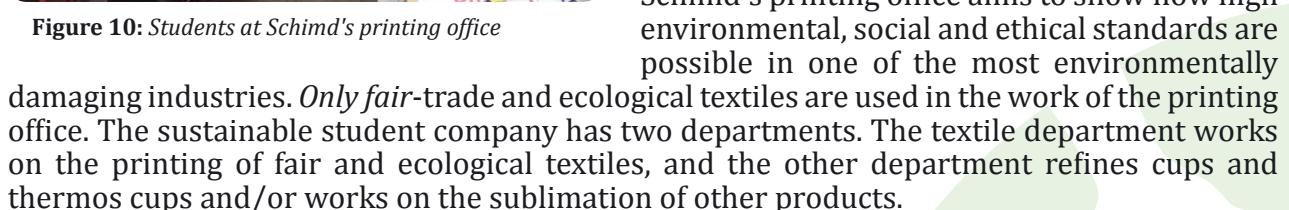
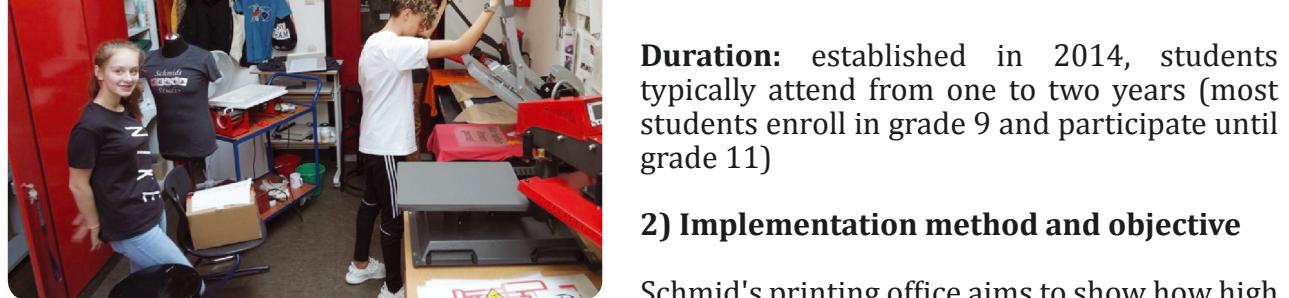
Number of students involved: between 40 and 60 (with a core group of 15 to 20); about 20 new students join each year

Number of teachers: 2 – 3

Duration: established in 2014, students typically attend from one to two years (most students enroll in grade 9 and participate until grade 11)

2) Implementation method and objective

Schmid's printing office aims to show how high environmental, social and ethical standards are possible in one of the most environmentally



damaging industries. Only fair-trade and ecological textiles are used in the work of the printing office. The sustainable student company has two departments. The textile department works on the printing of fair and ecological textiles, and the other department refines cups and thermos cups and/or works on the sublimation of other products.

All 9th and 10th-grade students must choose an elective subject, and about 20 students choose a school sustainable student company. For 12th graders, the student company offers a supplementary course Digital Worlds in which the existing equipment is used.

The student society initially used school funds and premises, but due to its success it can now fully self-finance and has its own building near the school.

3) Results

By working in this sustainable student company, students learn in detail about the sustainable production of raw materials, transfer of special IT knowledge and experiences, and business models, public relations and marketing of their products. Furthermore, they usually present their products in various school competitions. One of the success factors is the hardware designed for small orders, which is an advantage over competitors. Marketing is aimed at schools, organizations and businesses across Berlin. Due to its work on public relations, the sustainable student company is very active in school competitions and is frequently inviting media and political representatives to workshops.

Mr. Carrot's Sustainable Student Company Scheme

1) Brief description

Title: Mr. Carrot's Sustainable Student Company Scheme

School: various schools participating in this scheme

Age of pupils: 12 – 16 years (secondary education)

Number of students involved: between 10 and 30 per school, with new students joining each year

Number of teachers: 2 – 4 per school

Duration: usually from one to three years

2) Implementation method and objective

The project scheme, developed and supported by the BUND and Deutsche Umwelthilfe (<https://www.duh.de/home/>), as well as by various companies which financially support various sustainable student firms, helps schools and student initiatives create their own sustainable company dealing with snacks/trade. The project scheme advises schools to create concepts and funding at the initial stage and in everyday work, and in working with bodies and offices. Furthermore, it connects schools with manufacturers and extracurricular partners.

The student firm's focus is on learning and practical, action-oriented experience, with the main intention of providing healthy food and beverages made from sustainable resources to the school community. This process takes place through several departments: procurement (suppliers, offers), production (equipment, recipes), sales (sales booth), marketing (advertising, announcements), accounting (tax administration, sponsors, account management) and management.

3) Results

The student company is not only able to offer healthier and more sustainable food and drinks at a lower price than standard external services, but also the resulting earnings are used within the school, and its spending is democratically decided on by the members of the student company.



Figure 11: Promotion of healthy food in a sustainable student enterprise



Figure 12: Promotion of student products

CHAPTER 3: FROM IDEA TO REALIZATION

3.1. Finding an idea

The establishment of a sustainable student company itself is the first and easiest step in the system of its management. Bringing together motivated students and a truly independent student engagement in the work of a sustainable student company, which over time will lead to the development of already listed skills and competencies that are crucial to coping with future socioeconomic and environmental challenges, is a much more complicated process. In order for students to be really motivated to work and to feel real ownership of the end product of this work, it is important that this motivation is intrinsic and that the students are also sensitively connected with the vision of the student enterprise. Finding an idea and vision that will unite all students is challenging for each leader and requires a certain amount of time. Therefore, below are described activities that were used practically under the guidance of mentor Cidrani and which can be used in the work of the student company in order to find a common purpose and lay the foundation for the path to success.

MASSIVELY TRANSFORMATIVE PURPOSE – MTP

Massively Transformative Purpose (MTP) is a term first used by Salim Ismail in his book *Exponential Organizations* to describe a new breed of organizations that surpass their competition in the 20th century more than ten times. Today, this term is widely used for the so-called purpose over purposes, i.e. the thing that drives the individual and what in the business world represents the very core of the reasons for doing business.

MTP is a grand-scale vision statement that: is audaciously big and aspirational, can cause significant transformation to a huge group of people – a community, an industry, or even the whole planet, it unites and inspires action in everyone involved.²

MTP is used to form answers to questions:

- Why are we doing what we're doing?
- Who do we want to influence?
- What problem do we want to solve?

The answers to these questions should lead to a goal that cannot be achieved simply, that primal, massive goal that transforms the whole life of the individual. This goal is then shaped into an inspirational slogan that moves the individual and/or group. Not only does it inspire and encourage, MTP also creates a clear structure for the company.

Peter H. Diamandis, founder and president of the X Prize Foundation and co-founder and executive chairman of Singularity University, states:

An MTP must be something that inspires and challenges you. It must be aimed not only on the mind, but also on the heart. It has to be declared with confidence and sincerity. It can't be a narrow goal, or even technologically specific. And above all, it must be uniquely yours.³

A worksheet that helps students find their MTP is in Chapter 5: Materials, page 60.

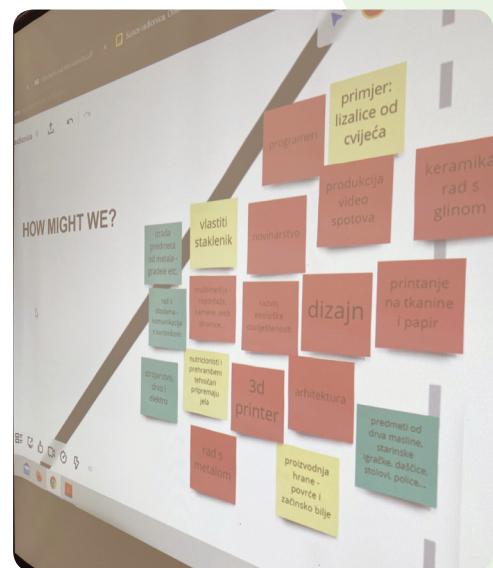


Figure 13: An example of MTP use on project workshops

26 ² <https://moonshotpirates.com/blog/setting-a-goal-for-changing-the-world-massive-transformative-purpose/> (January 28, 2022),

³ <https://www.diamandis.com/blog/discovering-your-massively-transformative-purpose> (January 28, 2022)

Moonshot Thinking

Moonshot Thinking was inspired by a speech by U.S. President John F. Kennedy, who, at Rice University in 1962, stated the following: "We have chosen to go to the moon in this decade." Kennedy's intention, or time-set goal, resulted in the alignment of the entire country with his aspiration and, ultimately, its realization. CEO of the company X Astro Teller expanded a simple utterance by Kennedy into a whole philosophy of reflection, now known as Moonshot Thinking. At the heart of Moonshot Thinking is choosing one big problem/idea and focusing on solving/realizing it. While MTP defines our life mission and what drives us to create, Moonshot pulls the right problem out of MTP, making it easier for us to identify specific actions that will lead to solving a problem which is consistent with our purpose. It is evident that the MTP and Moonshot idea must be closely linked to yield progress.

Moonshot Thinking is applied most often at the beginning of a project and can be carried out individually or in a group by pairing with another method, e.g. brainstorming. To facilitate the path to a Moonshot idea, a set of questions has been devised that primarily helps identify one major problem related to MTP, and by means of deduction it leads to awareness of the activities that need to be undertaken to solve it. Therefore, it is good that the MTP of the student enterprise is determined before conducting Moonshot Thinking.

A real Moonshot cannot be too big and too crazy enough. Moonshots do not necessarily have to do with disruption, apart from the very important fact, that Moonshot Thinking implies and allows for completely new ways to think about the future. In other words, a Moonshot approach allows persons and companies to address the challenges of disruption.⁴

A set of questions to conduct Moonshot Thinking can be found in Chapter 5: Materials, page 62.

Double Diamond

The Double Diamond is a process of developing an idea created by the UK Design Council in 2004. In the Double Diamond method, groups creatively and collaboratively create ideas. In addition to highlighting the design process, the Design Council also uses key principles and methods and encourages the ideal working culture needed to achieve significant and long-lasting positive change⁵. It takes approximately one or two hours to carry out the method itself and it is adapted to both smaller and larger groups.

Steps to develop ideas:

Step 1 – Goal setting

The leader divides the participants into groups, ideally of four to six people. He determines what is the purpose of carrying out the Double Diamond method depending on your needs (e.g. finding an idea for a student company product/service or introducing the whole group to a chosen idea). Depending on the purpose, the leader adjusts the time of implementation. If the goal of the method is to develop a new idea, students should be given as much time as they need for each step.

Step 2 – Principles of the idea

The principles of the idea are simple guidelines that stimulate creativity and divergent thinking at the initial stage and result in a large number of ideas. The leader briefly explains to the students the principles that are encouraged.

- Yes, and... – encourages students to build on the ideas of others with a simple affirmative message yes and by adding their ideas. It should be emphasized that in order to successfully implement this principle, it is important to actively listen to the interlocutors.

