Promoting safety –
a component in health
promotion in schools

**Bundesverband
der Unfallkassen**

ISSA · AISS · IVSS

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I. Preliminary remarks

"Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." (World Health Organisation, 1948)

Injuries and traumas caused by accidents can seriously affect the different constituent parts of this state of well-being. Educationalists, physicians and psychologists agree with the statistical data that accidents continue to be the main cause of death among children, teenagers and young adults in most of the highly industrialised countries. Situations of extreme stress constitute an additional risk for children

Against this background, the Regional Committee of the WHO for Europe decided that one of the principal objectives of its health policy in 1998 was " to reduce the incidence of the main diseases and injuries and alleviate the suffering they cause" (WHO: Health 21 health for all in the 21st century).

Schools have just as an important part to play in the accident-prevention process and the creation of safety-conscious behaviour as they do in the field of health care and preventive medicine. Childhood and adolescence are key stages for further development of the individual in later life. Schools reach out to children and young people during a phase of their development when behaviour patterns are still being shaped and formed. The chances of success in creating changed behaviour in these target groups are therefore greater than with adults. The proverb "you can't teach an old dog new tricks" or, one might add, more correctly, only with a great deal of effort, also applies to safety promotion. Behaviour patterns and life styles that have developed during childhood and youth usually determine the way we deal with risks and conflicts, for example, with alcohol and drugs, for the rest of our lives. Schools can exert a very powerful influence on this development. Swiss and British studies show, for example, that our time spent at school helps even out health inequalities and can have a crucial and significant influence on our attitude and perception of health. *(cf. Jean-Claude Vuille / Maya Schenkel: Evaluation of the project "Gesundheitsteams an Schulen" – "Health Teams in Schools")*

A long lasting improvement in the safety of children and young people at and through school requires a preventive approach that goes beyond the existing approaches of technology-oriented accident-prevention and behaviour-oriented safety-education schemes and

- in which safety is understood holistically and as a component that contributes to health in the sense of the WHO definition,

- is subject-oriented and less object-oriented;

- embraces the system as a whole and looks at the way organisation, individuals and environment relate to one another;

- is not directed solely towards the prevention of risks and dangers but also towards promoting resources; and

- is included in the planning process so that it is an integral part of development at school.

An approach of this type incorporating the traditional approaches of accident prevention and safety education can be described by the term "safety promotion".

If safety promotion is to be successful within the school context, it must take account of the educational framework determined by the target groups' structural and organisational conditions and the special features of the school system. Most of all, it must be geared to the school's mission to educate and train, which has two essential elements. School is meant:

- to teach the skills, attitudes and moral concepts that life and work require; and

-    to help develop the personality based on the principle of social responsibility.

Specifically, this means that the objectives, content and methods of safety promotion must be compatible with the objectives, content and methods of teaching and education at school. If it is successful in doing this, safety promotion should not place an additional burden on teachers, but supports the school in aspiring to be a "good" school.

II. The concept of safety promotion

The following sections describe the main aspects of the safety-promotion approach, and take into account existing practices of accident prevention in the school environment.

II.1 The subjective dimension of the term 'safety'

In the context of development, education and socialisation and therefore also in the context of school, safety is neither an objective parameter nor a static condition. On the one hand, it is hardly possible to fix a uniform scale and level for the safety of children and young people. Safety depends primarily on individual abilities, skills, ideas and cognitive capabilities; but it also depends on contextual conditions. Jumping over hurdles or doing the backward roll, for example, may place too great a burden on pupils with weaker motor systems and therefore constitute an increased accident risk, whereas for others who are more agile and experienced these tasks are not difficult at all. On the other hand, these abilities, skills, knowledge and attitudes are in a constant state of flux, especially during childhood and adolescence. They can change through learning, exercising, training or simply natural development. Stress, lack of sleep and fear may also affect the psychological disposition. Environmental conditions are also constantly changing. Collectively and individually, these changes may have a negative or positive influence on so-called safety-consciousness and the feeling of confidence and the subjective perception of risk.

Safety must therefore be understood as the result of a process of constant adjustment to outside demands and influences on the one hand and individual competencies and self-determined concerns and needs on the other. The aim of this process is neither to feel threatened, nor to be threatened, socially, emotionally, physically and intellectually.

This conceptual interpretation is also based on the assumption that ultimately greater safety cannot be achieved unless those concerned take part and act on their own initiative.

The subjectivity of the concept of safety in the design of safety promotion schemes relieves teachers neither of their duties of care and supervision nor of their responsibility for the health of pupils in their charge. It does however make them differentiate more and adapt their pedagogic means to the required preventive measures.

