

KomPass - An Innovative Approach to Qualify School Crisis Prevention Teams

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ABSTRACT

For the prevention of targeted violence, and for the prevention of crises, the qualification and establishment of school crisis prevention teams is nationally recommended in Germany. In some German states (e. g. Hesse) this is even made mandatory by the respective provincial Ministry of Education. The *KomPass* project met this recommendation through an innovative approach in one of its qualification programmes in which knowledge is not mediated to the future crisis team members in traditional classroom events, but rather through the online learning portal *KomPass*. This online portal is nestled in a blended learning environment which provides for the combination of classroom and online phases. In these phases, the future crisis team members are supervised by certified “*KomPass* coaches”. *KomPass* is an excellent example of this type of learning in further education, as the developed portal and qualification programmes are now successfully used in this setting.

This article reports on the instructional design of one component of the *KomPass* project, the blended learning qualification programme for (future) members of crisis teams at schools which concludes with a certification.

THE KOMPASS PROJECT

The *KomPass* project, “Crisis intervention in schools during major disasters – development of digital media for the qualification of professional educators, teachers and trainers”, was a collaborative project with three equal partners. It was funded by the German Federal Ministry of Education and Research (BMBF) and the European Social Fund (ESF) of the European Union (EU) from July 2012 to June 2015, and was located in BMBF programme “New Media in Vocational Education”. The aim of this framework programme is the integration of new media as means of teaching, learning, working and communication in the qualification and further education, as well as quality improvement of learning opportunities through media support.

The partners in the joint project were National Institute for Preventive Action of Saarland (Landesinstitut für Präventives Handeln – LPH) as project coordinator, the Center for Learning Technology (CeLTech) at the University of Saarland, the University of Applied Sciences of Saarland (HTW Saarland), the German Research Center for Artificial Intelligence (Deutsches Forschungszentrum für Künstliche Intelligenz – DFKI) and the Institute of Psychology and Threat Management (Institut Psychologie und Bedrohungsmanagement – I:P: Bm). The project partners formed the steering committee of the project, which was the governing body for operational and administrative project issues.

Likewise, the project structure provided an advisory board, which served as a strategic and professional institution with advisory and supervisory function. Well-known representatives from the disciplines of psychology, pedagogy, and computer science constituted this advisory board.

Objectives of the project were the design, development, deployment and ongoing implementation of an interdisciplinary digital information and training portal with application-oriented and action-guiding information and eLearning courses on the topics of crisis intervention in major disasters and the prevention of targeted violence in schools. The content of the online learning portal *KomPass*, which assists in the qualification of crisis teams, thus relates to school crises, and is exemplarily illustrated using the theme of school shootings. Overall, there is still a high demand for training and skills development to prevent and to deal with crises at schools; *KomPass* came in at this point and was very well received from the audience, which is reflected in the evaluation results and demonstrates the success of the work done.

Based on current scientific and conceptual approaches and taking into account comprehensive findings from the practice of school crisis intervention, 13 online learning modules were developed for the online portal *KomPass*, additional information (expert interviews, e-book, links) and practical tools (exercises, case studies, knowledge tests, crosswords, Wiki, FAQ), as well as discussion and exchange forums for various target groups were provided. These online components are complemented with qualification programmes for multipliers for the *KomPass* portal (“coaches”). The project aimed at offering three of these “*KomPass* qualification programme for coaches” in three different provinces of Germany during the project – always in cooperation with the relevant state ministries and responsible authorities and school psychological services. Based on the use in the various provinces, the online portal and the associated “*KomPass* qualification programme for crisis teams” along with its 13 online learning modules and the multiplier seminars were subject to multiple quality assurance cycles. During the project, a model was developed that allowed the structural integration and stabilisation of the developed programmes after the end of the project. This was based on an exploitation plan that includes assurance of appropriate spatial and temporal unlimited rights to use content, technology and services.

Management of *KomPass* project

In third generation eLearning programmes, the “visual, auditory and textual material flow, interact and enhance each other in a coherent, holistic fashion” to enrich the learning experience (Gray, Ryan, and Coulon, 2004). With the advancement of technology, eLearning projects become more complex, and it became unavoidable for the *KomPass* project to adopt a team-delivered project mode. Team-led projects usually result in the experience of various struggles. The *KomPass* project has confronted these known hurdles in advance by clearly dividing the responsibilities between the partners.

