

Give musculoskeletal health to children and young workers

20-21 March 2019, Hotel Carlton, Plaza Federico Moyua, 2 – Bilbao

Perspective 1: Mainstreaming OSH into education – with a practical dimension

INTRODUCTION

The seminar brought together four perspectives, mixing research, policy, and practice to explore the scope and variation in the theme of ‘MSD prevention among school children / young workers’:

Perspective 1: Mainstreaming OSH into education – with a practical dimension

Perspective 2: Ergonomics – with a policy dimension

Perspective 3: Musculoskeletal health and young people – with a research dimension

Perspective 4: Body self-perception – with a communications dimension

All attendees participated in expert-led discussions in four small groups and covered the four different perspectives. The groups did not discuss the same questions, as through the group discussions, the experts led the meeting discussion, funnelling down in specificity towards the preparation of an outcome. Each group spent one hour with each expert.

For more information about the practicalities and the dynamics of the workshop, please consult the agenda of the seminar and the PPT called “background information (ahead of the seminar).”

In this document the summary of the perspective 1 is presented. The discussion questions were:

- What do we mean by mainstreaming (OSH into Education)?
- Which education level is the most crucial for the prevention of musculoskeletal harm (Kindergarten, primary, secondary, university, vocational)?
- How can ergonomics help to support the learning process in schools?

Following these discussions the last group designed a practical mainstreaming intervention to bring together education and ergonomics in an educational establishment.

Design for the workshop

Dynamics:

Interactive (Movement, subgroups, tasks, common outcome)

Principle: The funnel

Organisational issues:

Number of people: 11 to 17

Leader: Diana Policarpo

Duration: 4 x 1 hour



Common outcome

Location: Workshop room (Room Elcano ground floor)

Room design: Square of tables on the right side of the room; 20 chairs on the left side of the room

Material:

- Flipchart-Poster “Perspective Mainstreaming – RED”
- Poster in DIN A 4 format and red cards “mainstreaming” (DIN A 5)
- Printout of the funnel
- Flipchart-Posters (Approaches of MS OSH into Education; Education levels)
- Print outs “Mind Safety – safety matters!”
- Print outs “Ergonomic classroom”
- Dots
- Scissors
- Red sheets to write in

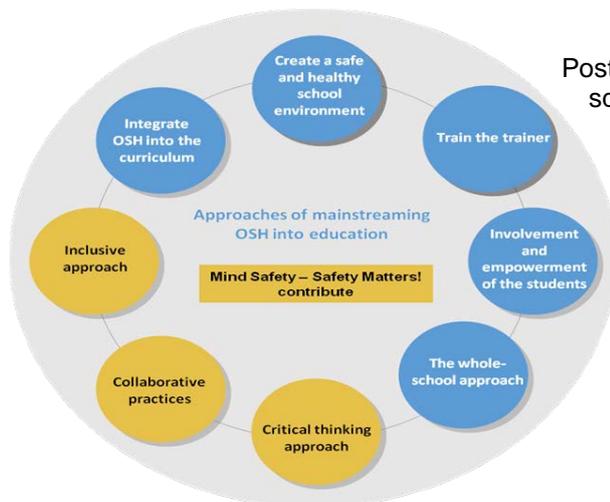
DAY 1

20th March 2019

Round I. What do we mean by mainstreaming (OSH into Education)?

Brief introduction from Diana Policarpo about Portugal good practice and the Mainstreaming OSH into Education Model of the Project Mind Safety – Safety Matters!

Brief introduction of how this first round of the workshop will work. This round has much importance because the participants will choose the areas of the model that other participants will work in the final workshop.



Poster with “Approaches of Mainstreaming OSH” on the table square

Approaches of mainstreaming OSH into education – Mind Safety- Safety Matters! Contribution

Process in Round I:

- Poster with model on the table;
- Brief Introduction into the topic based on the Portuguese case to illustrate
- Participants have an important task to do: Focus and choose the four most important areas/dimensions of the Mind Safety – Safety Matters! Model of Approaches of mainstreaming OSH into Education
- One group per dimension will be formed (4 groups; approx. 5 person each)
- Facilitator of the group collects results on a flipchart (Maurizio will keep the bucket points of the first round for the report in the next day)

Results:

The 17 participants have chosen in this order the answer to this question:



1. **Integrate OSH into the curriculum** (4 red and 3 orange dots – red is the first choice and orange the second);
2. **Train the Trainer** (4 red and 2 orange dots);
3. **Inclusive approach** (3 red and 1 orange); and
4. **Create a safe and healthy school environment** (2 red and 2 orange dots).

What are the most important approaches of mainstreaming?

In addition, why?

