

Section 1 - Summary

1.1 Author(s)

Snježana Damjanović, Secondary school, Math- ICT teacher

1.2 Background

As a teacher of mathematics- ICT I present this proposal to create a holistic method of learning through STEAM so that children can develop their skills and focus on their development to choose the occupation that suits them best.

1.3 Descriptive title

STE(A)M on implementing road of interdisciplinary blended learning Counseling through STE(A)M.

1.4 Abstract

Most of 21st century careers will require different skills: Science, Technology, Engineering, Art and Math skills. It involves project- and problem solving -based learning. Students are given a problem based on a counseling theme to solve as a team. While working together, they build problem-solving skills, research and form ideas, and practice presentation, collaboration and communication skills.

Section 2 - Objectives

2.1 General objective

How to choose a good career?

Throughout the school year, students will draw information from career programs under the guidance of trained teachers.

2.2 General description of the objective

- Explain your goal in detail.

The main purpose is to inform students about the economic opportunities arising from the STEAM study. Apart from studies in science, technology, engineering and mathematics, all fields of knowledge are integrated into today's economy. Educational development goals focus on learning skills, resource utilization, academic strength, and future educational planning. Social / emotional development goals focus on socialization, self-esteem, relationships, chemical health, and

citizenship. Career development goals focus on career awareness, interests and skills, resource utilization, and connecting academic classes with future career decisions.

2.3 Strategic goals

In terms of careers, these career counseling strategies focus on:

- What really matters
- Typical working day
- How to become a professional on this career path
- What skills are needed in this career
- Which organizations are and in which industries do these occupations be needed
- How students emphasize flexibility, employability, commitment, emotional intelligence and lifelong learning through the perspective of constructionism

Section 3 - Objectives

3.1 Users

Help children discover their skills and focus on their development to choose the occupation that is most appropriate for their profile. For this activity, we introduce some learning activities that can be integrated into different learning adapted to the characteristics of the classroom.

3.2 Recipients

One counselor provides children with information and guidance.

3.3 Special needs

Based on the new protocols, school counselors can work using distance counseling technology (virtual / online / e-learning) with the same standards and ethics as school counselors working in traditional school settings.

Section 4 - Value Proposal

4.1 Value Proposal

Students have the right to their own choice, personal freedom, responsibility to others, and responsibility for leading their school and career path.

4.2 Results

At least 3 teachers of our school are familiar with the STE (A) M educational approach and their applications in school counseling. We also have a Scinetix ambassador at the school who is well acquainted with the STE (A) M approach to teaching and career. School counselors monitor students' progress and provide students with the necessary information, support in understanding themselves and their needs, solving their problems, making realistic decisions, improving skills and adapting to a constantly changing environment.

4.3 Impact

Counseling provided by trained professionals can have a major impact on the lives of students, families, and the entire community. Counseling helps people deal with difficult life situations. It also helps individuals who are unfamiliar with the values and shortcomings of an STE(A)M career.

Section 5 - Costs

5.1 Cost structure

- Work (internal staff): none in Bosnia and Herzegovina curricula and schools
- External consultants: we do not have access, Bosnia and Herzegovina is non EU
- Administrative costs: school budget
- Financial costs (interest on loans, etc.)
- Travel and accommodation: NO
- Space rental: NO
- Furnishings: school infrastructure
- Hardware-software: IT infrastructure of the school laboratory
- Other services: Forms / copies, etc. From the school budget (school school board)

5.2 Funding opportunities

- A low budget of € 100-200 is needed to cover the national speaker fee.
- Funds can come from the budget of the Ministry of Education, because schools do not have their own budget
- We can also use volunteers, eg Scientix ambassadors

- In Bosnia and Herzegovina, education is free for preschool, primary and secondary school age, and is financed primarily from the cantonal Ministry of Education
- NCP for Scientix which can organize STE (A) M workshops with Scientix ambassadors
- Participation in the STEM Discovery Campaign category: STEM career

Section 6 - Action Plan

6.1 Activities

STE(A)M Career Workshops

- Organizing 4-5 workshops for the development of the Guide for the development of STE (A) M curriculum at the cantonal level
- Establishment, at the school level, of local development curriculum working groups, including representatives of Scientix ambassadors, mentor training advisors, career counselors in the fields of: engineering, engineering, economics, etc.
- Organize 3 workshops for designing tools for evaluation and monitoring of curriculum implementation at the cantonal level

Section 7 - Risks

7.1 - Risks / Competition

a. Risk description

- Due to the pandemic, there may be weaknesses in laboratories for face-to-face career information, so there is a need for virtual remote workshops.
- As public schools, which do not have their own budget possible lack of material and technical infrastructure

b. Probability

1-2

c. Severity

2

d. Mitigation strategy

Redefining goals and reprogramming with flexibility.

7.2 - Risks / Opposition

a. Risk description

Organizing training programs for teachers

b. Probability

1-2

c. Seriousness

2

d. Mitigation strategy

Each counselor keeps a training calendar, where he draws an analysis of the time / task.

7.3 - Risks / External Threat

a. Risk description

- Organizational difficulties

- Difficulties due to pandemics or natural disasters in the school area.

b. Probability

2

c. Seriousness

2

d. Mitigation strategy

Re-Designing