The Institute of Psychology and Threat Management (Institut Psychologie und Bedrohungsmanagement – I:P: Bm) delivered the content. I:P:Bm develops and communicates prevention concepts for everyday life of different professions, which combine research, practical case studies and training. In 2003, I:P:Bm published the first

study on targeted violence and school shootings in Germany (Hoffmann, 2003), and an extensive study in cooperation with the Technical University of Darmstadt, that presented clear early warning signs for targeted violence (Hoffmann, Roshdi, and Robertz, 2009). As early as 2003, I:P:Bm started with the first training course on the prevention of school shootings for the school psychology service in Rhineland-Palatinate. Until today, several thousand professionals from Germany, Switzerland and Austria have taken part in these training courses. I:P:Bm's prevention approach of threat management is interdisciplinary oriented so that members of different professional groups such as pedagogy, psychology, police, social work and psychiatry can work together within this methodology. I:P:Bm's concept for school crisis teams is called "System Safer School" ("System Sichere Schule") and was selected by Saarland and the Swiss canton Solothurn as foundation for their programmes on the prevention of school shootings.

The instructional design was provided by the National Institute for Preventive Action of Saarland (Landesinstitut für Präventives Handeln – LPH). LPH is divided into four departments – Educational prevention, crime prevention, health promotion, and evaluation research. The tasks of LPH lie in strategic and planning areas, in the active design and implementation of measures and evaluation and research. An additional emphasis is on interagency networking, in the recommendation of target leading projects and assisting in the planning of activities and projects in the field of prevention. A key project is the training of crisis team members, which was developed and implemented in close cooperation with I:P:Bm and their "System Safer School" in 2010. In principle, all secondary schools in Saarland have the opportunity to book this attendance day qualification series for their (future) crisis teams, which consists of six modules. Within the feedback of this qualification series, the need for further vocational training in the area of school crises was paramount.

The Center for Learning Technology (CeLTech) handled the creation of the technical design. The Competence Centre Virtual Saar University (CC VISU), which is reported as a unique scientific institution in regard to the exploration, development and (sustainable) implementation as well as consultancy on innovative eLearning technologies on the international and national level is operated by the University of Saarland since 1999. CC VISU cooperates with the Competence Centre eLearning of the German Research Centre for Artificial Intelligence (DFKI) since the beginning of 2010 under the umbrella of the Centre for eLearning Technology (CeLTech). The objectives of the project with regard to the technical part focused on building a technology-based organization and infrastructure for both project-specific and sustainable support of management processes for supply-based or demand-induced digitization of information and knowledge resources of the complex phenomenon of school shootings. The focus was on interdisciplinary design, production, storage and distribution of digitized information and knowledge resources that are to be used in schools, youth training centres as well as academic education and training (Nagel, Dörr, Hoffmann, Igel, and Roshdi, 2014). The main questions for the project-specific development was on the one hand how digital media can be integrated into the process of information and knowledge generation, documentation, and dissemination based on author-centred approaches (web 1.0) and user-generated content (web 2.0), and on the other hand how digital media technologies can change the processes of design, production, storage and distribution of high-quality teaching and learning content in heterogeneous technological environments to be used via browser or mobile devices (Bloch, 2010, p. 22).

For a heterogeneous target group – from school staff, professional educators, school psychologists, police officers and management personnel in educational institutions to staff from teacher training institutions and other educational institutions – *KomPass* provides qualification courses, thematic modules, advanced options and tools for communication and collaboration with each other, and thus opens the chance for debate, exchange and in-depth training. It aims at providing high-quality means of education that are not only cost and learn effectively but deliver the service to the satisfaction of its users (Bloch, 2010, pp. 55ff.). During the project

