


Preparation of teachers for education in OSH - continuation: more about teachers training program for OSH learning

 31.01.2018

Příprava učitelů na vzdělávání v BOZP - pokračování: Více o tréninkovém programu pro učitele ke vzdělávání žáků v BOZP

Alena Horáčková¹, Irena Kuhnová¹

¹ *Výzkumný ústav bezpečnosti práce, v. v. i., horackova@vubp-praha.cz, kuhnova@vubp-praha.cz*

bezpečnost a ochrana zdraví při práci

vzdělávání

učitelé

kompetence

učení

Abstract

This article which follows up to introductory part published in JOSRA No. 1/2017 [1] presents basic structure of teachers OSH training program, objectives, guiding questions, key or essential ideas and the other information about the program. Alongside, examples of related teachers' competences for OSH education are provided.

Key words: teachers, competences, learning, training, education, OSH

Abstrakt

V tomto článku, který navazuje na svou úvodní část publikovanou v JOSRA č. 1/2017 [1], předkládáme základní představu o struktuře tréninkového programu pro učitele ke vzdělávání žáků v BOZP, cíle, návodné otázky, hlavní myšlenky a další informace týkající se programu. Zároveň jsou poskytnuty ukázky rozsahu kompetencí učitele, potřebných ke vzdělávání žáků v BOZP.

Klíčová slova: učitelé, kompetence, učení, příprava, vzdělávání, BOZP

Introduction

Risks are always present in all areas of our life. Family, school teachers, the educational community and the whole society have a role to play in promoting a culture of safety and health at work. From the point of view of accident prevention, change behavior is a complex and lengthy process.

According the publication "Global Strategy on Occupational Safety and Health" by ILO [2] priorities were identified by the European Commission regarding the areas of research and interventions to be followed by European and National

Strategies on OSH.

Stimulate research of OSH concepts, different risks in different work contexts, is a starting point:

- Fundamental concepts: Work; safety, occupational health; prevention; hazard and risk;
- Safety and Health references;
- General Principles of Prevention.

Training Modules and OSH Topics

The program structure is organized according to the competences that teachers should acquire and develop as the content bricks of each module. The module list has taken into account training pedagogical, organizational, practice and ethics dimensions. These dimensions are present in the modules and in the themes that will be worked throughout the training sessions, as follow:

- Module 1 - Occupational Safety and Health basics,
- Module 2 - Occupational Accidents and Diseases,
- Module 3 - Workplace Hazards,
- Module 4 - Safety Management and responsibilities,
- Module 5 - Health and Safety in the school context,
- Module 6 - Teachers Intervention Project.

Teachers Training Program for OSH Learning

More detailed idea of the team from the project MIND SAFETY - SAFETY MATTERS! on the content and key aspects of the teacher training program for OSH learning is listed below.

Module 1 - Occupational Safety and Health basics

OBJECTIVES

- ❖ To provide a space for self- introduction and well as encourage participants to reflect on their motives and their expectations.
- ❖ Outline the importance of safety education and awareness of workplace hazards at school.
- ❖ Clarify common understanding on OSH basic concepts.

GUIDING QUESTIONS

- ❖ Why should everyone concerned about occupational safety and health?
- ❖ What legal rights do workers have to a have safe job?

KEY IDEIAS

- ❖ In the global world, the fast technological advances have great impact in many aspects of our lives and also in the workplaces conditions.
- ❖ Although work as benefits for one's life, it can also happen workers be injured, became sick or even killed on the job.
- ❖ Workers need to know how professional risks can affect their lives.
- ❖ Work in a safe and healthy way is a human right that should be learned as soon as possible.
- ❖ As new workers, young people are likely to be inexperienced and unfamiliar with many tasks required from them, so they need to learn and practice general health and safety skills.