1. Integrate OSH into the curriculum

- “If not in the curriculum, knowledge on OSH will be unknown”
- “Pre-school – integration of knowledge about OSH in everyday life by talking”
- “Primary school – Integration into topics like “sports and health” and other topics”
- “Vocational Education – Healthier and safer workers, safety practices, are part of usual conduct at workplaces => increased safety at work, awareness”
- “University – A sector based OSH and OSH management for future managers”.

2. Train the Trainer

- “The only way to reach audience (group)”
- “To inspire teachers to take action for safety education”
- “OIRA (Russian approach of risk assessment)”.

3. Inclusive approach

- “Teach all in an individual way”
- “Interactive program”
- “Information about new working methods”
- “Create stimulating environment for teachers + students”.

4. Create a safe and healthy school environment

- “Research displays increasing MSD’s, among students and pupils + lack of physical activity”
- “Special culture of health and safety involving several actors and different groups”
- “Starting at Pré-school with special standard:
 - ✓ Good attitude
 - ✓ Good ergonomics
 - ✓ Good programmes”
- “Working environment of teachers is the learning environment of pupils”

Round II. Which education level is the most crucial for the prevention of musculoskeletal harm (Kindergarten, primary, secondary, university, vocational)

Diana Policarpo gave a brief summary of round I and presented the four areas chosen by the previous working groups.

Brief introduction into the different levels of education (Four Flipchart-Posters):



The participants split up into four groups according to the different levels of education:

Task 1: What are the different demands and needs on your level of education regarding ergonomics / prevention of MSD?

Task 2: Why is your education level most important to support the beginning of prevention of MSD's? Agree on two main arguments.



Level 1:
Kindergarten /
primary school

Answers:

Task 1:

- Possible causes of MSD (by own examples)
- Awareness of the risks of MSD
- How to prevent MSD (healthy postures and movements/variation)

Task 2:

- Understand cause – effect relationship
- The earlier the better because it's difficult to change postures/movements at a later stage



Level 2:
Secondary school

Answers:

Task 1:

- ROI (Return Over Investment) if address MSD risks at this level
- Reduce amount of time on devices
- Training on social interaction skills (eg. avoid isolation)
- Tips of using devices (eg. Postures), stand static versus dynamic.
- Explore other interests
- More emphasis on physical fitness/ mobility

Task 2:

- At this age kids tend to stop exercising
- At this age they are more self-awareness to make own choices.



**Level 3:
Initial vocational
training**

Answers:

Task 1:

- Train the trainer/teachers
- Involve info about ergonomics, OSH, MSD prevention into curriculum
- Make it attractive
 - ✓ Interactive way of teaching/training
 - ✓ Usage of new technology (virtual reality)
 - ✓ Competition
 - ✓ Case studies
 - ✓ Involvement -> students solutions (suggestions improvements)
- Support communication skills of students (assertiveness ->to tell when it is not OK)
- Connection between school and companies (practical training)

Task 2:

- They are partly involved in real working process
- They don't have bad working habits and are able to recognize bad/good practice



**Level 4:
University**

Answers:

Task 1:

- Education on correct posture and Education in correct vs. incorrect movement mechanics
- On line/ digital materials
- Government grants for policy and equipment
- Successful business people as Role Models
- Future Leader Manager

Task 2:

- Last chance to start protecting our bodies from injury mechanics
- Because natural ageing starts at this age
- Prevent or stop progression of pre-existing MSD's

Common Task: We distributed two dots to each participant for rating the arguments presented by all.

RESULTS:

- **Level 1** - The earlier the better because it's difficult to change postures/movements at a later stage (1 dot);
- **Level 2** - At this age they are more self-awareness to make own choices (2 dots);
- **Level 3** – Train the trainer/teacher (1 dot); Make it attractive (1 dot); They are partly involved in real working process (3 dots); They don't have bad working habits and are able to recognize bad/good practice (2 dots);
- **Level 4 - Future Leader Manager (6 dots)**



Group II picture - Perfect ending of a day full of creativity, ideas and good mood

DAY 2

21st March 2019

Round III. How can ergonomics help to support the learning process in schools?

Leader Maria Klotz

First, short input on the ergonomic classroom (5 min using printed slides from the PPT).