II.2 Risks and resources

Safety promotion is not directed exclusively to the risk-factor model, which is designed to identify factors that increase the probability of accidents or behaviour constituting a risk to health. Safety promotion at schools concentrates on the resources, i.e. properties and capabilities that help maintain, improve or restore both subjective and objective safety and – broadly speaking – health. Whether or not the safety of people is at risk is influenced by the type and number of risk factors they are exposed to, and above all, by the resources they have available to counter these risks.

Basic requirements for maintaining or restoring safety is safety-relevant knowledge and motor and sensomotor capabilities and skills, as well as a sense of coherence and competence in daily life.

By a sense of "coherence" we mean a lasting, dynamic feeling of (self-) confidence in people, characterised as follows:

- The demands of the environment are comprehensible (comprehensibility).
  At school this should result in a realistic risk assessment .

- Resources are available or can be developed to manage these demands (manageability).
  Children and young people with a sense of coherence are capable of protecting themselves against dangers, either by refusing to enter risky situations or, for example, by acquiring additional abilities and skills, such as learning to fall or balance properly.

- The demands are seen as challenges worth spending time and energy on (meaningfulness).
  For young people who have this sense of coherence investing time and energy in learning a new sport "makes sense".

(cf. Regina Krause: Risiko-Kommunikation risikolos und effektiv gestalten, in: Neue Wege zur Unfallverhütung im Sport – Designing risk communication to be effective and risk-free – in: New Ways to Accident Prevention in Sport, p. 60).

The more coherence that people have, the less likely they are to put themselves in risky situations.

Competencies and capabilities to manage daily life as understood by the WHO concern adaptation and positive action enabling individuals to handle effectively the requirements and challenges of life. (WHO 1998: Health Promotion Glossary. Geneva, p. 6). This includes capabilities such as decision making, problem solving, developing capabilities to communicate, social and personal competencies, etc., in other words, those aspects that enable children and young people to take control of and shape their own lives (Cornelia Oertle-Bürki: Gesundheit – Health 21, Bern 1999, p. 43).

The furtherance of these resources goes well beyond school and safety and is more generally preventive in scope. Accordingly, comprehensive safety promotion schemes have rather non-specific effects since several aspects of safety and well-being are often improved simultaneously unlike traditional accident prevention measures that are designed to have a specific effect on certain types of accidents. For instance, safety-promotion measures aimed at shaping the school environment to encourage physical activity may not only lead to pupils becoming more physically active but also reduce the number of acts of violence, thus increasing pupils' self-esteem and the well-being of the group as a whole. This non-specific effect of safety promotion, however, makes it more difficult to evaluate such actions and schemes, because there is a lack of clear indicators to assess their effects.

II.3 Altering behaviour and conditions

A key point in safety promotion at schools is modifying the behaviour of people living, learning and working in school. In principle there are three aspects that go with this:

- communicating knowledge and capabilities that promote safety;

- reinforcing a positive attitude towards safety-minded behaviour;

- motivating people to make use of their own knowledge and capabilities and to translate them into corresponding safety-promoting actions.

The concept of safety promotion extends this pedagogical approach (safety education) to take account of the system and relation to other walks of life. Safety promotion assumes that

modifications to behaviour and decisions about how to behave do not take place in a vacuum but relate to everyday situations, in other words wherever people live, work, learn and play and spend most of their time. School provides this type of learning, living and experiential environment not only for children and young people, but also for adult teachers and non-teaching staff. The structural, organisational and social design of this environment can have a major influence on the safety and health-conscious behaviour of children and young people. So safety promotion at school starts out with individual resources and builds upon them. At the same time other influential conditions are designed in such a way (design of the school as a workplace that is geared to the needs of pupils and teachers) that makes it possible to maintain or improve safety. Safety promotion is therefore concerned with designing the school as a workplace that is appropriate to the needs of pupils and teachers.

One aspect that has a major role to play in this context is obviously the school climate. A Bern study on health-promotion schemes at schools concludes that the years spent at school help to socially equalise the opportunities for staying healthy, thus confirming studies carried out in Great Britain. From the 6th grade onwards, according to the Bern study, the school climate has a much more important influence on the well-being, health and the health-conscious behaviour of children and young people than their social status. British studies have shown that the state of health and health-conscious behaviour at school-leaving age plays a very important part in future health and social development. What children experience in relation to safety and health in school is therefore far from irrelevant to their lives as a whole. (Jean-Claude Vuille/Maya Schenkel: Evaluation of the project "Gesundheitsteams an Schulen" in der Stadt Bern: Erste Resultate – "Health Teams in Schools" – Initial Findings Bern, August 2000). Even so, the question of the factors responsible for creating a good school climate conducive to safety and health remains open and needs to be examined in more detail.