DESCRIPTORS

- ❖ Understand the purpose of the workshop, and objectives of the module;
- ❖ Define work and workplace;
- ❖ Define hazard;
- ❖ List different hazardous situations and conditions on occupational activities;
- ❖ Have the perception of emerging risks at the workplaces, due the technological and societal changes;
- ❖ Discuss fundamental duties and rights at work;
- ❖ Compare different OSH perspectives and evolution through time;
- ❖ Identify the relationship between the OSH awareness, since young ages, to improve workplace safety and health.

Module 2 - Occupational Accidents and Diseases

OBJECTIVE

- Recognize that work accidents and occupational diseases causes are predictable and can be prevented.

GUIDING QUESTION

- How do work accidents and occupational diseases happen and how can we prevent them?

KEY IDEIAS

- The high costs, suffering, and losses caused by deaths and work-related accident victims are unacceptable. From the point of view of accident prevention, to recognize risks and knowing how to act, while exposed to bad work conditions and practices it's a long life learning process that should begin since we are young.
- Work-related accidents have an immediate visibility rather than occupational diseases that can take up to 30 years to be identified and medically recognized. Communicate dangerous conditions and situations reporting unsafe practices incidents, is a critical process to avoid injuries and the development of a disease related with a professional activity.

DESCRIPTORS

- Understand the definition of workplace;
- Discuss work accidents and occupational diseases statistics in a critical way taking into account the different causes and consequences;
- Illustrate the consequences of work accidents and occupational diseases;
- Be able to deliver the required OSH students learning expectations;
- To reflect on the OSH impact on students;
- To know how to act when an accident/fatal injury happens;
- Find what are the recognized professional diseases, related to teaching activity;
- Increase self awareness and responsibility towards hazards situations.

Module 3 - Workplace Hazards

OBJECTIVE

- ❖ Conclude that preventive measures are the most effective way to eliminate or reduce the hazards

GUIDING QUESTION

- ❖ How can we reduce workplace hazards to minimize professional risk exposure?

KEY IDEAS

- ❖ When thinking about hazards in the workplace or activity related risks, many people especially imagine dangerous occupations like mining or construction; few people think about the dangers that are present in occupations like, office work, or service sector jobs. However, a hazard can result in great damage for health.
- ❖ There are different categories of hazards, according to their nature and effects, however it is important to know that hazards interact among each other in the workplace environment and only become risks, according to human exposure, during the exercise of a specific professional activity. That is why each work context as to be known and seen like a system to choose what are the best and more effective to control hazards.

DESCRIPTORS

- ❖ Define and identify common workplace hazards;
- ❖ Describe the workplace context teaching activity conditions in School;
- ❖ Describe the effects of workplace hazards;
- ❖ Recognize/Know the meaning of hazards warning and safety signs;
- ❖ Participate in a critical way;
- ❖ Propose different ways of reducing hazards in specific workplaces;
- ❖ Apply correctly safety procedures to control specific workplace hazards.

Module 4 - Safety Management and responsibilities

OBJECTIVE

- ❖ Relate the impact of preventive measures in workplace safety and wellness improving.

GUIDING QUESTIONS

- ❖ What are the employer's responsibilities?
- ❖ What can we think of that might prevent an accident from happening again?
- ❖ Who is responsible for OSH at school?

ESSENTIAL IDEIAS

- ❖ Employers must keep the workplace safe for workers. The best way to control a hazard is to eliminate it completely. Although, this can be not possible, so it is critical to assess the risks to know better ways to reduce the probability of occurrence of an accident or occupational disease.
- ❖ If you cannot completely remove or control an hazard in the workplace or keep it away from the workers, good safety policies and managerial measures can reduce their exposure to the risks, such as training the workers on how to do their jobs in a safe way, despite the hazards, or organize time schedules and breaks to avoid and reduce tiredness.
- ❖ Personal protective equipment is the least effective way to control hazards; however workers should use it, whenever employer gives it to them.

