

A PARTNERSHIP APPROACH TO CREATING A HEALTHY AND SAFE SCHOOL

1. Case metadata

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2. Organisations involved

Gheorghe Asachi Technical University Iasi Occupational Safety & Health Department in cooperation with Mihail Sturdza Secondary School

3. Description of the case

3.1. Introduction

The lower education system in Iasi County consists of 336 units with 148 687 pupils. The 336 schools employ 10 187 members of teaching staff, 942 members of auxiliary teaching staff and 2 235 members of non-teaching staff, which represent almost 10% of the employed population in Iasi County. Statistics from 1990 - 2007 showed an alarming growth of pupils' accidents, i.e. work accidents, minor accidents and dangerous incidents. During 2007 – 2008, at Mihail Sturdza secondary school, two minor incidents took place. Teachers and pupils involved were not badly hurt and hospitalization was not required, but these events contributed to the necessity of an adequate

and complete evaluation of school risks. Both students and teachers at this secondary school are exposed to a variety of risks and there was no standard tool that could be used for a comprehensive risk assessment. Additional problems were caused by the lack of expertise in this field. As a result, risk assessments were not carried out.

3.2. Aims

The main aim of the task was to carry out a risk assessment in which students, teachers and other staff would be involved. The goal was to assess risks, to improve the safety conditions by creating a safer and healthier school environment and to reduce all other risks in school.

The steps determined to achieve the above aims were:

- preparation of a risk assessment guidebook adapted for schools;
- a step-by-step guidebook implementation at a school from the Iasi district;
- identification of potential risks;
- estimation of risk levels in the assessed work areas;
- estimation of global risk/security levels;
- determination of preventive and protective measures;
- prioritization of necessary measures;
- monitoring of the implementation and periodical revision of the risk assessment.

3.3. What was done, and how?

The beginning of the project was challenging because of a lack of knowledge on performing a risk assessment. Moreover a simple tool to conduct a risk assessment in schools did not exist at that time. The lack of human resources and the lack in expertise were resolved by establishing a partnership between the Occupational Safety and Health Department of the Gh. Asachi Technical University in Iasi and the M. Sturdza school team.

A team of specialists from the University started by developing a guidebook on how to assess the risks in schools. The guidebook contains seven sections, including instructions on how to collect, centralise and quantify data using a software program also provided by the University team. The program works with predefined forms that have to be filled in with relevant information.

Finally, graphics can be obtained regarding security and risk level in the school. These graphics are calculated based on activities and work zones, giving the school manager a global view on the risks and facilitating the establishment of the required preventive measures. A set of recommendations regarding the type of preventive measures to be adopted are included in the guidebook.

The guidebook also includes checklists facilitating the task of identifying the risks. Once the risks identified, they can be quantified on different activity levels, leading to calculations and the identification of the global security level of the school.

The work sheets of the software guidebook program are:

Sheet 01: identification data of the organization / workplace – stage I

Sheet 02: identification data of the evaluation team members – stage II

Sheet 03: description of the activities and work zones – stage III

Sheet 04: risk identification at work zones - stage IV

Sheet 05: risk level estimation per activity/work zone - stage V

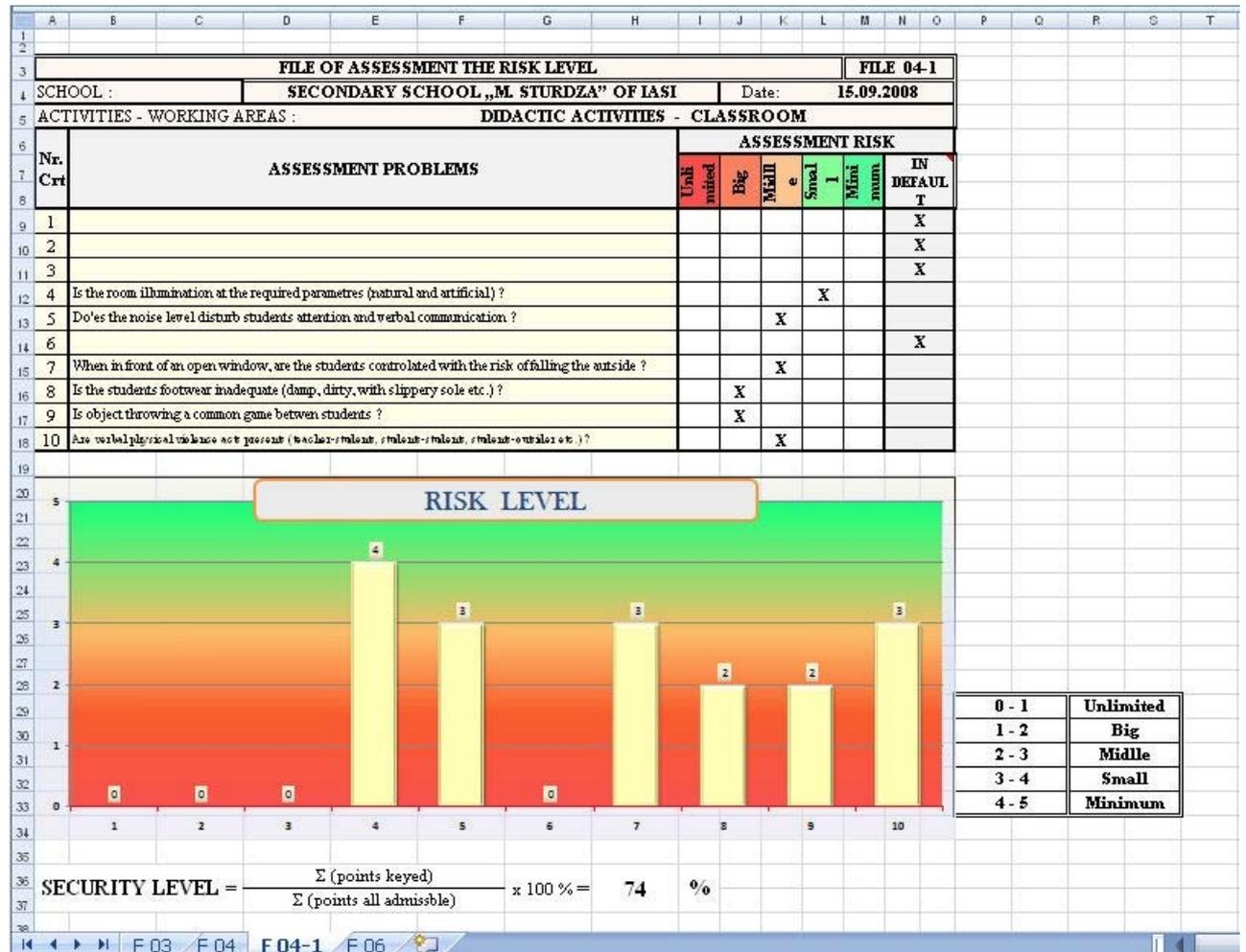
Sheet 06: global level of security (estimation) - stage VI

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Sheet 07: model evaluation report (measure prioritization) - stage VII.