⁴ <https://www.linkedin.com/pulse/what-moonshot-thinking-lisa-bouikidou> (January 28, 2022);

⁵ <https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond> (January 28, 2022)

- More is more – it encourages students to come up with as many ideas as possible at the initial stage without thinking about their quality.
- Postpone judgment – the leader explains to students how important it is to instantly silence your inner critic and resist the urge to evaluate your ideas. All ideas should be accepted, and later they will be evaluated.
- The team is everything – it emphasizes the importance of teamwork. The involvement of all students and the possibility of presenting all ideas are necessary.

Step 3 – Key question

The key question should be an open, clear and interesting question that seeks a common solution to a compelling problem or need. Where appropriate and agreed, instead of the main question of the leader, each group may ask its own questions to which it answers separately.

Step 4 – Tools for creating ideas

After the key question is set clearly, groups begin to think about possible answers/solutions. To facilitate this process for them, the leader can carry out several additional activities:

- connecting – the leader displays associative words or images several times, and the students have a few minutes to think about ideas for each image/word
- negative thinking – the leader transforms the key question into a negation, the students think about the answer (e.g. what kind of product do we not want to produce in a sustainable student company) and then turns it back to its original form
- how would _____ do this – students contemplate on an issue from the perspective of a company they admire (e.g. Google)
- user perspective – students explore a key issue from the perspective of certain users of a product or service of a sustainable student company
- mix it up– students think about technology and subjects related to a key issue, then mix and match different elements to get new ideas

Step 5 – Reflection

The leader provides the student groups with sufficient time to reflect on the answer to the question using the tools given.

Step 6 – Grouping and narrowing down

The leader instructs students to group themselves together and to group similar answers/ideas. Repeated responses are removed and the resulting ideas are named.

Step 7 – Select

After the students have grouped together and organized their ideas, they agree on how to jointly select one idea or several ideas that they want to implement.

Step 8 – Developing an idea

The last step, the development and research of the chosen idea, can be carried out within this method or in an independent term.

3.2. Sustainable Business Canvas (SBC) – design and test sustainable business models for sustainable student businesses

Alexander Schabel, Borderstep Institute for Innovation and Sustainability (Borderstep Institut für Innovation und Nachhaltigkeit)

The foundation of every company is a promising business idea. Regardless of whether it is profit-oriented or non-profit, whether it develops a product or a service. Following the initial idea, the next step is the development of a suitable business model. In this process, all factors relevant to a company's success must be examined and every field of activity must be analyzed to assess the feasibility and increase the chances to succeed with the initial idea. The Sustainable Business Canvas was originally developed by Alexander Osterwalder and Yves Pigneur and is used to visualize and analyze business models. It is currently one of the most widely used tools in start-up management. As part of the project StartGreen@School, the tool was modified by the Borderstep Institute with regard to sustainability aspects and can now also be used by students and student companies.

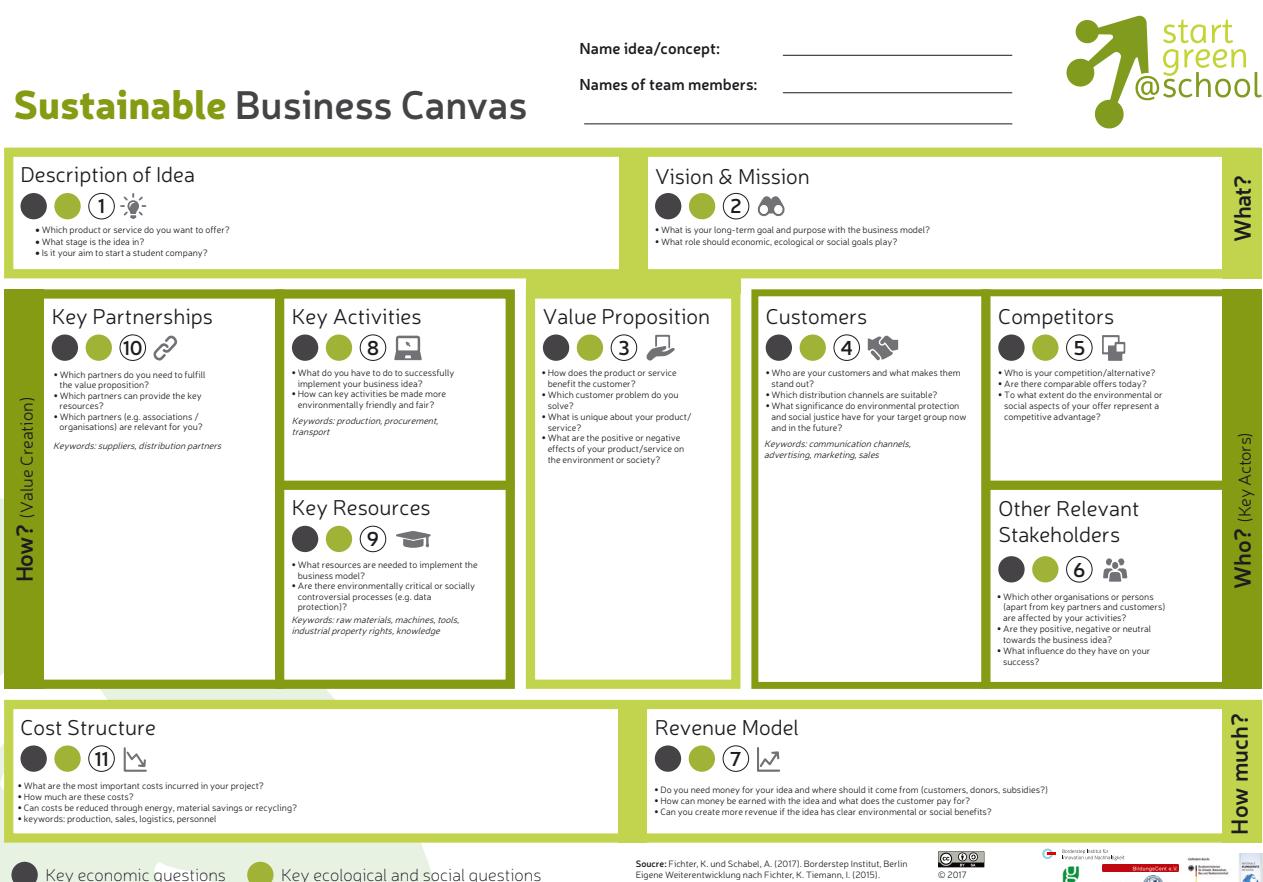


Figure 14: Sustainable Business Canvas (Fichter, K. and Schabel, A. (2017). Borderstep Institute, Berlin. Own modification based on Fichter, K. Tiemann, I. (2015), Universität Oldenburg and Osterwalder, A. and Pigneur, N. (2011))

Student teams can use the canvas model to create a more defined plan for their sustainable student company in an interactive and fun workshop setting. Every segment of a student company is described in the canvas and specific questions incorporate sustainability aspects of the relevant activities.

A starting point for the exercise is a defined business idea. Teams of approximately 3 – 6 students can then discuss the details of the planned business model by answering and discussing guiding questions for all of the SBC's 11 segments. Just like innovators in the real world, they use post-it notes to guide and document their discussions. Every student group should have a mentor that guides them through the process. In the end, students present their findings by using the canvas.



Figure 15: An example of using SBC in a German school



Figure 16: SBC in practice

The workshop can have a flexible design and depending on the group size can last from 2 hours to a full day. Teachers and workshop mentors give a quick overview of the segments in the beginning and should – depending on the group – also elaborate on some of the terminology used on the canvas. Students can then work on the segments and use the finished canvas to define the next steps in order to initiate the founding process of a student enterprise.

You can find the SBC model in Chapter 5: Materials on p. 64.

3.3. Financing sustainable student companies – ways and opportunities

Helena Habdija, Impact Hub Zagreb

There are many different ways of funding projects in local communities. The financing of school cooperatives is presented below with two workshops: *Sources of financing of student companies* and *Crowdfunding for student companies*.

Learning outcomes of the workshops:

- the ability to distinguish between different types of funding
- applying acquired knowledge about the types of financing of projects of sustainable student companies and crowdfunding
- the ability to make decisions and set goals
- the ability to create a plan and a prototype
- leadership skills and the ability to work in groups
- creating ideas, innovation and solving problems (developing new strategies)
- critical thinking (resource and market assessment, strategy valuation)
- managing yourself and time (self-organization)
- the ability to look at the bigger picture
- presentation skills (preparation of convincing presentations for different target audiences)

Sources of financing of sustainable student companies

Purpose/objective: to get to know the different types of available sources of finance on the market

Desired results: the ability to distinguish between different types of financing

Time: 60 minutes

Materials: PowerPoint presentation

There are many different ways of funding projects in local communities. Choosing one depends not only on the availability of money, but also on what kind of organization we are, how much money we need, what our goal is, what level of participation do we want from investors/donors, what is the planned use of finances...

Overview of different sources of funding

Sources of funding:

- bootstrapping – developing a project/idea without additional financing (savings, borrowing, business model)
- grants and other sources of funding:
 - EU funds (e.g. the Horizon program – focuses on developing the economy in three priority areas: science excellence, industrial leadership and societal challenges)
 - international funds (Global Fund for Children, Global Fund for Women, Wallace Global Fund, UNICEF Innovation Fund, Global Fund for Community Foundations...)
 - foundations (Open Society, Anna Lindh, Cisco, Ford, Robert Bosch...)
 - state, regional and local financing programs (micro-investment loans, small loans, self-employment incentives, incentives from the City of Zagreb, Split, Osijek...)
 - donations (e.g. an innovative approach of the application ThankYou Hrvatska)
- loans – bank loans are one of the most common ways to obtain funds
- share sale – selling shares is one of the most common ways to finance a business venture and it can be a difficult decision to sell a stake in a business to people you barely know. Therefore, it is important to find the right investor (a person with a good financial status, business angel, business fund, venture capital fund, corporate partnership...).
- crowdfunding – many users/donors invest in your business on a crowdfunding platform
- corporate social responsibility (CSR) – companies and corporations finance projects that have a positive impact on the local community
- donations or sponsorship – organizing events or fundraising campaigns

Students need to be presented with all kinds of funding in order to be able to decide on the one that best suits their project. Encourage them to explore the market further to get more familiar with all the possibilities.

Crowdfunding for sustainable student companies

Purpose/goal: to get to know the pros and cons of crowdfunding and plan a campaign

Desired results: building a prototype of a crowdfunding campaign

Time: 180 minutes

Materials: PowerPoint presentation, A4 and A3 paper, poster papers, permanent markers and highlighters, recycled paper, cardboard, Legos, other materials

Crowdfunding

Crowdfunding is a process in which the public is asked for financial support to start a creative project or company. The process takes place on the Internet, and the goal is, through various motivational factors, to involve a great number of people who will cumulatively, through small payments, lead to a significant amount of funds which will be sufficient to achieve even larger projects. It is considered

an alternative form of financing because it does not belong to the traditional financial system. The process is transparent because we can see in real-time how much money has been raised and how many people have participated in each project. It is limited in time because the money is not collected indefinitely, but within a set deadline, usually from 30 to 60 days.