Four groups discussed the following questions for the four levels of education:

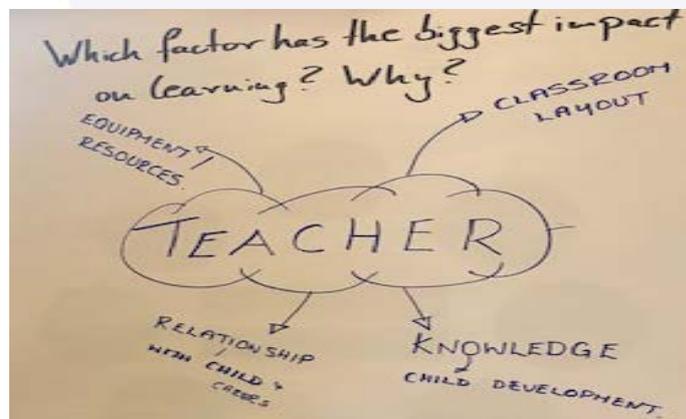
Question 1: Which ergonomic factor has the biggest impact on the learning process? And why?

Question 2: (extra): Which other factors influence the learning process?



Level 1:
Kindergarten /
primary school

Answers:
Question 1:



Question 2:

- Communication – between research and educator (training)

Answers:

Question 1:

- Social factors:
 - ✓ To belong to the group/relationship
 - ✓ To feel comfortable physically and mental
- Motivation:
 - ✓ Why am I here? What is the supposed outcome of learning?
- Participation
- Interactivity



Level 2:
Secondary school

Question 2:

- NOISE
- Physical
 - ✓ Lay out of the room structure
- Social
- Perception, understanding each other and the teacher



Level 3:
Initial vocational
training

Answers:

Question 1:

- INSTRUCTOR
 - ✓ Model in work, prevention, etc.
 - ✓ Knowledge – Know-how
 - ✓ Motivation

Question 2:

- Motivation (student)
- Interest in specific sector
- Interaction
- Communication
- Self-esteem X Self-efficacy
- Proper equipment/Learning environment (Technical Skills)



Level 4:
University

Answers:

Question 1:

- Motivation (individual factor)
- Theory into practice and vice-versa
- Change of learning
- Culture
- Teach the teachers
- Skills set
 - ✓ Persuade + Influence
 - ✓ Leaders

Question 2:

- Professionalizing the school might provide skills and affect culture



Group III picture - Excellent group dynamics! Thank you for your delivery!

Round IV. Design a practical mainstreaming intervention to bring together education and ergonomics in an educational establishment

All the participants defined the areas / dimensions in Workshop 1.

The four areas chosen in Workshop 1 were:

- Integrate OSH into the curriculum;
- Train the Trainer;
- Inclusive approach; and
- Create a safe and healthy school environment

We made a distribution of tasks between the participants as follows:

- All the groups will work on the success factors and on the hindrances, in one of these areas/dimensions, to define:
 - Objectives/needs
 - Target Group/Stakeholders
 - Outcomes/Products
 - Indicators of Effectiveness
 - Sustainability.

Common result: Paint the possible interventions on a flipchart paper

The task in Round IV is to “Create an Intervention to prevent MSD’s for School Children/Young Workers!”

ANSWERS:



- Objectives

- ❖ Mainstreaming OSH into Primary Schools – MSD’s topics

- Target Groups

Pupils – Primary schools

Teachers

- Outcomes/Products

- Define the modular courses for MSD’s topics for teachers
- Train the teachers by various experts (labour inspectors, ergonomists specialists, etc.)
 - Lessons for the pupils
- Practical opened lessons were different experts will provide guidance on use of protective equipment and ergonomic exercises
- Creative activities regarding MSD’s topic

- Indicators of Effectiveness

- Number of pupils/teachers included into the project
- Number of seminars/lessons
- To create follow-up of the project (accidents at work, health issues)

- Sustainability

- To extend at national level and involved more institutions/ministries.

**- Needs**

- ❖ Shorter lessons
- ❖ Ergonomic furniture
- ❖ Individual appliances
- ❖ Need to feel safe sooner
- ❖ Movement included into every lesson

- Target Groups**- Outcomes/Products**

- Given methods are used in classroom
- New methods are developed by teachers themselves

- Indicators of Effectiveness

- Workshop on methods (different methods)

- Sustainability

- Teachers learn from each other
- Movements are part of every school day.



Change of setting: **Self-directed learning**

No "Schools", "Universities" in the future

- Objectives

- ❖ To promote individual learning & development
- ❖ Improve performance of the system

- Needs

- To learn & work collaborative
 - ↳ To belong to someone/something
 - ↳ Social competences

- Intervention

- Build a "Community of practice" (CoP) for healthy learning
 - ↳ Practice ↔ Theory/ in change

- Indicators of Effectiveness

- At eye level, we are all apprentices
- Needs oriented
- Meeting two times/year 8collaborative)
- Moving venues (e.g. schools, companies, others)
-



- Objectives

- ❖ Health and Safety are important values

- Target Groups

All levels

- Outcomes/Products

- Learning materials of MSD's

- Indicators of Effectiveness

- Practical changes

- Sustainability