Structure of the *KomPass* Project

The project structure of *KomPass* was divided into four phases: design phase, development phase, trial and evaluation phase and finally the supplementary phase (see Figure 1). The scientific basis was identified by I:P:Bm and was linked to ideas about technology (CeLTech) and media-didactic concepts (LPH) in the conception phase at the beginning of the project. Building upon these decisions, basic design considerations and the areas of responsibility of each partner in the project were determined. The content and modules for the two *KomPass* qualification programmes as well as the didactic structure of these qualification programmes were developed in the subsequent development phase. First qualifications took place during the trial and evaluation phase (see the section on *Monitoring and Evaluation*). Moreover, assessments of the qualification programmes for coaches and the modules were held. Additionally, the *KomPass* qualification programme for crisis teams and the modules were evaluated by different user groups that could already use the online portal.¹ In the final supplementary phase the modules and the *KomPass* qualification programme for coaches were revised before the project ended. In addition to the overarching project phases, cycles of revision were incorporated and always gave one partner the lead and structured the feedback process of the other partners.

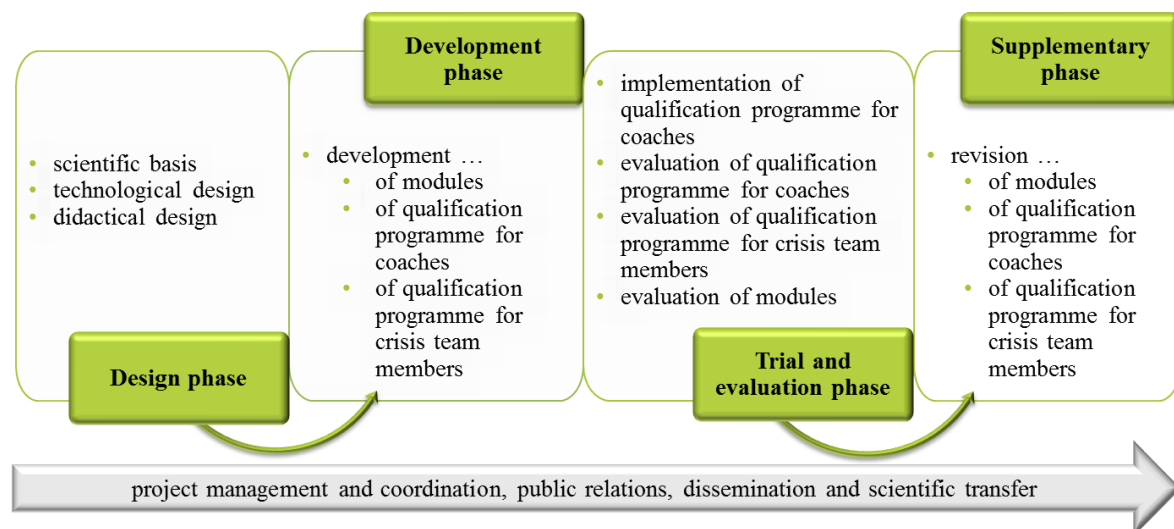


Figure 1: Structure of the *KomPass* project

KomPass to this day consists of two core elements (see Figure 2), the “*KomPass* qualification programme for coaches” and the “*KomPass* qualification programme for crisis teams”.