Crowdfunding is changing the financial industry on several levels. It primarily allows for the idea to be validated before the end product arrives on the market. It also provides access to capital without the additional pledges that the traditional financial sector requires. It is unlikely that a bank will provide a loan to start a business without asking you to take out a mortgage on a property and/or machinery. Also, it is essential to disperse the risk. The campaign starter, who has worked out his business plan well, knows how much money he needs to start a business and will not even embark on a business venture unless he raises the necessary finances. On the other hand, donors pay relatively small amounts of money which they can afford to lose. In the end, the marketing dimension is key to a successful campaign. Not only do you raise money for your business through crowdfunding, but you also promote it.⁶

Introduction and preparation

At the beginning of the workshop, students need to be introduced to different ways of raising money through group funding, crowdfunding platforms, and to their potential.

It should be noted that many users/donors invest in the project through crowdfunding platforms in order to support projects, receive a reward, purchase a service, product or equity, donation or lend.

There are two ways to crowdfund: by using a crowdfunding platform and using open source crowdfunding.

No matter what type of crowdfunding you choose, the most important thing is campaign preparation. Campaign preparation includes:

- goal (how much and what)
- content/message/channel
- channel type (online/offline)
- media content
- network
- budget and resources
- activities
- partners

An example of a crowdfunding campaign of Miret company is shown at the link:



Setting SMART goals and value proposition

It is important to present the method of creating SMART goals, as well as to explain it by means of examples. SMART objectives are specific, measurable, achievable, relevant and time-bound.

An example of a goal: I will improve my physical health.

Example of SMART determinants:

- *Specific: I'll run every day.*
- *Measurable: I'll follow the marathon running plan on the Nike app.*
- *Achievable: I've run before, I'm healthy, the marathon is in six months.*
- *Relevant: I will improve my physical health and be a vital person full of energy.*
- *Time-bound: I enrolled/paid for a marathon that takes place in six months.*

Example of a SMART goal: I will follow the running plan on the Nike app and run a marathon in six months.

The students are divided into working groups. While working in groups, encourage them with questions and comments thereby reminding them of the task.

Students should create and set a SMART goal for the next three months within which they will organize a crowdfunding campaign, with the help of the following questions:

- What do you want to achieve?
- Why do you want to make it happen?
- How will you measure your progress? How will you know that the goal has been achieved?
- What steps do you need to take to achieve your goal? (Think about each step: is it necessary, does it take you closer to the ultimate goal, do you have the necessary resources to implement it?)
- How long will it take you to reach your goal? When are you going to work on it? (period)

After setting up SMART goals for a crowdfunding campaign, it is necessary to start planning the campaign itself. The first step is to design a value proposition of the campaign and answer the following questions:

- Why would someone donate/invest money in your project?
- Why is your project different? Why would someone choose your product/service over someone else's?
- Which audience do you address? (Content, approach and promotion channels need to be customized for the audience we're addressing.)

Value proposition – a clear statement that explains how your product solves customers' problems or improves their situation, brings a specific benefit, attracts the ideal customer/user to buy from you, not from the competition.

Prototype building

After elaborating on the idea and concept of a crowdfunding campaign, students must create a prototype solution.

The aim is to concretize the idea through creative work to make it tangible for students and so that it would continue to gradually develop into functional solutions. The idea should be visible, tangible or otherwise presented by simple means (e.g. modeled with paper or shown with a simple drawing). The purpose of the activity is to raise awareness of which ideas are good and which ones need to be amended in order to be implemented.

Explain to students what a prototype is and show a few photos and videos of prototyping.

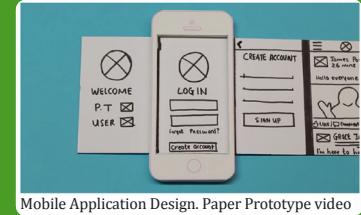
Video 1: *How to make a prototype out of cardboard:*



Video 2: *Making a prototype out of paper:*



Video 3: *Prototype design for a mobile application made out of paper:*



With the use of simple materials, students need to make a prototype of their own idea (crowdfunding campaign). They are encouraged to be as creative as possible and to use visuals when modeling prototypes. The activity of creating a prototype will help build a creative environment in the room and motivate students. You can do this activity in a more eco-friendly way by conducting it outdoors and by using natural or recycled materials.

Once the prototype has been made, students should be able to explain and present the planned crowdfunding campaign and any benefits it might provide to potential investors.

Pitch presentation

Pitch presentation is a short and clear transfer of information about the product/idea. The content, structure and manner in which it is presented are all important.

It is necessary to familiarize students with the content and structure of the three-minute presentation:

- background – introduce yourself and your team
- the problem you want to solve (facts and figures)
- solution – explain what is the solution
- way of functioning – explain how your solution works
- value – explain why and how you are different
- the future (outcome and impact) – explain how many people you will influence and what will change in your community
- the motivation behind the campaign – present why to choose you / your team

Participants have three minutes to present their idea. The pitch-presentation structure is there as a guideline, not as a rule.

3.4. Product marketing – student company's key to success

Ana Nikol Šprlje, Faculty of Economics, Split, University of Split

In everyday life, the term marketing is often used, and synonyms for marketing are most often advertising, promotion, sales and the like. But what exactly is marketing? Although the first thought of marketing is most often sales and advertising, marketing is a much more complicated process. Marketing is a social and management process that precedes the creation of the product itself, but does not end with the placing of products on the market; instead, it is extended onto further operations of the company. Modern marketing means a business activity that connects production with consumption so that the social needs that appear on the market as in demand are met to the fullest (Rocco 2020:16). Marketing is a process that begins with market research, i.e. by defining the problems and goals of the research. It is necessary to determine the behavior of the consumer and to consider all the factors affecting him, namely his decisions when purchasing a product or service. Each group of consumers has a unique demand, and the goal of the enterprise may be to meet more heterogeneous segments or one homogeneous group. Before making the product, the company should decide which segments of consumers it wants to satisfy and, in accordance with the needs and wishes of the group, begin to design the product.

Thus, the task of marketing is much broader than just meeting the needs of customers. Namely, the supply and demand on the market are not always the same. The enterprise needs to create a certain demand in order to sell its product. Otherwise, if it happens that demand does not exist or is irregular, marketing would be unnecessary because there would be no customers whose needs should be met (Kotler, P. W., Saunders, V. and Armstrong, J. G. 2006:14).

As already mentioned, marketing does not end with finding customers; it continues when the product is placed on the market, retaining existing customers and attracting new ones. The cost of attracting new customers is much higher than the cost of retaining existing ones, but both are necessary to achieve profitability.

There are five concepts on the basis of which organizations carry out their marketing activities: production, product, selling, marketing and social marketing concepts.

The production concept is one of the oldest concepts, and it is based on the availability and low prices of products.

The product concept is based on the quality, performance and innovation of the product.

The selling concept assumes that the promotion and sale of products are key factors in the performance of the business.

The marketing concept begins with defining the market in order to meet the wishes and needs of customers, that is, in order to gain a competitive advantage in the market.

Social marketing develops and integrates marketing concepts with other approaches to influence behaviors that benefit individuals and communities for the greater social good (J. French, R. Gordon, 2015). Nevertheless, all the above factors are key to successful marketing. Today, social marketing is developing more and more.

The social responsibility of marketing not only implies the aspiration of the company to achieve its own goals, but it is also in its interest to protect and strengthen the interests of society. The enterprise does not only have a responsibility for the social community, but also for nature, which is why the term green

marketing is often used. Green or environmental marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment. (Polonsky 1995:30).

Green marketing encourages changes and directs the behavior of particular market segmentation, that is, it creates new social values. Unlike classical marketing, which aims to sell a product to a potential buyer guided by the aforementioned concepts, the goal of green marketing is to market a product that, with appropriate prices, quality, availability and innovation, will reduce the harmful impact on the environment as much as possible (Tišma 2001).

Table 1: *New Marketing Paradigm*

	CLASSICAL MARKETING	ENVIRONMENTAL MARKETING
Consumers	consumers with style	man
Products	from cradle to grave universality products	from cradle to cradle flexibility services
Marketing	sales-oriented material benefit	erudite value
Companies/associations	independent reactive competitive short-term orientation maximizing profits	interdependent penetrating collaborative long-term orientation increasing standards and quality of life

Source: Ottman, J. A. *Green marketing, Opportunity for Innovation*, NTC Business Books, Chicago, 1998 pp. 48

The chart demonstrates that environmental marketing differs in many ways from classical marketing, but nevertheless, they have one common component and that is to satisfy the wishes and needs of customers. But unlike classical marketing, which aims to maximize profits, the goal of environmental marketing is to maximize the benefits that the environment will have from this product. Thus, environmental marketing is aimed at preserving the environment, whether that be related to pollution of water, air and soil, depletion of natural resources, loss of ecological diversity, waste management, etc.

Environmental marketing is a much more complicated process than classical marketing and requires much more time, and often has higher costs, because new alternatives have to be found. Companies that use environmental marketing in their business most often, in addition to an environmentally friendly product, find new ways of production that will not affect the environment. These companies have an additional segment, i.e. the customers who care about environmental protection. Moreover, green products are more and more appreciated today, as well as products that are not tested on animals.

The main goals and tasks of promotional activities in environmental protection are:

- reporting, encouraging and reminding individuals with the aim of improvement of ecosystem protection
- reporting and encouraging companies, different societies, associations and communities to undertake concrete environmental actions
- promotional participation in the organization and realization of ecological prevention
- fostering non-formal forms of environmental education for individuals, in particular for preschool and school children
- spreading the ecological culture of all participants and their surroundings (Mađarić 1987)

The goals of environmental marketing are increasingly being developed and expanded, not only to preserve the environment, but also to increase the quality of human lives.

CHAPTER 4: PROJECT SUSTAINABLE STUDENT COMPANIES IN CROATIAN HIGH SCHOOLS – GREEN COMPANIES PROMOTE SUSTAINABLE ENTREPRENEURIAL THINKING AND ACTION OF YOUNG PEOPLE IN CROATIA

4.1. About the project – background and the goal

Following the successful implementation of the two projects, *Participate in Sustainable Development* (2013 – 2015) and *Students Learn Citizenship – Service-Learning for Nature Conservation and Environmental Protection* (2016 – 2018), whose aim was to educate and train young people to active civic participation and encourage volunteering activities in the field of environmental protection, at the beginning of 2020 the third project began *Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia* in partnership with the German Society for Environmental Education and Protection (Deutsche Gesellschaft für Umwelterziehung – DGU). The project is funded by the German Federal Environmental Foundation (Deutsche Bundesstiftung Umwelt – DBU), one of Europe's largest foundations promoting innovative environmental projects. The project is co-financed by the Ministry of Science and Education of the Republic of Croatia.

From the very beginning, the project partners are the Croatian Association of School Cooperatives (HUUZ), an umbrella organization for school cooperatives in Croatia, and Marjan, an association aimed at the protection of Marjan hill. During the project, cooperation was achieved with Cidrani, a Croatian start-up that usurps the world wellbeing scene and sets new standards in the field of health, creativity and longevity as an example of a sustainable company, and Impact Hub Zagreb, an incubator that offers opportunities to create positive changes through a unique ecosystem of resources, inspiration and cooperation. Both Cidrani and Impact Hub Zagreb are involved in order to transfer the knowledge to participants to start their own companies, but also to strengthen their entrepreneurial skills and competencies.