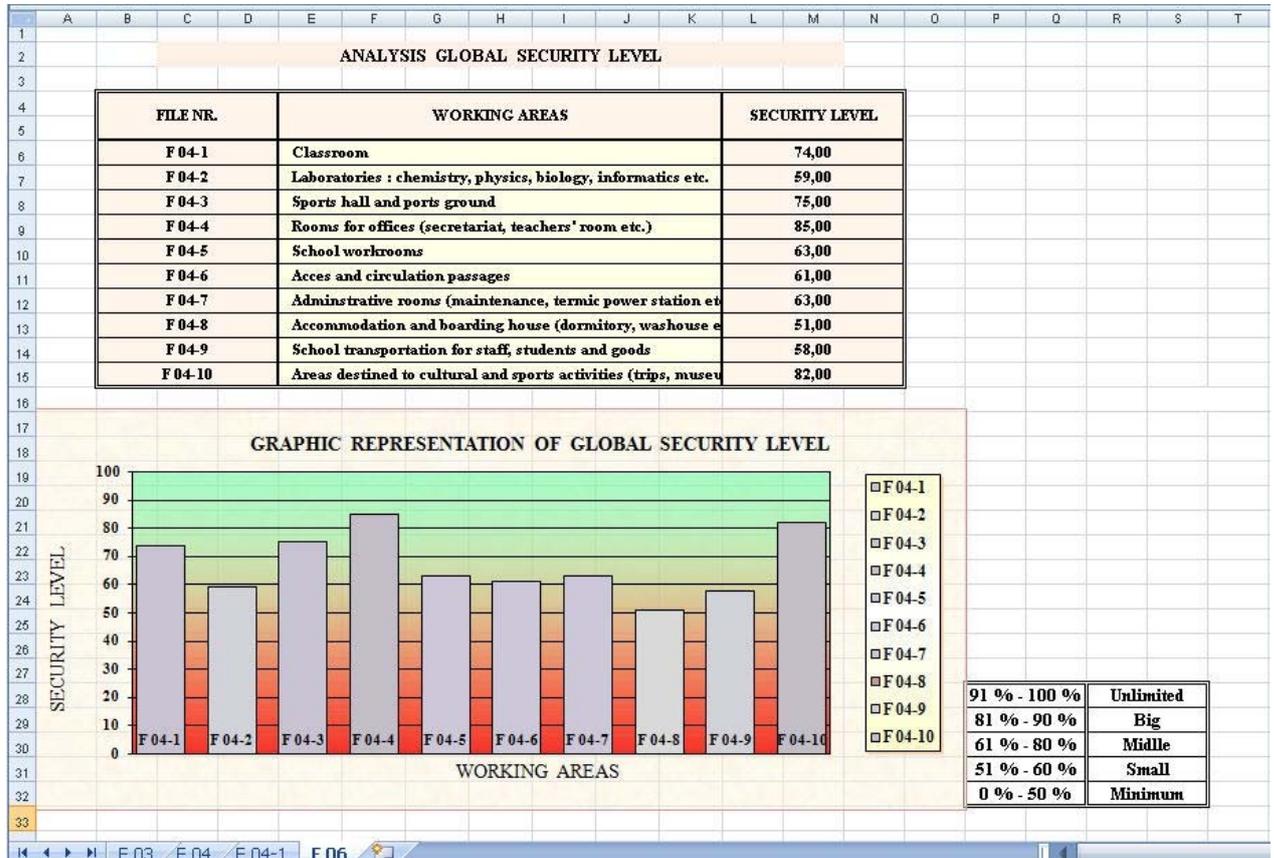
The security and the risk level of the different working areas are presented graphically (see figure 1), giving a clear overview of the risks. Afterward, all working areas are combined into one single table (see figure 2).

Figure 1. File of assessment of the risk level



Source: Gheorghe Asachi Technical University

Figure 2. Analysis of the Global Security Level



Source: Gheorghe Asachi Technical University

This contributes to the development of appropriate prevention measures. The guidebook also includes a set of recommendations on preventive measures to be taken for specific risks.

A team consisting of the school manager, the safety officer, the occupational physician, the representatives of school administration and the students is also formed to identify and analyse risks. The team is trained by specialists in the correct use of the guidebook. Corrective actions are suggested based on established levels of risk and priorities.

The first evaluation of risks at the Scholar Group M. Sturdza by an internal team went on for 4 months. The Scholar group included 81 teachers, 15 auxiliary teachers, 16 auxiliary workers and 1 042 students. The description of the activities was made by collecting information from teachers and the auxiliary staff, by studying the job descriptions, and by evaluating visits throughout the entire school. All the members of the evaluation team formed their own general opinion about the activities that took place.

During the process there were identified two types of didactical and auxiliary activities which include ten areas of work: classrooms, laboratories (Chemistry, Physics, Biology, Informatics), areas for physical education, offices (reception, teachers' room), workrooms, access and circulation areas, administrative areas (maintenance rooms, storehouses, steam generator), accommodation areas (dorms, cafeteria, laundry) means of transport belonging to the school (van), areas for cultural and sport activities (trips, museums, contests). The data regarding their identification and description was enclosed in the forms developed for the third stage of the guidebook.

The team identified risks stemming from students' habits or games (the risk of slipping on water from a dripping wet sponge, the risk of tripping or slipping due to lack of attention caused by the use of cell phones). Students took pictures and made movies with the dangers and their consequences. The

materials they created contributed to the preparation of a set of measures for avoiding these potential dangers.

A team was formed that was tasked with the implementation of preventive actions, the estimation of costs involved and the establishment of a process for the evaluation of the implementation of the measures and for the monitoring of their efficiency.

The inclusion of the students in the process proved to be very successful – they were very involved, they identified risks specific to them and their suggestions were innovative and creative. They initiated an exchange of information with students from other schools. The risk assessment results and the prevention plans were presented during meetings between the teachers, students and parents.