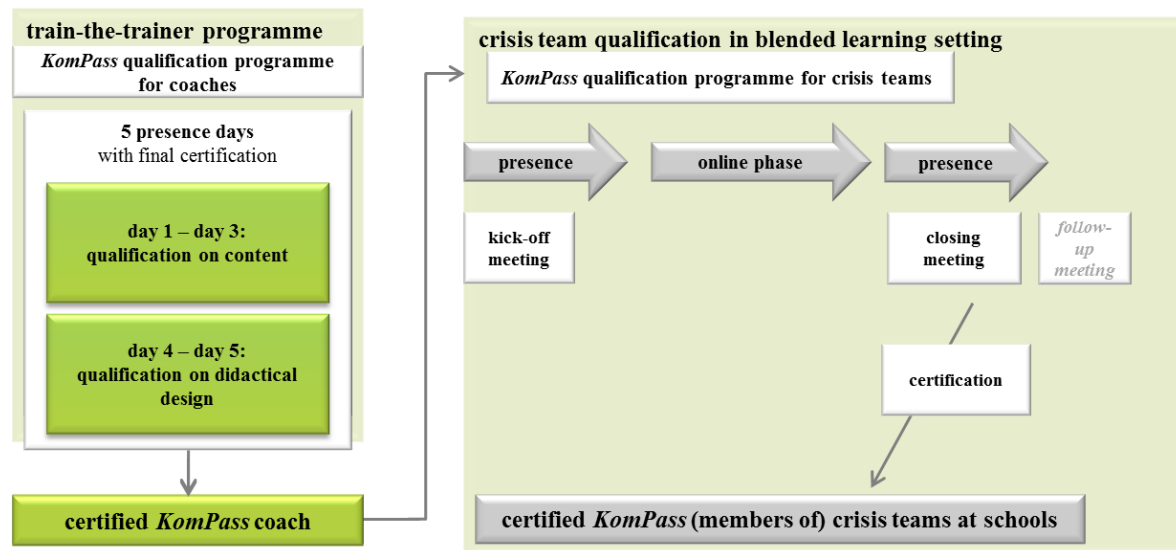


Figure 2: Core elements of the *KomPass* project

The “*KomPass* qualification programme for coaches” is a five-day attendance train-the-trainer qualification with the objective to train coaches for the qualification of crisis teams. The qualification for coaches is always offered in cooperation with the relevant state ministries and responsible authorities and school psychology services. After certification, coaches can carry out *KomPass* qualification programmes for crisis teams at their institutions in their respective states. The five-day qualification programme for coaches includes information on the main findings to targeted violence in schools, risk assessment and case management, setting up school crisis teams and preparation for an emergency, as well as behaviour in a crisis. On the other hand, didactical aspects are taught, which relate to the functions and tools of the online portal *KomPass*, and the duties and functions of a *KomPass* coach in a blended learning setting are addressed. These seminar topics are supplemented by the presentation of the project-specific monitoring and evaluation framework (see section on Monitoring and Evaluation), which transparently outlines the evaluation activities during the project period and shows how the effectiveness of the online portal *KomPass* and the crisis team approach are recorded. The training concludes with a certification. During the project period, 5 of these *KomPass* qualification programmes for coaches were carried out.

The “*KomPass* qualification programme for crisis teams” is a qualification programme for school crisis teams in a blended learning environment in which they are supported and trained by a certified *KomPass* coach. In the concept of blended learning, the attendance phases and the eLearning phases alternate (Häfele and Maier-Häfele, 2004, p. 15; Reinmann, 2011, p. 7). The attendance days are used for networking, deepening acquired knowledge e.g. through discussions, as well as an exchange of experiences, while eLearning phases focus on acquiring knowledge by self-guided, individual and

collaborative, learning (Kopp and Mandl, 2011, p. 141). The *KomPass* qualification programme for crisis teams is based on this blended learning approach: the kick-off event (attendance) presents the participants with a thematic introduction and an introduction of the online learning portal *KomPass*. Teacher-led activities in these classroom settings include simulations and exercises as well as group work. Fundamental to the subsequent online phase is this digital learning portal (see Figure 3). The “*KomPass* qualification programme for crisis teams” qualification is primarily used for the training of teachers of secondary schools and vocational training institutions, and where appropriate, school management, further (social) educational personnel (e. g. school workers), but also other potential future crisis team members (e. g. administrative staff in schools, police). The closing meeting (attendance) offers a summary of the contents and the opportunity to reflect and resolve outstanding issues. With its blended learning setting the *KomPass* qualification programme for crisis teams is the focal point for the following explanations on the instructional design of *KomPass*. During the project period, one of this *KomPass* qualification programmes for crisis teams was carried out.