The project aimed to integrate sustainability into the field of student entrepreneurship and to promote sustainable entrepreneurial spirit in three schools in Croatia (Craft Technical School Split, School of Design, Graphics and Sustainable Construction and High School Braća Radić from Kaštel Štafilić). As student companies play an important role in moving young people into the world of work, project activities focus on high schools, namely students and teachers. Participation in the project will result in the development of sustainable entrepreneurial thinking in young people and encourage the green orientation of their professional choice.

Specific project goals, such as the establishment and development of sustainable student companies in high schools, are aimed at improving the work of the existing school cooperative *Trišnja* of High School Braća Radić from Kaštel Štafilić, as well as on the establishment of two new sustainable student companies for the Craft Technical School Split and for the School of Design, Graphics and Sustainable Construction Split. Thus, during the project, the Craft Technical School established the school cooperative *Karika*, and the School of Design, Graphics and Sustainable Construction founded GOGSS. The steps in the establishment of school cooperatives are described in detail in subheading 1.7. *How to establish a school cooperative?* Working together in student companies strengthens awareness of sustainability and sustainable behavior of learners and promotes entrepreneurial spirit.

To achieve its objectives, the project envisions activities such as studying good examples of sustainable student companies and ways to apply them in schools. The process of reflecting and creating ideas and networking opportunities with existing companies was undergoing at the conference *Student Green Businesses – Promoting Sustainable Entrepreneurial Thinking*, and in joint workshops (more in the next chapter). The renovation and use of the Marjan Association's sales kiosk within the Marjan Forest Park is described in more detail in subheading 4.3. Project results on p. 42.

4.2. Project implementation

4.2.1. Workshop *Sustainable Student Company – Characteristics and Structure*

Date: Friday, March 19, 2021

Time: 9:00 a.m. to 1:15 p.m.

Venue: UNIST Technology Park, A.G. Matoš 56 Street, Split



Figure 17: Presentation of a Cidrani product

The first project workshop was also the first live meeting of the project participants. The workshop brought together students and teachers from three collaborative schools, educators of the Sunce Association and the founders of Croatian start-up Cidrani: Nika and Bruno.

After the opening statement of the educator of the Association Sunce, Nika and Bruno, as mentors of the student company, presented the Cidrani concept and motivated the students to take a confident step and start a business. With the help of MTP and Double Diamond, the methods already described in the manual, they helped students

deepen their thinking about a truly high-quality and sustainable product in accordance with the vision of sustainable student companies.



Figure 18: The educators of Sunce Association and Cidrani team



Figure 19: Motivational speech of the mentor

4.2.2. Workshop *Finding Business Ideas and Developing Business Models*

Date: Friday, May 6, 2021

Time: 8:30 a.m. to 1 p.m.

Venue: UNIST Technology Park, A.G. Matoš 56 Street, Split and Zoom platform for participants who were unable to attend live

The second project workshop was based on the Sustainable Business Canvas (SBC) tool. At the beginning of the workshop, students of the Faculty of Economics in Split Ana Nikol Šprlje and Mirna Radović presented SBC in detail, so that participants could use it, along with participatory methods, to

elaborate a business idea into a business model for their sustainable student company. With the help of mentors from Cidrani and by using SBC, participants (students and teachers) elaborated the following aspects in detail:

- WHAT (idea, vision/mission, what is promised to customers)
- WHO (customers, competition, interest group)
- HOW (key partners, key activities and key resources)

Also, in order to give a bigger picture for the development of the business plan, the two students briefly gave a general presentation on marketing theory, and the student of the Faculty of Humanities and Social Sciences in Split Marijan Pušić presented an overview of the websites of partner schools. On the other hand, the Croatian Association of School Cooperatives presented the marketing of student products on several specific examples. At this workshop, a common product was finally selected among several possibilities – vegan pašticada A' La Pašticada.



Figure 20: Mentoring and monitoring students at a distance



Figure 21: Group work on product design

4.2.3. Workshop *Sustainable Economy on the Example of a Partner Company*

Date: Wednesday, June 23, 2021

Time: 8:00 a.m. to 8:00 p.m.

Venue: Eco-farm Zrno, Habjanovac 45 Street, Habjanovac and Bistro Zrno, Medulićeva 20 Street, Zagreb



Figure 22: Study visit to the Zrno eco-farm



Figure 23: Intensive cultivation on the Zrno eco-farm

Due to the inability to organize a study trip to Germany because of logistic difficulties caused by the coronavirus pandemic, a visit to Croatian examples of good practice was organized. On Wednesday, June 23rd, students and teachers of collaborative schools, as well as the educators of the Sunce Association, left Split for Habjanovac, a small village where the Zrno eco-farm is located. After a delicious lunch made out of fresh ingredients from the garden, manager Ksenija Piršljin took participants on a tour of Zrno and brought them closer to ecological and bio-intensive production methods without pesticides and herbicides, and the process of certification and establishment of standards and trust. The day ended with a dinner at the Zrno bistro, which uses fresh ingredients from the property to prepare organic dishes.

Date: Thursday, 24 June 2021

Time: 9:00 a.m. to 9:00 p.m.

Venue: Impact Hub Zagreb, Boškovićeva 2 Street, Zagreb
 BIRD incubator, Franjo Petračić 4 Street, Zagreb
 HUUZ, Dalmatinska 12 Street, 10000 Zagreb



Figure 24: Lecture at Impact Hub Zagreb



Figure 25: Project participants visit BIRD incubator

While the first day of the study trip was more focused on the production itself, the second day was supposed to bring students closer to the work that comes after concretizing the initial idea. In the premises of Impact hub, a community of entrepreneurs and innovators focused on the betterment of society, project manager Helena Habdija explained to the participants what impact is, i.e. what is



Figure 26: Working meeting at BIRD Incubator



Figure 27: Presentation on the state of school cooperatives in Croatia

the importance of social influence in the business world and gave counts about the development and financing of a business idea. Then the participants visited the BIRD incubator, whose premises are also used by project partners Cidrani. The founders of Cidrani and the project mentors, Nika and Bruno, led the reflection of the development of the business idea of partner schools so far and gave advice for its development. They then introduced the participants to Ms. Renata Brkić of the Feelsgood Social Impact investment fund. Feelsgood Social Impact invests in Croatian and Slovenian business ventures of strong and capable teams that will leave a measurable social impact. Ms. Brkić presented the project *Scientific Picnic* of the Baltazar Association – a project of popularization of science and art whose main goal is to promote science in the broadest sense and to interest young people, and those who feel that way, in choosing science as their life vocation. Before returning to Split, participants also visited the Croatian Association of School Cooperatives, where they reviewed the exhibited works of school cooperatives and experienced what it was like to work on a potter's wheel.



Figure 28: Pottery wheel work



Figure 29: Overview of the work of young cooperatives

4.2.4. Workshop Establishment and Financing of Sustainable Student Companies

Date: Monday, October 4, 2021

Time: 9:00 a.m. to 1:00 p.m.

Venue: UNIST Technology Park, A.G. Matoš 56 Street, Split

At the fourth workshop we were again joined by Blanka Horvat from the Croatian Association of School Cooperatives. She instructed two high schools without a school cooperative, step by step, how to establish a cooperative and exhaustively presented them with all the necessary paperwork. Another lecturer, Helena Habdija from Impact HUB Zagreb, gave students and teachers professional guidance in designing a crowdfunding campaign for her business idea. Also, the workshop reviewed the current state of the student product and presented the project activity of renovating and using the kiosks of the Association Marjan.



Figure 30: Working on financing a business idea



Figure 31: Presenting group work results

4.2.5. Workshop *Crowdfunding Campaign, Process of Creating Product Price and Market Launching*

Date: Thursday, November 4, 2021

Time: 8:45 a.m. to 12:15 p.m.

Venue: UNIST Technology Park, A.G. Matoš 56 Street, Split

Representatives of the DBU Foundation, Dr. Cornelia Soetbeer, Head of the Department for Environmental Communication and Protection of Cultural Heritage, and Claudia Domel, as special representative in central, eastern and southeastern European countries since 2009, also participated in the final workshop. DBU representatives briefly presented the work of their foundation, its activities and opportunities for participation in the project for students and teachers of the three secondary schools. On the other hand, students and teachers proudly presented their product, vegan pašticada, product website and visual identity that they created on their own. They also gave DBU representatives a sample of their A' La Pašticada so that they could witness the fullness of its taste themselves. In addition, a detailed plan for the production of agreed quantities of product and a plan for its further promotion were made at the workshop. The cost estimate has been reviewed and improved and distribution channels have been agreed with the hope of presenting the final student product soon.



Figure 32: Final arrangements between mentors and students



Figure 33: Product price creation process



Figure 34: Presentation by DBU representatives, Claudia Domel and Dr Cornelia Soetbeer



Figure 35: Documenting joint work in order to promote products

4.3 Project results

One of the project activities is the renovation and use of the sales kiosk of the Marjan Association within the Marjan Forest Park for the presentation and sale of student products. The contract with the Marjan Association, the owner of the kiosk, agreed that the kiosk will be used for this purpose even upon completion of the project for the benefit of the owners of kiosks and student companies.

The kiosk is available to the Association Sunce, i.e. to collaborative schools, during the project and 24 months after its completion. The Association Sunce, i.e. collaborative schools, can dispose of it 24 hours a week. The Association Sunce and the Marjan Society have committed to use the kiosk to contribute to the promotion of nature protection, especially Marjan Forest Park, and to encourage environmentally responsible behavior, *reduce-reuse-recycle* principles and social responsibilities. In addition, the Sunce Association will dispose of the space as a good host, participate in the costs of regular maintenance of the kiosk during its use, and leave the kiosk in its current state after the use. Also, Sunce will provide the person in charge of displaying the products.

Before the start of the project, the kiosk was not operational, so for this reason its renovation was implemented. The kiosk was connected to the electricity grid, the floor and concrete counter were repaired, existing lighting was replaced and walls and windows were refurbished. Some of the activities, such as repairing floors or connecting to an electricity grid, were done by experts, while some activities, such as sanding and painting the wall and cleaning, were done by project participants through organized volunteering action. In addition to students and teachers on the project, other students of collaborative schools and volunteers and employees of the Sunce Association participated in the volunteer action.



Figure 36: The initial state of kiosk, Prva Vidilica, Split



Figure 37: Kiosk renovation



Figure 38: Volunteer action of kiosk renovation

Although the initial plan of the project was that students design and create one product that reflects their school and best promotes their skills and knowledge, in the end it was decided to create a common product. This product combines different skills of students and teachers of three secondary schools and it is the result of their efforts and work. A confirmation of joint efforts is the fact that the final product is not just one product, but a package of products that includes: a 370 ml jar with vegetarian sauce A' La Pašticada, a decorative sticker with the necessary information, a decorative wooden beech box, a recipe booklet, a kitchen cloth with the product logo, as well as the promotional video and a link to the website (<https://alapasticada.webflow.io/>).