3.4. *What was achieved?*

The risk evaluation in the school was concluded with a report containing data referring to the identified risks, the risk level for each working area and also the global level of security. There were identified three working areas with a high level of risk: the laboratories, the accommodation areas and the means of transport; five working areas with a medium risk level: classrooms, administrative areas, access and circulation areas, the gym, the workrooms; and two areas with a low level of risk: the office area and some of the exterior areas. Depending on the identified risk and on the risk level of each working area concrete actions to eliminate or reduce risks were suggested and prioritized. Pupils' involvement and participation led to the identification of specific risks.

Before the project started there was a lack of awareness regarding many of the existing risks, however due to discussions and subsequent presentations a school-specific prevention culture was developed. Pupils took pride in the fact that they attend a safe, healthy school environment due to their efforts in enforcing prevention and protection measures; and teachers took pride in the fact that their school constituted a healthy, safe environment due to measures targeting work conditions improvement. Parents appreciated the school's efforts to create a healthy and secure learning environment.

The school manager decided to present the outcomes of the risk assessment and the established prevention plan on meetings with the teachers, students and parents. In the following school years, revisions of the risk assessment in the school will be conducted.

3.5. *Success factors*

The implementation of preventive measures recommended as a result of the risk assessment has led to improved health and safety among students, teachers and administrative staff.

- In one workroom, where heavy material with a high risk of accident was manipulated, a new electro-mechanical lifting structure was installed (see Figure 3).

Figure 3. A new electro-mechanical lifting structure

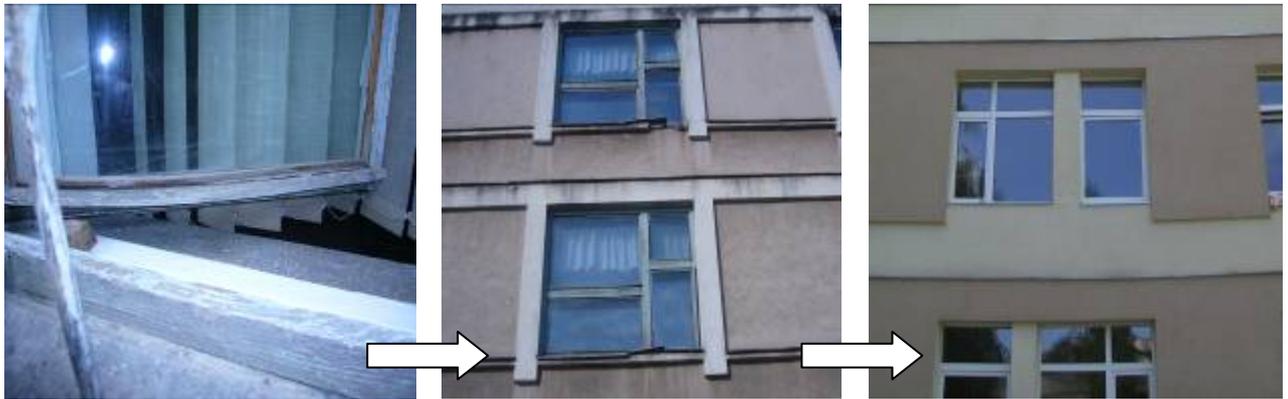


Source: Gheorghe Asachi Technical University

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- In the student dorm, windows were changed due to a risk of falling and hurting the people below (see Figure 4).

Figure 4. The windows were changed due to the risk of falling and hurting the people beneath



Source: Gheorghe Asachi Technical University

The guidebook exists in electronic form and can be constantly updated and improved when certain risks are eliminated and others identified.

The project resulted in very good co-operation between the university and the secondary school which led to the preparation of a risk assessment guidebook adapted for schools. The whole process ended in its systematic implementation at a school from the Iasi County in Romania.

The involvement of students in the risk assessment process significantly contributed to the development of a prevention culture among students. The final step, the promotion of the results, contributed to the safety awareness among teachers, pupils and their parents.

3.6. Further information

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3.7. *Transferability*

The principle of adapting risk assessment methods to the specific needs of schools is a very good idea that can be transferred to all companies facing specific working processes. The practical approach to risk assessment in schools as it was used in the project and the active involvement of students and teachers can be a model for all educational organisations.

4. References, resources:

Information provided by the organisation in the framework of the Good Practice Award Competition 2008/2009.

drd. ing. Andrei George Albulescu, drd. ing. George Daniel Tanasievici, prof. dr. ing. Constantin Baci, drd. ing. Gabriela Căldărescu, Partnership for a Safe and Healthy School, Good for students. Good for school.