KOMPASS QUALIFICATION PROGRAMME FOR CRISIS TEAMS

KomPass has become an innovative approach in vocational training beyond the initial project period, combining eLearning with attendance days into a blended learning setting to improve teacher’s skills and professionalization in the field of school crisis prevention. The term eLearning refers to all forms of learning in which digital media are used for the distribution and presentation of learning materials including the support of interpersonal communication in learning processes (Klimsa and Issing, 2011, p. 14). Knowing that eLearning is not the ultimate panacea in vocational training and also knowing that face-to-face interaction is favoured by a large proportion of learners, especially the target group of this programme (teachers), the *KomPass* project actively decided on a blended learning approach to the qualification programme for teachers in becoming school crisis team members. Blended learning has become the strategy of choice for a variety of training projects in vocational training settings (Gray, Ryan, and Coulon, 2004). The decision for the blended learning approach as instructional design for the *KomPass* qualification programme for crisis teams was motivated by the intention to provide maximum sustainability. And as the results show, this aim was achieved (see section on *Results and Benefits of KomPass Project*). The acquisition of knowledge takes place independently, individually and self-paced – something that classroom teaching cannot provide – and leads to a deeper understanding and sustainable knowledge (Schulz-Zander and Tulodziecki, 2011, p. 41). The own flexible setting of each learner’s timetable additionally allows for joint training across schools and school types.

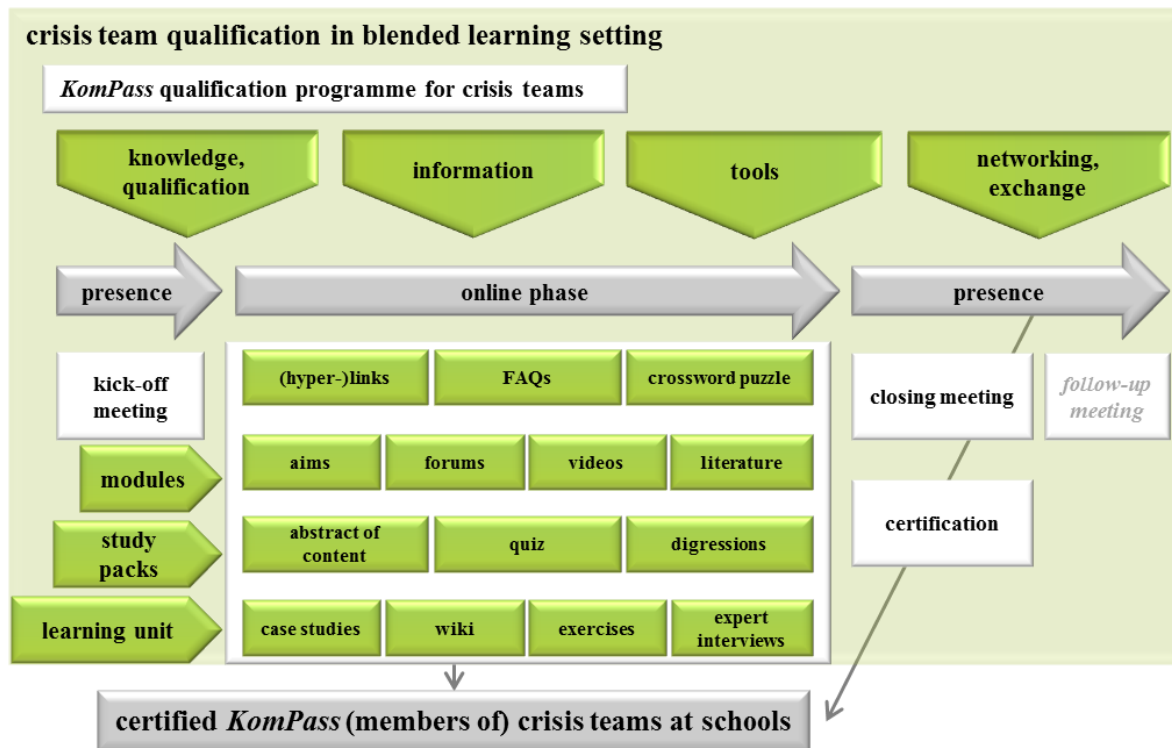


Figure 3: *KomPass* qualification programme for crisis teams

Instructional design

In order to meet the needs resulting from heterogeneous professional interests and previous knowledge of the target group, the didactic approach of “constructivist instructional design” (Kerres, 2012, p. 197) was used to design the *KomPass* qualification programme for crisis teams. The instructional design refers to both aspects of instruction as well as learning. The pedagogic principles and models of learning underpinning the effective design of the *KomPass* qualification programme for crisis teams can best be summarized as “constructivist instructionalism” (Kopp and Mandl, 2011, p. 143).