DESCRIPTORS

- ❖ Define each one and order the prevention principles according to the hierarchy of controls;
- ❖ Participate performing a role play activity to elaborate and
- ❖ Compare each control benefits;
- ❖ Elaborate (in critical way) on a risk assessment tool example;
- ❖ Valuing legal duties on the use of protective equipment and its required measures;
- ❖ Identify emergencies at work;
- ❖ Find collaborative solutions to reduce and control hazards identified.

OBJECTIVES

- ❖ Positioning OSH in the education system (legal frameworks, policy and strategy);
- ❖ Identify facilitators and barriers to promote the development of OSH competences in the existing educational practices;
- ❖ Plan OSH class activities to promote OSH awareness among students.

GUIDING QUESTIONS

- ❖ What students need to know about OSH?
- ❖ What should be the teacher's role as an OSH learning facilitator?

ESSENTIAL IDEAS

- ❖ Occasionally everyone should work, one day. Young workers are especially exposed at risk and occupational injuries. Many young people believe that, when you get injured at work, it is "bad luck"; or "it is your fault", however reality might be quite different. Often they are unaware of the dangers and hazards posed by some tasks or equipment.
- ❖ Labor laws that protect young people are in some cases different from those who apply to adults, like other specific laws to specific groups of workers with specific needs (pregnant, older workers, persons with disabilities, etc.).
- ❖ These and other OSH issues can be interconnected with other competences, and contexts, according to different subjects programs and introduced in the teaching practice, adequate to student's needs.

DESCRIPTORS

- ❖ Share own prior knowledge, experiences and ideas about competences to facilitate OSH learning
- ❖ Relate competences objectives and concepts of occupational health and safety, with their disciplinary area programs;
- ❖ Discuss ways to encourage students to overlook to their responsibilities in protecting themselves and keeping the workplace safe;
- ❖ Define priorities to integrate the previous/rebuilt OSH competences in the teaching practice;
- ❖ Choose different approaches to OSH in teacher's own subject according specific student needs;
- ❖ Reflect on different pedagogical methods/strategies, adjusting specific characteristics of students and OSH learning goals.

OBJECTIVES

- ❖ Draw a plan for a project related to OSH awareness at school with future steps for promoting learning on OSH issues.
- ❖ Clarify the importance of OSH competences in the professional/learning context.
- ❖ Reflect on OSH awareness practice activities, impact with students at school.

GUIDING QUESTIONS

- ❖ How can we WORK TOGETHER to create a Health and Safety positive culture at school?
- ❖ What are the most important things you learned about OSH?
- ❖ How will you use what you have learned?

ESSENTIAL IDEIAS

- ❖ The school is a workplace with many hazards and activity risks. Occupational Health and Safety, Risk Education and Health Promotion follow common goals and use similar approaches and strategies, to stimulate collaborative problem solving that concerns to all members of educational community and should be everyone's responsibility.
- ❖ Students need to be aware of the importance of OSH in their present and future lives and Teachers are key elements to increase and improve learning contexts focused on students by motivating them, to build their knowledge, develop creative thinking, to solve problems in different areas of their active life.

DESCRIPTORS

- ❖ Demonstrate motivation to introduce practice changes and experiences sharing about OSH awareness in the classroom;
- ❖ Improve the quality of learning by developing and rebuilding new competences;
- ❖ Assume the role of a facilitator of collaboration with other actors bringing OSH to school daily activities;
- ❖ Use inclusive approaches/resources of learning OSH.