II.4 Safety and risk

Safety promotion must not be equated with overprotection and minimisation of risks. People's safety depends mainly on the risks they are exposed to or seek out for themselves and the way in which they have learned to deal with these risks. Safety-conscious behaviour therefore calls for a self-reliant person who has learned to act responsibly and deal with risks in a competent manner. This is why it is just as important for safety promotion to allow adventure, exploration and risk taking as it is to have legislation and limits in place.

Risk competence is understood as the ability and willingness to recognise risks and dangers, to know how to deal with them and, if necessary, to eliminate them, thereby creating a new and safer situation. As they grow older, pupils need to acquire this risk competence as part of promoting safety at school. Among other things, this also means dealing with real risks.

For legal and pedagogical reasons, teachers and even pupils may find that managing risks not only involves adjusting or tolerating them. Being risk-competent and able to manage risks also means developing risk-compatible behaviour patterns and designing situations in such a way that risks can be assessed. Risk situations must be designed to avoid any damage to health. Specifically, this means that pupils must have a realistic chance of dealing with risk as it occurs; for example, in school sports, and also that their health must not suffer if they fail to do so.

What is required therefore is the ability to take a calculated risk. Safety promotion makes it necessary to strike a balance between the level of expectation, the difficulty of the task and the degree of competence. On the one hand, this requires teachers to possess the technical competence and a sense of responsibility and, on the other hand, that they are capable of identifying and interpreting situations involving hazards or risks, as well as judging the current state of health and physical fitness of the children and young people in their charge.

Integrating the element of risk in safety promotion is both reasonable and necessary because risk-related behaviour is part of the normal, healthy development of children and young people. Taking risks and seeking out dangers in their most varied forms are part of childhood and, even more so, of adolescence. By taking risks, children and adolescents test their own capabilities, skills and psychological dispositions, as well as their social stamina, in order to find out exactly what they can do. Braving adventures and handling risks confirms one's confidence, not only in one's own abilities and in oneself as a person, but also in others and in one's own standing in the peer group hierarchy. (cf. Hurrelmann, Klaus: Risikoverhalten und Kick-Erlebnisse im Jugendalter – Risk-related behaviour and living-for-kicks in youth and adolescence – p. 4-5).

II.5. Objectives and fields of action

Taking account of both the school's training and educational mission, safety promotion schemes at schools must have the following objectives

- to empower not only pupils, but also their teachers and non-teaching staff, to make informed, competent choices about their safety.

- to ensure that the school is an environment that facilitates people's safety options, thus minimising safety problems.

This wide-ranging objective can ultimately be achieved only if the promotion of safety is an interdisciplinary measure integrated into lessons in different subjects, as well as in routine school matters and school life in general. It is necessary because teaching and learning take place not only in the classroom but also throughout the entire school building, and in the school playground, as part of the process of co-existing with fellow pupils and teachers. Sustainable, wide-ranging safety promotion must therefore always be designed within a school-development scheme to foster a safety-conscious attitude and correspond with the criteria and conditions of school development processes:

➢ Firstly, safety promotion must relate to the whole school system. Individual problems that need to be identified by the respective school or by the people working there may help stimulate reform, i.e. they may serve as starting and anchor points for safety-promoting processes in school. Consequently, in addition to the implementation of safety-promoting measures in the school itself, for example, redesigning the school playground, handling hazardous substances, psychomotor movement exercises, etc. this calls for the promulgation of the idea of safety promotion among teaching staff and the institutionalisation of the school work in the sense of school development that promotes safety and health. The latter involves not only maintaining initiated measures but also, and primarily, continuously rethinking and innovatively redesigning the school as such. Forces inherent to the system should be harnessed for this purpose and a development process initiated with the aim of achieving organisational autonomy.

   Safety promotion as a component of school development calls for the active co-operation of the entire teaching staff, the head of school and school management. In this process, it is incumbent on external institutions such as pupils' accident insurers, for example, to create awareness, to provide information and advice, and to offer support and backing in a wide variety of ways.

➢ Above and beyond this, safety promotion as a component of school development must also take account of the mainstays of that development. These are: the development of equipment, staff, teaching and organisation.

   Staff development covers the teacher's active didactic repertoire, research and self-assessment, reflection and feedback, as well as co-operation and work allocation.

Teaching development subsumes such terms as guiding pupils, interdisciplinary learning, method training, self-study teams, extended forms of tuition and a learning culture.