The constructivist instructional design focusses not only on the importance of the relevance of the transmitted knowledge to the learner (“instruction”) to achieve effective learning. It also highlights the importance “of the concept of the learner as constructing his world of content, as he confronts newly-learned material with his existing knowledge” (Laister and Koubek, 2001). It is accompanied by the realization that learning processes are subjective processes: Adult learning should be seen as a “life-world related cognitive process” (Arnold, 1996, p. 193), in which new experiences are incorporated into existing interpretive schemes. That means that knowledge cannot be provided in a linear manner, but is built and designed in the situation of personal experience. This is complemented by the need for social interaction – horizontal between the learners and as an inherent ingredient of the learning process and the importance of a meta-cognitive level of learning and discussion (Laister and Koubek, 2001; Bloh, 2010, pp. 41ff.; Issing, 2011, p. 32; Schulz-Zander and Tulodziecki, 2011, p. 41). The possibility to interact – not only with the content but also

with other users and the coach – was an important part in the creation of the online portal *KomPass* to achieve collaborative learning.

Instructional aspects are particularly evident in the pre-selection and structuring of teaching content on the online portal *KomPass*. This includes defining the content of teaching, the teaching objectives, the methods as well as the exercises and case studies. This pre-selection includes an implicit recommendation (e. g. order of modules, cross-references within the modules or thematic linking options) for the design of the individual learning process. Modules 1-6 are about theoretical knowledge, whereas modules 7-12 are based on the actual work of the school crisis team and complement the theoretical knowledge with action-oriented instruments, tools and measures of school crisis prevention. The last module deals decisively with the effects of implementation of the school's crisis team approach to school development. Although a “thematic guide”, it does not subject to the traditional logic of control in instructional designs.

Within the instructional framework diverse constructivist perspectives were combined and realized that do the particularities of adult learning shown above justice. These are in particular the aspects of self-organisation and self-determination, communication and experience orientation. The four core functions of *KomPass* portal, as well as the individual learning paths and learning methods, that strive for both collaborative and communicative learning and emphasise the autonomy of learners, can only be realized through constructivist components. The learner can select individual learner-oriented qualification pathways, depending on individual starting conditions and interests. This is accompanied by the self-organisation of the learning process in terms of learning pace, learning tasks, place of learning as well as arrangement. That is, individual modules can repeatedly be stopped or continued, exercises and case studies can be worked on either alone or in a “private social network” (PSN) and the learner decides on learning time and place of learning. In the *KomPass* qualification programme for crisis teams, the constructivist perspective of this approach is shown by the modular learning units, exercises, expert interviews, tests and literature references that can be used by the learner in a self-controlled and self-managed way (see Figure 3). The objective is that learners can make a meaningful context to the learning object to attach subjective meanings to the contents. Information is particularly focused that fits into the respective cognitive system, is derived from the everyday professional life, and is relevant and useful. Learning is hence defined as a constructive process in which the learners build new knowledge structures, connect them with each other, connect them to existing concepts and use them again and again in different situations and connect them with new concepts (Reinmann-Rothmeier and Mandl, 1995). Other aspects of the portal, such as discussion forums and messaging functions, allow for participation of learners. The instructional aspect is reflected in the thematic pre-selection and the structure of content and exercises. In addition, the content structure and allocation of the modules into individual study packages, as well as the study packages into individual learning units, is defined in advance, but still leaves the learner with the freedom to create his or her personal learning path. Only through this learner-oriented perspective is it possible to meet the specific starting conditions and interests of participants.