Summary

The introductory article on the topic of teacher education in OHS [1] addressed the question "What competencies should teachers have to teach OSH?". From the point of view of OSH, based on the above-mentioned content of modules of the training program for OSH learning, it is possible to clarify and summarize the required teachers' competences as follows:

KNOWLEDGE	SKILLS	VALUES
------------------	---------------	---------------

<ul style="list-style-type: none"> ❖ Occupational Health and Safety concepts contextualized with the curricular subject, like: workplace, hazard and risk concepts; ❖ Occupational hazards and risks; ❖ Occupational risks, preventive and corrective measures (integrated, organizational, collective and individual); ❖ The consequences of occupational accidents and diseases at: social, cultural, economical and personal level; ❖ General principles of occupational risks prevention; ❖ Risk assessment; ❖ Best practice in safety procedures; ❖ Health and Safety at Work national legislation: legal basis for employers/employees; ❖ Health and Safety at work stakeholders. 	<ul style="list-style-type: none"> ❖ Clarify definitions of workplace, hazard and risk; ❖ Promote Health and Safety at Work learning in curricular units both in an integrated vision; ❖ Develop different pedagogical strategies, adjusting the specific characteristic of students and OSH learning goals; ❖ Illustrate the general principles of occupational risk prevention; ❖ Explain the role individual and organizational factors play in the risk prevention; ❖ Promote critical and creative thinking to discuss Health and Safety at work issues; ❖ Integrate digital technologies and other learning resources in a safer, inclusive and adapted way, considering specific characteristics of students. 	<ul style="list-style-type: none"> ❖ Mutual respect and cooperation; ❖ Initiative and proactivity in the communication and identification of hazardous conditions; ❖ Self-awareness and responsibility towards hazards situations; ❖ Disposition for critical thinking about Health and Safety at work issues; ❖ Active and collaborative participation in the development of solutions for health and safety at work problems.
--	---	--

Table: OSH related competences dimensions (sample)

Conclusion

Developing of teachers training program for OSH learning is based on a mind-set from the principles of prevention and under the assumption of that the promotion of a safety culture on workplaces by one side, and on the other, out of the necessity to reinforce OSH Education

The European Agency for Safety and Health at Work (EU-OSHA) presents in the publication “Occupational safety and health and education: a whole-school approach” [3] experiences of European countries, pointing out success factors such as active learning methods, that enable teachers are able to use their own experience and knowledge highlighting to this kind of approach with their students in the classroom – as well as the access of educational resources, like brochures and teaching guides, pedagogical resources and other informative materials about OSH, as an integrant part of the support strategy provided towards them. However international literature review pointed some directions to the project MIND SAFETY - SAFETY MATTERS! design. Those directions are based on some assumptions:

- ❖ Teacher’s training in this context refers not only to undertake routine tasks to, but all the activities aiming at preparing education professionals for their job as educators and as reflective practitioners. It corresponds to the

- concept of teacher's education;
- To support teachers as facilitators of learning processes, means to identify a number of essential elements of effective training, in terms of the quality of training, content, mode and adequacy of teachers' education and training, as a way to develop new competences, exploring previous experience, knowledge, and materials already existent.

Teachers training program for OSH learning will take in account these elements and educational interventions that have been recognized to be useful and effective. As important as provide teachers with an adequate education and training in OSH, is to promote opportunities to access Open Educational Resources (OER), adapt, and produce new OSH educational material about OSH to be used in the classroom by teachers. These aspects will be developed deeply in the other outputs of MIND SAFETY - SAFETY MATTERS! project.