The aim of organisation development at schools is the creation of a so-called learning school. This is a school where, through practical action, teachers can change their daily routine and the school in a way that enables them to be more satisfied and successful in their teaching and allows the pupils to be more satisfied and successful in their learning. Another mainstay quoted in the literature is equipment development. This relates not only to the value of equipment and apparatus but also to the furnishing and design of rooms. (cf.: Thomas Petzel: GimS. Gesundheitsförderung in und mit Schulen – Abschlussbericht – The promotion of health in and with schools – Final report, p. 52 ff.)

The implementation of these objectives requires different measures and activities for the target groups, assigned according to their content, in five fields of action. There is a great deal of overlap and interdependency between these fields of action:

➢ Building and equipment: school building, classrooms, school grounds, ergonomics, sports halls, sports equipment, etc.

➢ Organisation and organisational development: school climate, rules during break-times, school programme, safety organisation, communication, appropriate timetabling of classes, etc.

➢ Teaching: lesson content, planning and implementation of lessons, first aid, etc.

➢ Education: violence prevention, capacity for teamwork, self-reliance, self-reflection, etc.

➢ Political and framework conditions: regulations and laws, curriculum and guidelines, working with parents, network formation, co-operation, public relations, etc.

The overview of the fields of action and, especially, the examples of topics, show that there are many interfaces and possibilities for networking them with other topics of health promotion and interdisciplinary educational tasks such as, for example, education and the environment, traffic training schemes or physical education. As far as practical work is concerned, this makes it necessary to co-operate with other institutions that are not, or primarily not, dealing with questions of safety.

III. Measures

The choice of measures to bring about safety promotion in schools depends on the existing structures and systems in each country. Irrespective of the national position, the following measures can be considered:

1. Qualification

Qualification measures are intended to motivate and provide the means for multipliers (those training the teachers) and decision makers to initiate and support health- and safety-promoting processes at school. Qualifying measures include, for example, training courses, seminars, meetings of experts, congresses, professional talks, round-table discussions, talks on specialist subjects and also participation in trade fairs.

2. Communication

Mass-communication measures using different mechanisms (principally advertisements, posters, brochures, newspapers, videos, CDs and the Internet) enable a wide circulation of the contents of the material to support safety-promoting processes. They are suitable for drawing attention to a topic, for triggering initial responses to the subject and for providing additional information.

Staff-communication measures are suitable for consolidating and specifying the contents of any given material and for providing initial access to safety-promoting processes. Their objective is to help staff relate personally to the topics, to explore special issues and to learn by means of examples. This group of measures includes exhibitions, theatre, dance and music, action-related schemes or peer projects.

Another field of communication is sponsoring. It makes particular sense if it is impossible to actively support safety- and health-promoting activities of other organisations, but if they are otherwise suitable for encouraging these matters, for enhancing people's awareness of the association or of its concerns, or for purposes of sharpening one's public image in the direction of social competencies or for engendering sympathy.

3. Guidance and advice

Providing guidance and advice are among the basic measures required for accident prevention. These measures aim to provide support and assistance to school management and its functionaries, as well as to the bodies responsible for meeting the costs of the school's equipment and materials, in the conception and implementation of safety-relevant measures.

4. Quality assurance

Safety- and health-promoting measures have to be effective. This requirement makes not only the evaluation of measures necessary, but also the preparation, evaluation and processing of the basic scientific foundation (basic research).

What is also required beyond this is the development, testing and evaluation of innovative strategies and methods, for example, as part of pilot projects, and the drawing-up of basic rules within the framework of school regulations and the regulations of the pupils' accident insurers.

IV. Planning and implementation

The following points should be taken into account when planning a safety-promoting involvement: [1])

1. The measure must have a theoretical foundation. In particular, it should state what factors will be influenced by the measures, what effective mechanisms are taken as a starting point and what effects are to be expected (in the short, medium and long term).

2. Safety-promoting measures need to have as large an interdisciplinary bias as possible and make allowance for the theoretical and methodical approaches of the various disciplines involved. The health sciences have shown that health problems can often be resolved only if different disciplines work together.

3. The target group needs to be clearly defined: interventions are often not specifically differentiated although it is now common knowledge that a specific effect can be assumed. Studies investigating the effectiveness of drug addiction prevention programmes that combine knowledge communication with an improvement in life skills, for example, show that most of all those pupils who can profit from such interventions least require them. It can be assumed that programmes that do not differentiate according to gender, age, social stratum and/or ethnic affiliation have hardly any effect.