Figure 39: Making of the sauce



Figure 40: Decorative beech wooden box



Figure 41: Sauce jars ready for microbiological analysis

Jars with vegetarian sauce will be sold either individually or as a part of a special edition package that includes two jars of sauce, a wooden box, a recipe booklet and a kitchen cloth.



Figure 42: The making of decorative boxes



Figure 43: The making of decorative boxes



Figure 44: Part of the team of school cooperatives



Figure 45: The making of promotional materials



Figure 46: Recipes using A' La Pašticada sauce

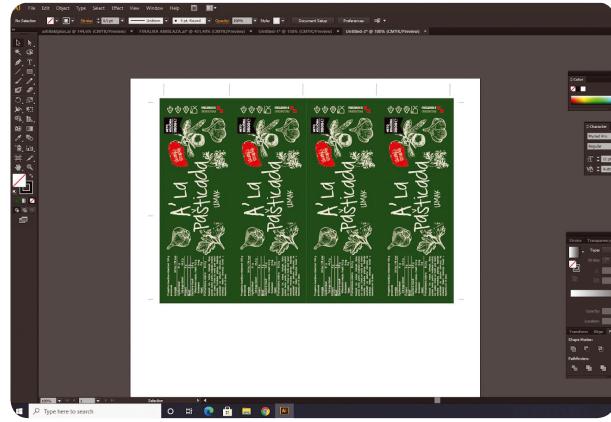


Figure 47: Creation of a product label



Figure 48: Final product – A' La Pašticada

4.4. Implementation challenges

Each project unquestionably carries challenges with which we acquire new knowledge and improve our skills. One of the challenges, at the very beginning of the project, was finding a sustainable company that would be an example of good practice for the schools involved – that would show how to be sustainable and how to run a successful business and that would take a mentoring role in setting up student companies. In other words, finding a company that respects the principles of sustainability in its business and has the capacity to participate in the project (i.e. work with students, participate in workshops and follow students) was not easy. During the writing of the project, we contacted and selected one company, however, when the project started, the cooperation did not materialize and the Sunce Association began the search for a new partner. When arranging cooperation, companies most often dropped out because of a sustainability questionnaire sent as a condition of the partnership. We are grateful that we have nevertheless found partners who have worked hard and motivated students, taught them and invested their time and energy in order to bring closer the business model and the challenges of the business world.

Furthermore, this project started before the coronavirus pandemic hit and was mostly implemented while the pandemic and online schooling were at their peak. Consequently, project activities had to change *ad hoc*. The project study trip, which was a strong incentive for all partners and participants to join the project itself, had to be postponed, and other activities from the beginning were almost exclusively moved to online platforms. The reorganization of activities from live media to online required detailed preparation of coordinators, i.e. Sunce educators, as well as the research of content and platforms that will allow as much interaction and participation as possible. With a lot of effort, we successfully held an online conference and introductory workshop and actively communicated with the participants until the moment when we were able to meet live again. Furthermore, the implementation of live activities

also carried its own challenges related to adaptation to pandemic measures and uncertainty on the possibilities for the implementation of activities.

To the delight of Sunce educators, the students involved achieved good relationships with each other and decided to design one common product instead of separate products by the school, as originally planned. Designing a product that will encompass students from three different schools, and with different knowledge, skills and competencies, was an additional challenge. Also, the selection of one common product made it difficult to realize the equal involvement of a large number of students. All this, resulted in exceeding the deadlines for its creation. However, satisfaction with the end product of the students, as well as all involved, was worth the effort.

Finally, communication between project participants, especially schools, teachers, students and Sunce educators, posed a particular challenge. Thanks to the exceptional efforts of project partners to motivate students to cooperate, we can say that the students independently led the innovative and creative work of designing the product, as well as a mutual organization. Nevertheless, we encountered difficulties in transferring information about their work to other project participants. Namely, the students agreed among themselves, but did not convey their conclusions and results through the intended communication channels to the others. Therefore, we had to make additional efforts to get feedback on the products and their progress. We presented the problem at joint workshops, which somewhat improved the situation.

Despite the challenges, in the end not only were the project objectives successfully achieved, but also an additional value was created in results that exceeded project expectations.

4.5. Review of the project participants

Craft Technical School

Working with Sunce Association, as always, is a very motivating experience. The level of professionalism you offer in work is certainly educational for all of us who work with you. The willingness to solve problems and achieve outcomes is present in every situation – when the pandemic dictates forms of work to us as well as when, for various unpredictable reasons, we are not able to do what was planned.

The involvement of students in this project activity allows them to achieve their potential through their own success and failure and to build trust in their own abilities. The experiences gained through teamwork exceed the framework of what a classic form of education can offer them. Being in a situation that requires a solution by cooperation and agreement with other team members, and in addition to presenting different social and cognitive skills at higher levels, unquestionably trains young people to approach problem-solving more creatively, usefully and functionally in their environments (family, professional, educational...) and participate in interpersonal relationships.

Psychologist Marijana Petrić Maršić, expert associate

Cooperation with participating schools was very lively and constructive, in a pleasant atmosphere, in a very pleasant space, which also had a positive impact on overall joint work.

What has been a challenge for us as a school, and has extended time spans in the performance of tasks, were the difficulties caused by the communication channels during the COVID-19 pandemic, the self-isolation of students and the temporary inability to work of employees who were irreplaceable in the practical part of the performance.

I would say that the organization and management of Sunce educators were at an enviable level.

English and Pedagogy Teacher, Ružica Vorgić, expert associate pedagogue

High School Braća Radić Kaštela

Our school participated in the project Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia. The cooperation with the Sunce Association and other partners was useful and instructive. Ideas were well-presented and well-processed at workshops. Our creativity in the work and development of entrepreneurship in agro touristic and food professions has been strengthened by numerous information and experiences of partners. Friendships and opportunities for further cooperation have developed along with knowledge.

Agronomy Engineer Marijana Bjeliš, teacher advisor

School of Design, Graphics and Sustainable Construction

The project has broadened the horizons of the students of the School of Design, Graphics and Sustainable Construction and brought them closer to the issue of entrepreneurship by introducing them to the possibility of self-employment and setting up their own enterprises, shaping the idea, starting production and placing the product on the market.

Students of the School of Design, Graphics and Sustainable Construction have made great efforts, sometimes using their own resources and leisure time, to design and manufacture packaging, design and create a promotional video, and analyze and test the market.

After completing the project and gathering all the experiences and knowledge they have received and mastered, the opinion and desire of all participants, students and professors is how such projects should be launched every year in all secondary schools, and perhaps, in the not too distant future, introduced into the curricula at the state level.

Biology and Chemistry Teacher, Darija Ćerdić Vukušić



CHAPTER 5: MATERIALS

5.1. Decision on the Establishment (Renewal) of the School Cooperative

Pursuant to Article 39(1). Law on Education in Primary and Secondary School (*Narodne novine*, No. 10. 87/2008) and the article _____ of the Statute _____ (full school/institution name), in a session held on __. _____ 20 __, the School Board has adopted the

DECISION on the Establishment (Renewal) of the School Cooperative

Article 1

At _____ (hereinafter: School/Institution), the School Cooperative _____ (co-operative name) is established/renewed (hereinafter: Cooperative).

Article 2

Preparatory work until the proclamation of the establishment and start of the work of the Cooperative, and the tasks of cooperative administration until the election of the Cooperative Board are performed by the Interim Cooperative Board in the following composition:

1. _____ president
2. _____ member
3. _____ member

Article 3

The tasks of the Interim Cooperative Board are to:

- a) prepare a proposal for the rules, organization and name of the Cooperative
- b) develop a proposal for the work program of the Cooperative
- c) lead tasks related to the establishment and commencement of the work of the Cooperative in the School/Institution and outside the School/Institution
- d) organize the enrolment of students in the membership of the Cooperative
- e) establish a proposal for the appointment of members of the Cooperative Board
- f) hold the founding assembly of the Cooperative at which the establishment and commencement of work will be declared and the rules of the Cooperative will be accepted
- g) perform other tasks related to the preparation of the start of work of the Cooperative

Article 4

The Cooperative is headquartered in The School/Institution, _____ (location, street, and house number).

Article 5

The School/Institution for the work of the Cooperative provides premises, land and inventory owned by the School/Institution.

The Cooperative will also use the accessories, tools and resources it receives from donors, patrons and others.

Article 6

The cooperative's funds, regardless of sources, will be managed through the School/Institution account, will be specially registered, and can only be used for the work of the school cooperative and the improvement of the educational work of the School/Institution.

Accounting and other professional services of the School/Institution will perform financial, accounting and other administrative tasks for the needs of the Cooperative.

Article 7

This decision is submitted to the Croatian Association of School Cooperatives, Ministry of Science and Education and the Administrative Department for Social Activities and the State Administration Office in the county, the Social Services – (sub)Department for Education and Culture (or the City Office for Education and Sports of the City of Zagreb).

Class:

Reg. number:

In _____ . _____. 20____

President of the School board:

Principal of the School/Institution:



5.2. Rules of the School Cooperative

Pursuant to Article 39(1). Law on Education in Primary and Secondary School (*Narodne novine*, No. 10). 87/2008) and article _____ of The Statute _____ (full name of the school/institution), the Cooperative Board of the School Cooperative _____ (full name of the Cooperative) in the session held _____. 20_____. has adopted

RULES OF THE SCHOOL COOPERATIVE _____ (full name of the Cooperative)

1. Basic provisions

Article 1

School cooperative _____ (hereinafter: Cooperative) is a voluntary student organization that contributes to achieving the educational and socio-economic goals of the school/institution because, as a form of extracurricular activity, it enables students to acquire work-technical, environmental, economic, social and ethnological education and the development of abilities, as well as a and useful use of leisure time.

Article 2

The founder of the Cooperative is _____ school/institution _____ (hereinafter: School/Institution).

The founder of the Cooperative can be joined by other founders – co-founders.

Co-founders of the Cooperative can be legal entities (enterprises, institutions, associations) and individuals who, by: monetary or other gifts, professional assistance, enabling the use of funds of work, selling products, and by other means, help establish and create conditions for the work of the Cooperative.

Article 3

The Cooperative does not have the characteristics of a legal entity.

The decision of the Management Board of the Cooperative becomes final when the School Board agrees with it.

The Cooperative can join related associations or alliances in the Republic of Croatia, and is a member of the Croatian Association of School Cooperatives in the Croatian Association of Technical Culture.

Article 4

The Cooperative is headquartered in the School/Institution, _____ (location, street, and house number).

Article 5

The Cooperative has its own stamp, flag and emblem.

The content, shape and appearance of the stamp, flag and emblem are determined by the management of the Cooperative by decision.

Goals and tasks of the Cooperative

Article 6

The Cooperative contributes to the achievement of the goals and tasks of student education through a program which combines scientific knowledge and learning and certain productive and useful work.

The aim of the Cooperative is to voluntarily gather as many students as possible and through appropriate methodical procedures and, under the guidance of a mentor teacher, enable them to develop interests and abilities and acquire, deepen and apply biological, technical, economic, social and related knowledge in the field important for the entire production process, from its planning to market, and other evaluation of the results of the work.