Literature

1. HORÁČKOVÁ, A.; KUHNŮVÁ, I. Preparation of teachers for education in OHS: basis for the development of teachers training program for OSH learning. *Časopis výzkumu a aplikací v profesionální bezpečnosti* [online]. 2017, roč. 10, č. 1. Dostupný z: <http://www.bozpinfo.cz/josra/preparation-teachers-education-ohs-basis-fof-development-teachers-training-program-osh>. ISSN 1803-3687.
2. *Global Strategy on Occupational Safety and Health: conclusions adopted by the International Labour Conference at its 91st Session, 2003*. Geneva: International Labour Organization 2004. 14 p. ISBN 92-2-116287-7 (print version).
3. *Occupational safety and health and education: a whole-school approach*. Luxembourg: Publications Office of the European Union, 2013. 102 p. ISBN 978-92-9240-029-3.
4. *Mainstreaming occupational safety and health into education: good practice in school and vocational education*. Luxembourg: Office for Official Publications of the European Communities, 2004. 149 p. ISBN 92-9191-016-3.
5. *OSH in the school curriculum: requirements and activities in the EU Member State*. Luxembourg: Office for Official Publications of the European Communities, 2009. 180 p. ISBN 978-92-9191-215-5.
6. European Agency for Safety and Health at Work. *Training teachers to deliver risk education: examples of mainstreaming OSH into teacher training programmes*. Luxembourg: Publications Office of the European Union, 2011. 99 p. ISBN 978-92-9191-705-1.
7. Mainstreaming OSH into education. *OSHWiki* [online] [cit. 2017-01-05]. Dostupné z: https://oshwiki.eu/wiki/Mainstreaming_OSH_into_education.
8. A whole-school approach to OSH education. *OSHWiki* [online] [cit. 2017-01-04]. Dostupné z: https://oshwiki.eu/wiki/A_whole-school_approach_to_OSH_education.
9. *Factsheet 45: management of occupational safety and health in the education sector*. Bilbao: European Agency for Safety and Health at Work, 2003. ISSN 1681-2123.
10. *Factsheet 46: occupational safety and health in the education sector*. Bilbao: European Agency for Safety and Health at Work, 2003. ISSN 1681-2123.
11. *Factsheet 52: mainstreaming occupational safety and health into education*. Bilbao: European Agency for Safety and Health at Work, 2004. ISSN 1681-2123.
12. *Factsheet 82: OSH in the school curriculum: Members State activities: summary of a report*. Bilbao: European

Agency for Safety and Health at Work, 2008. ISSN 1681-2123.

13. Factsheet 103: strategies for training teachers to deliver risk education. Bilbao: European Agency for Safety and Health at Work, 2012. ISSN 1681-2123.

14. *Professional Standards for Teachers and Trainers in Education and Training - England* [online]. London: Education Training Foundation [cit. 2017-01-25]. Dostupné z: http://www.et-foundation.co.uk/wp-content/uploads/2014/05/4991-Prof-standards-A4_4-2.pdf.

15. *Standards in education and training for safety and health at work: European perspectives, promising developments and examples of good practice: IAG Report 4/2011e*. Berlin: German Social Accident Insurance, Dresden: Institut für Arbeit und Gesundheit der DGUV, 2011. 151 s. ISBN 978-3-86423-028-8 (print).

16. *ENETOSH Standard of Competence for Instructors and Trainers in Safety and Health*. Dresden: Deutsche Gezeitliche Unfallversicherung e.V. 2011. 52 p. ISBN 978-3-86423-028-8.

17. *Unit Plan* [online]. EDUTOPIA [cit. 2017-01-25]. Dostupné z: <https://www.edutopia.org/pdfs/blogs/edutopia-finley-planning-curric-unit.pdf>.

18. *Health and safety checklist for classrooms* [online]. Health and Safety Executive, 08/11 [cit. 2017-01-25]. Dostupné z: <http://www.hse.gov.uk/risk/classroom-checklist.pdf>.

19. *Health and safety matters for students embarking on work experience: a short guide for teachers*. Dublin: Health and Safety Authority, 2008. 17 p.

Vzorová citace

HORÁČKOVÁ, Alena; KUHNOVÁ, Irena. Preparation of teachers for education in OHS: continuation: more about teachers training program for OSH learning. *Časopis výzkumu a aplikací v profesionální bezpečnosti* [online], 2017, roč. 10, č. 3-4. Dostupný z: <http://www.bozpinfo.cz/josra/preparation-teachers-education-osh-continuation-more-about-teachers-training-program-osh>. ISSN 1803-3687.

Autor článku:

[Mgr. Alena Horáčková](#)

[PhDr. Irena Kuhnová](#)