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[1]   cf. Petra Kolip: Evaluation und Weiterentwicklung des SPP III "Jugendliche und junge Erwachsene" – Evaluation and Further Development of Addiction Prevention Programme III "Juveniles and Young Adults" – of the Swiss Foundation for Health Promotion - July 19, 2000

4. The needs of the target group must be made clear. In the safety-promotion field many measures are developed within the isolated confines of the conference room without any reference to the actual requirements of the target group. A procedure that is scarcely acceptable for programmes aimed at adults is completely unsuitable for the target group of young people. Young people have little interest in safety topics; they think of themselves as invulnerable, live for the "here and now", want to feel their strength and test their physical limits, and have a short perspective in relation to their bodies and health. What is important to them is a zest for life and well-being; they will willingly take a chance with their health if it enhances their current feeling of being alive. Measures that take the subjects of safety and health as their approach are therefore not very promising. There are, however, subjects and topics that young people are concerned about and that are connected to health and well-being or through which it is possible to convey safety-relevant subjects and messages. It is therefore desirable, and in part absolutely necessary, to involve the target groups in the planning of the measures.

5. The respective setting must also be taken into account: the safety promotion intervention must match not only the respective target group, but also the setting. In doing so, it is necessary to keep in mind that school is not a homogenous setting. The various school types, as well as individual schools of one type, can be very different from one another. A major finding of the GimS project (project on the promotion of health in and with schools) was that secondary modern schools operate with a far more traditional concept of health than grammar schools. As a pedagogical unit, every single school provides different framework conditions - in terms of organisation as well as contents - that have to be taken into account. This means that the framework conditions not only impose constraints on particular situations but also that they can be used to increase the effect of a measure or project.

6. It makes sense to combine behaviour-related and setting-related involvement. Behaviour-related safety-promotion interventions are not meant solely to reflect social and structural framework conditions. Rather, they are only successful if behaviour-related measures are supplemented by setting-related measures and vice versa. An initiative to promote safety at school could, for example, also include the redesign of the school playground to pupils' requirements.

7. It is necessary to consider emotional components and a large variety of didactic approaches to safety-promoting measures. Many projects concentrate on the cognitive level by transmitting safety-relevant knowledge. Psychological research has shown, however, that a three-stage process needs to be assumed, namely: knowledge - attitude – behaviour. Passing on knowledge is not sufficient on its own; the objective must be to achieve a change of attitude. But even if one succeeds in changing the attitude, one cannot be sure that the behaviour will change as well. Numerous psychological mechanisms must be assumed in this context. If changes are to be achieved at all, this can only succeed if the target group is addressed not only at the cognitive, but also at the emotional and pragmatic levels. Safety must be something that school-children can experience and perceive for themselves. The aim cannot be to preach negative messages but to offer positive messages that can also be experienced through the senses. Apart from this, pupils must receive training in their newly acquired skills and capabilities. Different didactic approaches need to be chosen for this purpose in order to address the target group at the largest number of levels possible.

8. Sustained safety promotion must be designed for the long term and as a continuing process; and it must be embedded in a framework (school development). Evaluations in recent years have shown that selective, isolated campaigns have only little effect. Project weeks may provide a welcome interruption to school routine but they hardly display any long-term impact, especially beyond the school gates. Selective campaigns and isolated

measures, however, are reasonable and necessary as PR measures, to sensitise people to the problem or as a starting point for other activities. They are necessary to eliminate acute dangers and non-negotiable risks.

9. Projects and actions taken need to be evaluated. Without a demonstration of their effectiveness it will be difficult in the long term to establish safety promotion, in the sense of the enhancement of a resource, as an approach that holds out the promise of success.

10. Co-operation with partners may be useful and necessary for implementing measures. It may relate to the achievement of consensus with regard to objectives and/or implementation of measures. Co-operation is necessary because:

-   there is a great deal of overlap between the main individual topics that form part of a health-promotion system;

-   school resources are limited and opportunities for involvement must not be overrated. Too many projects and activities would have a demotivating effect;

-   limited personnel or and financial resources can be used more effectively and different aspects and problems can be handled as an integral concept at school;

-   it helps in obtaining and improving information and so provides more effective measures and processes.

11. Measures and projects, etc. must be designed in such a way that they represent a "win win" situation for all parties involved.

Closing remarks

Safety promotion as a component of health promotion is a further development of the traditional approaches of accident prevention and safety education. It is an integral approach that includes everybody involved with school and aims to enable all those concerned, especially the pupils, to shape their own safety. The educational and training processes called for need to be supported and facilitated by teachers as well as parents, school authorities and non-educational institutions.

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