The Cooperative specially develops and nurtures work habits, work values and creativity, students acquire knowledge and awareness of the ways and needs of nature conservation, as well as nurturing heritage and folk creativity, students professionally inform, direct and create preconditions for the transfer and practical application of knowledge in life and local environment.

Article 7

The basic educational tasks of the Cooperative are, as early as possible and to as many students as possible:

- to arouse and develop awareness of the necessity and value of work for man's life
- develop and nurture work habits and responsibility, innovation, independence, entrepreneurialism, tolerance and the need for cooperation
- enable the acquisition, deepening, expansion and application of knowledge and the development of capabilities essential for the economy and the organization of work
- develop awareness of the possibilities, achievements and need to apply modern scientific, technical and technological developments
- contribute to the transfer of knowledge acquired in school to the practical activities of the Cooperative and, conversely, knowledge acquired through work in the Cooperative to school
- develop love for nature and values created by man through his work and an awareness of the necessity of preserving balance in nature, protecting the environment and nurturing heritage
- enable the greatest development of abilities and the realization of personal interests, and therefore self-affirmation and knowledge of one's own preferences and abilities
- prepare a selection of school programs and future occupations from the activities of the Cooperative

These tasks are accomplished by:

- respecting student volunteering, interests, foreknowledge and abilities in the preparation and execution of work programs and their participation in the evaluation of the results of the work
- providing good sources of knowledge (teaching aids, modernly equipped cabinets, literature, capable and motivated leaders)
- providing the means for work (land, machinery, tools, livestock, reproductive material, etc.) that are necessary for the production and service activities of the Cooperative
- problem-oriented, exemplary and research-oriented teaching, especially through the participation of students in experiments and the preparation of independent research papers
- providing professional assistance, i.e. professional leaders and support (e.g. by involving specialists in working with young cooperatives, by encouraging student participation in the work of

professional institutions)

- enabling members to perform while showing the results of work and gaining recognition for their abilities, knowledge and skills at fairs, meetings and competitions
- identifying, monitoring and supporting individuals and groups with more pronounced interests and predispositions and enabling the mastery of differentiated programs (summer schools, camps and more)
- cooperation with parents, businesses and institutions in the town and professional services, higher education institutions, faculties and scientific institutes

Members of the Cooperative

Article 8

Any student of the School/Institution can become a member of the Cooperative after completing the first grade of primary school. Parent of a student member of the Cooperative, mentor teachers and other experts participating in the work can also become members of the Cooperative.

Members of the Cooperative may be students who have graduated from the School and their parents, external associates, donors and patrons, experts and individuals who have an interest in promoting school cooperatives and supporting the achievement of goals and tasks of the Cooperative.

The members referred to in paragraph 1 of this Article shall hold the position of ordinary members, and those referred to in paragraph 2 shall hold the position of supporting members. Student members are called young cooperatives.

The Management Board of the Cooperative may also appoint honorary members.

Article 9

Membership in the Cooperative is voluntary, which is confirmed by the signature of the Application Form.

By joining, an individual assumes the obligations and rights laid down in these Rules.

Regular membership may cease at the personal request of the member, or by his expulsion due to non-fulfillment of tasks or due to conduct which is contrary to the objectives and tasks of the Cooperative.

Records are kept about the members of the Cooperative. Membership is proven by a card whose content and form are determined by the management of the Cooperative.

2. Activity and funds of the Cooperative

Article 10

The activity of the Cooperative includes production and service work organized in a way that allows students to get to know and master the basic elements of the production process.

The work is established as an educational process by which students get to know modern scientific, technical and technological achievements, acquire economic and other knowledge and rationally

organize work and use factors of production and distribute profits, i.e. they master the way of achieving optimal results by rationally using resources with the least possible threat to the natural environment. By participating in preparation, production and management, students get to know the overall process as a technical-technological, economic and social, working and creative one.

Article 11

The scope of activities and work tasks are determined by the annual plan and work program of the Cooperative, which is an integral part of the School/Institution program.

The annual plan and program of the Cooperative is aligned with the educational goals and tasks of the School/Institution and the mental and physical possibilities (abilities) and foreknowledge of the students.

Members of the Cooperative can carry out production work and research in economic companies, research and professional institutions, whereby production work always provides a recognizable economic effect.

The yearbook and registry book of the Cooperative is to be kept in order to register the cooperative's activities.

The registry book registers key events and results of the Cooperative, sections, students, leaders and associates. The person who keeps the yearbook and the register is appointed by the Cooperative Board.

Article 12

The interests of students are realized by establishing work in one or more related production and service activities, i.e. by establishing sections.

The section is the basic educational and working unit of the Cooperative.

The Cooperative has these sections:

1. _____,
2. _____,
3. _____,
4. _____.

At the beginning of the school year, the Management Board of the Cooperative may decide on the organization of additional sections in order to meet the interests of the members.

The organizational forms of operation of sections are determined by the management of the Cooperative.

Article 13

Section members perform these tasks:

- plan, program and implement the program
- distribute and register each member's work
- evaluate the work and propose rewards according to the results of the work
- care for compliance with work obligations (labor discipline)
- take care of inventory and consumables, monitor the state of the means of work, propose purchases, keep a cashbook and review the work

The section has a leader-teacher, and may have one or more contributors.

Article 14

The activity of the Cooperative is public.

Article 15

The means for work used by the Cooperative in production and service activities are land, machinery, tools, livestock and others; they are provided by the School/Institution and are the basic resources of the School/Institution.

Basic funds can also be provided in a form of gifts from companies, associations, entrepreneurs and other sources in accordance with the law.

Article 16

Funds for the activities of the Cooperative are acquired via:

- membership fee
- sales of products and services made by students in the Cooperative
- incentives from the state, county and city/municipal budget
- donations and sponsorship
- gifts
- other sources in accordance with the law

Products and services are put on the market by the School.

Article 17

The Cooperative does not have a special account; instead, its funds are kept in the School/Institution account.

The income and expenses of the Cooperative are recorded on a separate card in School/Institution bookkeeping.

The total income of the Cooperative consists of all the funds referred to in Article 16, which the Cooperative generates during the year and can be used exclusively for the work of the Cooperative.

The funds may be spent on the basis of a decision of the Administrative Bodies of the Cooperative. The principal of the School/Institution is the initiator for payments.

3. Management

Article 18

The governing bodies in the Cooperative are:

- Cooperative Assembly
- Cooperative Management

Article 19

The Cooperative Assembly consists of all members of the Cooperative.

The Assembly shall be convened at least once a year. It is convened and chaired by the President of the Cooperative. In exceptional circumstances, the Assembly may also be convened by the Cooperative Board.

The Assembly establishes the positions and guidelines for the management of the Cooperative and they bind the Cooperative Management.

Article 20

The Cooperative and its affairs are directly managed by the Management Board of the Cooperative. Management consists of:

- Cooperative Board
- President of the Cooperative
- Secretary of the Cooperative

The term of office lasts 2 (two) years and can be repeated. An individual member of the management board may be replaced even before the end of the term. Replacement is carried out according to the same procedure as the appointment.

Article 21

The Cooperative Board has 7 (seven) members appointed or elected by the School Board, namely:

- 2 (two) members of the School/Institution staff
- 1 (one) member parent of a student member (Article 8, paragraph 1. Rules)
- 1 (one) member of the co-founders or members of the Cooperative (Article 2, paragraph 3 and Article 8, paragraph 2, Rules)
- 2 (two) members of students cooperatives, members of sections or interest groups (Article 8, paragraph 1. Rules)
- 1 (one) member of the representative of the local government unit (municipality/city or city district in Zagreb) in whose territory the Cooperative is based

The Cooperative Board shall elect the Chairperson, the Deputy Chairperson and the Secretary of the Cooperative among its members.

Article 22

The Cooperative Board shall work in the meetings convened and led by the Chair.

The Board shall meet as appropriate, as required by its tasks and work.

The Board shall decide using a majority vote of all its members.

Article 23

The Cooperative Board performs these tasks:

- adopts the Rules of the Cooperative
- decides about the activities of the Cooperative and coordinates the work of sections
- determines work programs of sections and adopts the work program of the Cooperative
- adopts the financial plan (budget) of the Cooperative and disposes of the funds of the Cooperative
- decides on the status, name, seal, flag and emblem of the Cooperative
- decides on the membership in the Cooperative
- determines the amount of the membership fee
- decides on awards and recognitions for work
- conducts business within the authority of the Cooperative

Article 24

The Cooperative Board may, for the purpose of the agreement, provide information or other reasons relevant for the activities and progress of the Cooperative, organize meetings of individual sections. It is obliged to run the meetings in case of a request of at least one-third of the total number of sections.

The conclusions of these meetings serve as guidelines for further work of the Cooperative Management.

Article 25

The President of the Cooperative leads the work of the administrative bodies and the affairs of the Cooperative.

The President of the Cooperative is also the President of the Cooperative Board and the Cooperative Assembly.

The President of the Cooperative represents the Cooperative. The President of the Cooperative must first obtain the authorization of the School's principal when dealing with matters relating to the rights and obligations of the School.

The President signs the conclusions of the administrative bodies, the Rules and other acts of the Cooperative, disposes with the funds in accordance with the distribution of funds established by the financial plan (budget) of the Cooperative and performs other tasks of interest to the Cooperative.

In the event of the president's impediment, his/her duties shall be held by the Deputy Chairperson.

Article 26

The Secretary of the Cooperative organizes and conducts general, administrative, financial, legal and other tasks and assists the President of the Cooperative in the performance of his tasks and the preparation of meetings.

The Secretary conducts business communication with other participants in the Cooperative program.

Article 27

The expert leader of the Cooperative and the expert heads of sections are appointed by the School Board following the proposal of the Teachers' Council and with the prior consent of the Cooperative Management.

Leaders:

- plan, program and organize production work with the immediate cooperation of students
- choose the most effective methods and forms of work
- monitor, guide and encourage student work
- allow students to connect with other professionals and make good sources of knowledge available
- are responsible for the safety of students in their work
- collaborate with parents and educators and introduce other teachers to work results

A specialist outside the School/Institution may also be appointed as a Leader if he or she meets the prescribed conditions for being a teacher.

The Leaders form the Expert Council of the Cooperative and they respect professional pedagogical and scientific norms in the realization of their tasks.

4. Measures to encourage and support pupils

Article 28

The encouragement of students is achieved by participating in fairs, meetings, competitions, summer schools and camps, and by awarding commendations, recognitions and prizes.

Students may be awarded cash prizes for their immediate contribution to the achievement of cooperative production results and services.

When evaluating the work, achievements, commitment and behavior are judged.

Awards, commendations and prizes may be awarded by:

- Cooperative Assembly
- Cooperative Board
- School Board
- Teachers' Council
- teacher (professor) leader

Article 29

Students, who achieve the best results during the school year, acquire the right to participate in fairs, meetings and competitions of a higher level, and the best ones can participate in summer schools and camps.

At meetings and fairs, the results of work and experiments are presented by individuals and groups.

Fairs, meetings and competitions are organized from theoretical and practical knowledge.

Article 30

The student can be commended for his work in the Cooperative. Praise is expressed orally or written.

Article 31

The award for exceptional results in the work and improvement of school cooperatives can be given to individuals, cooperatives or sections in the cooperative.

The award for outstanding achievements in competitions can be given to an individual, cooperatives or sections. The award can be a monetary amount for educational, cultural, artistic, sports and other needs (for tickets, excursions, book purchases, etc.)

In addition to the sum of money, the awardees are presented with a document showing why the prize was awarded and what the prize is.

5. Transitional and final provisions

Article 33

The Cooperative may cease work due to the absence of basic working conditions.

The decision to stop the work of the Cooperative is made by the founder.

The remaining funds are transferred to the ownership of the School/Institution.

Article 34

These Rules shall be amended and supplemented as adopted.

Amendments may be proposed by the Cooperative Management, individual sections, the School Board and the Principal of the School/Institution.

Article 35

These Rules shall enter into force once confirmed by the School Board.

One copy of the confirmed Rules is submitted to the Croatian Association of School Cooperatives.

President of the Cooperative:

The school board confirmed these Rules on its _____ session held on _____ 20____

President of the School Board:

5.3. Application form and Credentials

APPLICATION FORM

In accordance with Article 2 (1) and (2), Article 17(2) and Article 28(1) of the Statute of Croatian Association

of School Cooperatives _____
(Name of primary or secondary school, student dormitory or education center)

represented by Principal _____
(principal's first and last name)

in which the school cooperative _____ operates
(name of school cooperative)

has decided to join the Croatian Association of School Cooperatives as a regular member.

Our representative in the Croatian Association of School Cooperatives will be

the Leader of school cooperative _____
(name and surname of the leader of the school cooperative, address and telephone number)

Please find attached a completed Credentials form for our representative in the Assembly of the Croatian Association of School Cooperatives. We commit to informing the Croatian Association of School Cooperatives in writing about any change of the leader of our school cooperative and our representative in the Assembly.

(location and date)

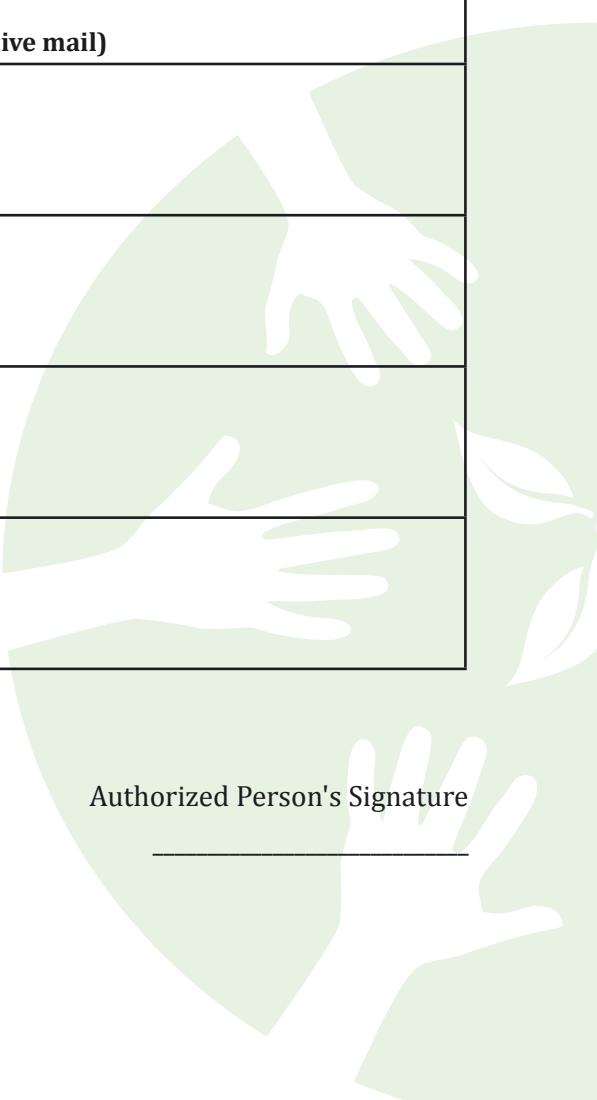
(signature of the Principal and stamp)

**CREDENTIALS OF THE REPRESENTATIVE
IN THE ASSEMBLY OF THE CROATIAN ASSOCIATION OF SCHOOL COOPERATIVES**

Full name of the educational institution that elected the representative	
Personal identification number (OIB) of the institution	
School Cooperative Name	
Election date of the representative	
The mandate period of elections	
Personal information about the representative	
First and last name	
Place and year of birth	
Full name of the occupational title	
Job Title	
Institution of Employment	
Special skills and knowledge in the field of school cooperatives	
Mail delivery address and contact (Select the checkbox next to the address where you want to receive mail)	
Home address (zip code, place, street, and house number)	
<input type="checkbox"/> Telephone: Fax: E-mail:	
Workplace address (institution name, zip code, place, street, and house number)	
<input type="checkbox"/> Telephone: Fax: E-mail:	

In _____, _____ (dd/mm/yyyy)

Authorized Person's Signature



5.3. Massively Transformative Purpose (MTP) – worksheet

Name:

Date:

1. Name inspiring areas that fill you with excitement, wonder and nostalgia.

What did you want to be when you grow up?

- 1.
- 2.
- 3.
- 4.
- 5.

2. Name big challenges or problems you would like to solve.

Which injustices make you feel particularly hurt or angry? How would you spend a billion dollars to make the world a better place?

- 1.
- 2.
- 3.
- 4.
- 5.

3. Who do you want to be a hero to?

Who benefits from your MTP?

- 1.
- 2.
- 3.
- 4.
- 5.

4. Write words that describe the actions you want to take. Circle the most powerful ones.

For example: solve, inspire, transform, influence, create...

- 1.
- 2.
- 3.
- 4.
- 5.

5. Write down trial versions of potential MTPs. Circle the ones you can connect with the most.

Note: Keep them easy to remember and under 20 words.

- 1.
- 2.
- 3.
- 4.
- 5.



5.5. Moonshot Thinking – worksheet

Name:

Date:

1. Write down a few Moonshot ideas and circle the ones you connect with the most.

Conditions:

- it is connected to your MTP
- it is big, bold, a bit scary and exciting
- you don't know how you're going to make it happen yet
- if you make it happen, it will change your life
- is easily identifiable and measurable
- you will clearly know when it comes true (as well as everyone else)

1.

2.

3.

2. Describe clearly what your Moonshot idea will look like in five years.

Use specific numbers and dates in order to make the idea objectively measurable.

3. What concrete and measurable outcomes, which will lead to the realization of the Moonshot idea, can you achieve after one year?

4. What can you do in the next 30 days to test and reduce the risks for achieving your one-year and five-year outcomes?

5. How can you prove that your Moonshot idea is achievable?

For example, a similar Moonshot idea was realized by someone else.

6. What action can you take now to take a step closer to realizing the Moonshot idea?



5.6 Sustainable Business Canvas (SBC)

Sustainable Business Canvas

Description of idea

WHICH PRODUCT OR SERVICE DO YOU OFFER?

WHAT STAGE IS THE IDEA IN?

IS IT YOUR AIM TO START A SCHOOL COOPERATIVE?

Key Partnerships:

WHICH PARTNERS DO YOU NEED TO FULFILL THE VALUE PROPOSITION?

WHICH PARTNERS CAN PROVIDE THE KEY RESOURCES?

WHICH PARTNERS ARE RELEVANT FOR YOU?

HOW?

Key Activities

WHAT DO YOU HAVE TO DO TO SUCCESSFULLY IMPLEMENT YOUR BUSINESS IDEA?

HOW CAN KEY ACTIVITIES BE MADE MORE ENVIRONMENTALLY FRIENDLY AND FAIR?

Resursi:

WHAT RESOURCES ARE NEEDED TO IMPLEMENT THE BUSINESS MODEL?

ARE THERE ENVIRONMENTALLY OR SOCIALLY HARMFUL PROCESSES IN THE IMPLEMENTATION?

Prijedlog vrijednosti:

KAKO PROIZVOD ILI USLUGA KORISTI KUPCU?

KOJI PROBLEM KUPCA RJEŠAVATE?

ŠTO JE JEDINSTVENO VAŠEM PROIZVODU?

KOJI SU POZITIVNI A KOJI NEGATIVNI EFEKTI VAŠEG PROIZVODA?

Cost Structure:

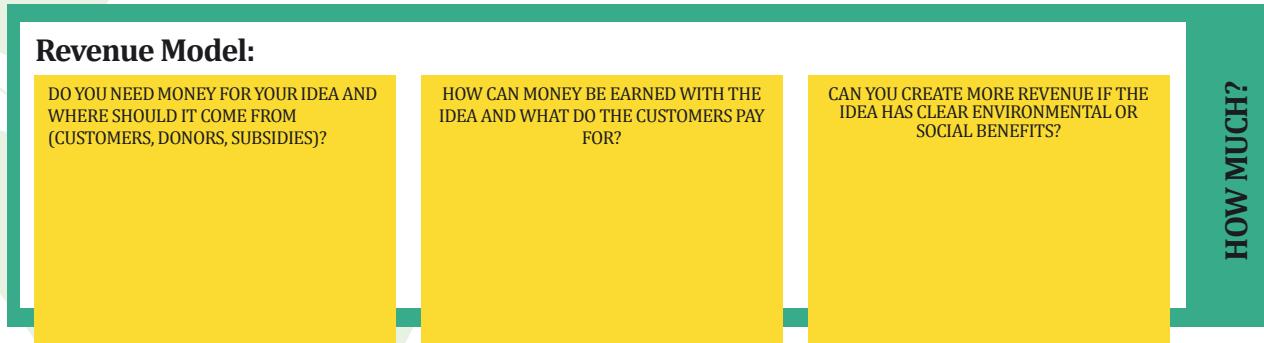
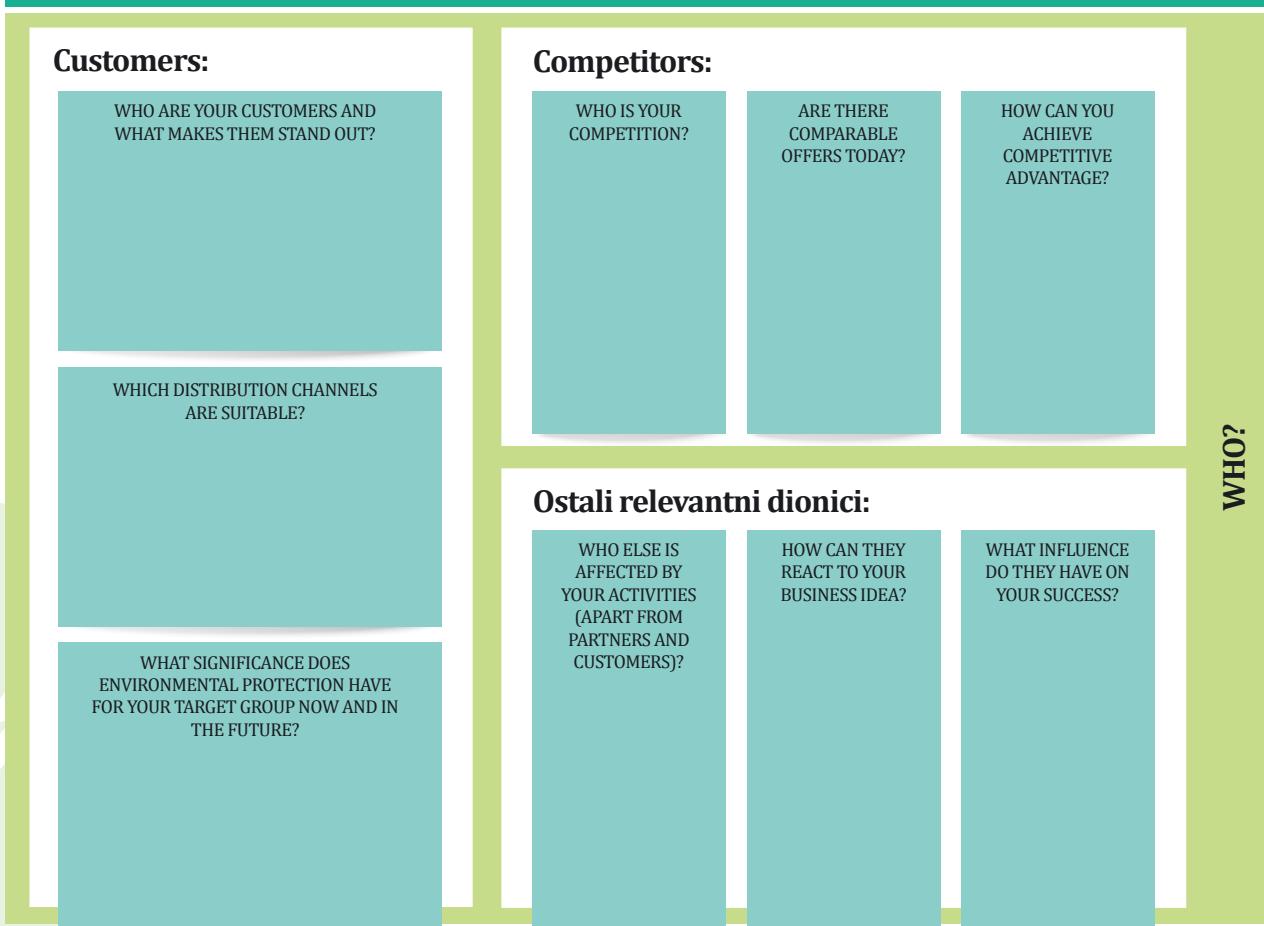
WHAT ARE THE MOST IMPORTANT COSTS INCURRED IN YOUR PROJECT?

HOW MUCH ARE THESE COSTS?

CAN COSTS BE REDUCED THROUGH ENERGY, MATERIAL SAVINGS AND/OR RECYCLING?

Name high school:

Name idea:



Literature and links



Alayón, D. 2018. Understanding Moonshot Thinking.
<https://medium.com/future-today/understanding-moonshot-thinking-783e3399c611>

Boikidou, L. 2019. What is moonshot thinking?
<https://www.linkedin.com/pulse/what-moonshot-thinking-lisa-bouikidou>

Buccaneer et al. 2008. School cooperative in the development of children and youth. HUUZ. Zagreb.

Design Council. 2019 What is the framework for innovation? Design Council's evolved Double Diamond.
<https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond>

Diamandis, P. H. 2017. Discovering your Massively Transformative Purpose.
<https://www.diamandis.com/blog/discovering-your-massively-transformative-purpose>

French, J. and Gordon, R. 2015. Strategic social marketing. SAGE Publication Inc. 2015, 20 (1).

Group of authors. 2018 Manual for conducting research work in the school cooperative. HUUZ. Zagreb.

Group of authors. 2019 School cooperative primer. HUUZ. Zagreb.

Hafner, H. 2017. A Crowdfunding Guide. Association for Civil Society Development SMART. River.

https://www.civilnodrustvo-istra.hr/images/uploads/files/Vodic_za_Crowdfunding.pdf

Kotler, P.W.; Saunders, V.; Armstrong, J.G. 2006. Marketing Basics. MATE and Zagreb School of Economics and Management. Zagreb.

Mađarić D. 1987. Promotional activities in the protection of ecosystems. Birotehnika Economic Library. Zagreb.

Olsen, K. 2020. Setting a goal for changing the world: Massive Transformative Purpose.
<https://moonshotpirates.com/blog/setting-a-goal-for-changing-the-world-massive-transformative-purpose/>

Osterwalder, A. and Pigneur, N. 2011. Business model generation: a handbook for visionaries, game-changers, and challengers. Strategyzer.

Ottman, J.A. 1998. Green marketing, opportunity for innovation. NTC Business Books. Chicago.

Rocco, F. 2020 Marketing management. School book, Zagreb.

Law on education in primary and secondary School. 2022.

<https://www.zakon.hr/z/317/Zakon-o-odgoju-i-obrazovanju-u-osnovnoj-i-srednjoj-%C5%A1koli>

About the project promoter and the project team

Association for Nature, Environment and Sustainable Development Sunce (<https://sunce-st.org/>) was founded in Split in 1998 in response to the growing need of society for an independent and professional body that will offer solutions in issues regarding the environment and nature. Today, the Association Sunce is nationally and internationally present as one of the leading organizations for the protection of nature and the environment in Croatia. The Association is committed to increase standards and improving the systems for environmental protection, encouraging public involvement and participation, and advocating the creation of a responsible society aware of the connection between people and nature. It also protects the public interests and the right to a healthy environment and creates solutions for nature conservation and for reasonable use of natural resources for the benefit of all citizens. The importance of educating all generations about the need to protect the environment, nature conservation and the principles of sustainable development has been emphasized since the foundation of the Association. Association Sunce carries out the education of primary and secondary school students by means of various projects that are either aimed solely at education or education is incorporated as a part of the project. In cooperation with other programs of the Association Sunce, a whole range of educational materials intended for students and teachers has been created to date.

Margita Radman, head of the Department of Education and Information, was born in Split in 1987, where she received her master's degree in marine biology and ecology from the University Department of Marine Studies, University of Split, in 2012. After a year of professional development as a museum pedagogue trainee at the Natural History Museum Split, she took the examination as a museum pedagogue. At the same time, she joined the Association Sunce, first as a volunteer, mainly in the nature conservation programs and on the Department of Education and Information, and since 2012 she has been employed as an associate educator. At the Faculty of Humanities and Social Sciences in Split, as part of the Center for Research and Development of Lifelong Learning, in 2015 she completed the program of pedagogical-psychological-didactic-methodical education, and in 2018 she became head of the Department of Education and Information.

Maja Golem, an expert associate educator, was born in Split in 1992. She received a master's degree in Croatian language and literature and pedagogy at the University of Split in 2016. Immediately after graduation, she completed her internship at the University of Galway (NUI Galway), more precisely at the Irish Center for Autism and Neurodevelopmental Research, and has then worked at the Elementary School Split 3 and at the Center for Autism Split. Since 2020, she has been working in the Association Sunce.

Tea Kuzmić Rosandić, an expert associate educator, was born in Split in 1992. She received a master's degree in Croatian language and literature and pedagogy at the University of Split in 2016. Immediately after graduation, she completed her internship at the University of Galway (NUI Galway), more precisely at the Irish Center for Autism and Neurodevelopmental Research, and has then worked at the Elementary School Split 3 and at the Center for Autism Split. Since 2020, she has been working in the Association Sunce.

Miranda Šimac, an expert associate educator, was born in Dubrovnik in 1989. In 2015 she received a master's degree in biology and geography from the Faculty of Natural Sciences and Mathematics and Educational Sciences, University of Mostar. Since 2016 she has been working as a teacher of biology and related subjects at the Medical School Dubrovnik, and in 2017 she became part of the expert team of educators of the Association Sunce.

Acknowledgements

We would like to thank all those who have followed and supported us during the implementation of the project *Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia* and when creating this manual. In particular, we would like to thank all teachers and educational institutions who have made it possible to accomplish the project and manual through their commitment and enthusiasm. Special thanks also go to all the students who helped us carry out educational activities successfully. In particular, we would like to thank the following educational institutions that actively participated in the project as well as the institutions/organizations that supported the project:

- Cidrani, Zagreb – Nika Pintar and Bruno Balen
- Deutsche Gesellschaft fuer Umwelterziehung (DGU), Erfurt – Robert Lorenz
- Faculty of Economics, Split – Ana Nikol Šprlje, Mirna Radović and Assistant Professor Slađana Pavlinović Mršić, Ph.D.
- Gymnasium of Sustainable Development; School of Design, Graphics and Sustainable Construction, Split – Professor of Biology and Chemistry Darija Ćerdić Vukušić, pedagogue Ana Marija Ugrin and Teodora Grgić-Jeličić, communication and heritage specialist
- Croatian Association of School Cooperatives, Zagreb – Blanka Horvat and Domagoj Bajtal
- Impact Hub Zagreb, Zagreb – Helena Habdija
- Craft Technical School, Split – Marijana Petrić Maršić, psychologist, Ružica Vorgić Krvavica, professor of English Language and Literature and pedagogue and Milan Lučin, vocational teacher
- High School Braća Radić, Kaštel Štafilić – Marijana Bjeliš, agronomy engineer and Ivana Lelas, economist

We also thank all those who have helped to realize project activities, such as MARK 2 and the Association Permakultura Dalmacija, either by donating or by investing time. Finally, we especially thank the German Deutsche Bundesstiftung Umwelt Foundation (DBU) and the Ministry of Science and Education of the Republic of Croatia for their financial support in the implementation of the project *Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia* in which this manual was created.

The Association Sunce project team

Maja Golem, Tea Kuzmičić Rosandić, Margita Radman, Miranda Šimac



**Deutsche Gesellschaft für Umwelterziehung
Lindenstraße 6, 19406 Neu-Pastin, Deutschland**

- 🌐 www.umwelterziehung.de
- ✉️ sekretariat@umwelterziehung.de
- 📞 0049 (0)3847 2964

UDRUGA ZA PRIRODU, OKOLIŠ I ODRŽIVI RAZVOJ



**Association for Nature, Environment and Sustainable Development
Sunce, Obala HNP 7/III, 21000 Split, Croatia**

- 🌐 www.sunce-st.org
- ✉️ info@sunce-st.org
- 📞 00385 (0)21 360779
- 📱 00385 (0)91 3607790

Sustainable Student Companies in Croatian High Schools
Participate in Sustainable Development: Understand – Implement – Shape
A practical manual for educational institutions and civil society organizations



The handbook was created as part of the project *Sustainable Student Companies in Croatian High Schools – Green Companies Promote Sustainable Entrepreneurial Thinking and Action of Young People in Croatia* (2020 – 2022) funded by the German foundation The Deutsche Bundesstiftung Umwelt (DBU). Part of the activities were co-financed by the Ministry of Science and Education.