For a valuable learning experience, modes for self-reflection should be incorporated into the setting (Laister and Koubek, 2001). Self-reflection at an individual level is necessary

for the individual to understand his/her learning styles, capacities and preferred learning and planning strategies, further improving the learner's autonomy (Laister and Koubek, 2001). Additionally, monitoring of performance sets challenges to eLearning and blended learning settings (Häfele and Maier-Häfele, 2004, p. 267). Within the *KomPass* qualification programme for crisis teams, a certification takes place at the end of the online phase, so the *KomPass* coach can monitor the performance of the participants. The certification process is done online and requires participants to answer multiple choice questions that are randomly chosen from the system from a pool of questions. In addition, participants need to show evidence of an in-depth substantive dialogue on the issue of the prevention of targeted violence by answering questions in the context of a given case and discussing points for action. For participants, quizzes and exercises for every module allow for self-monitoring and self-reflection. The exercises are constructed in a varied way (e. g. matches, case work, multiple choice questions, and crossword puzzles) so that the experience keeps the learner motivated and different forms of knowledge are tested. Quizzes and crossword puzzles, as well as case descriptions, offer a variety that stimulates curiosity motivation and explorative behaviour (Issing, 2011, p. 31).

In terms of time required for the *KomPass* qualification programme for crisis teams, the approach of the instructional design sets outline criteria but allows the learner to be flexible. The all-day kick-off meeting is a face to face event, used to ensure that organizational content can be discussed, and a first familiarization with the online portal *KomPass* takes place. Additionally, contacts can be established with other participants outside their own (future) crisis team. The subsequent online phase lasts several weeks, and its duration is decided by the *KomPass* coach as they know their respective school landscape better and can hence ensure that the needs of the participants are met. It takes about 10.5 hours in total to work through the 13 modules, with the time per module being between 30 and 90 minutes. With a working rate of 1.5 hours per week, the online phase takes seven weeks, and no more than eight weeks are recommended. After the completion of the online phase, a second and closing attendance day event will take place, in which the content will be reflected, and the experience with the online learning portal will be shared. After the closing meeting, it is conceivable that a so-called "follow-up" event takes place, which deals with the already initiated processes to establish a crisis team of the participants. This event is a recommended and not a mandatory event.

Content of online learning portal KomPass

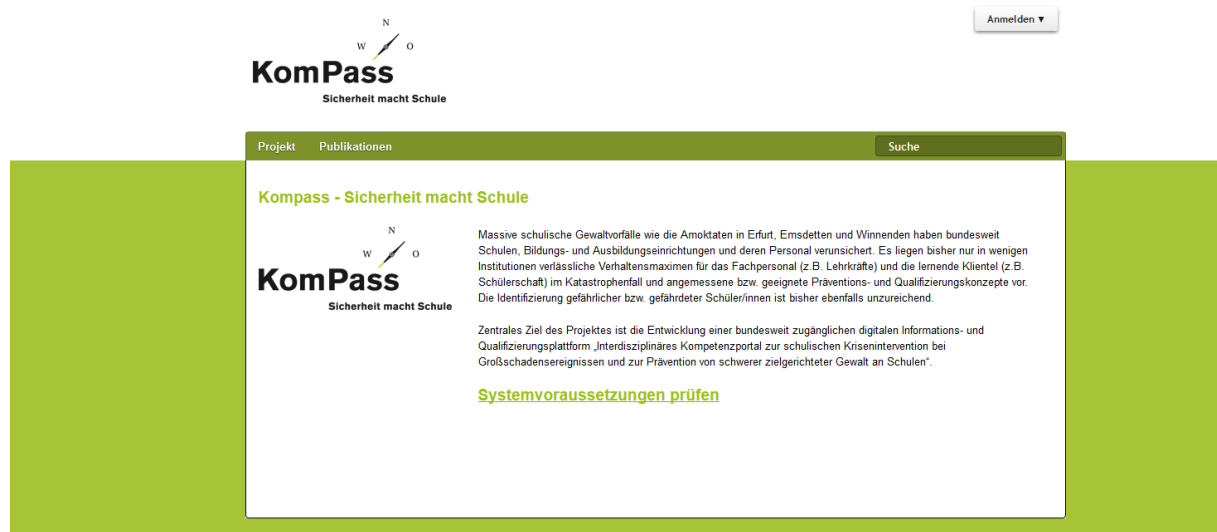


Figure 4: Landing page of *KomPass* portal www.KomPass-schule.de

The online portal *KomPass* provides both the opportunity for qualification and networking and exchange. It also provides further information on current issues, such as depression, or digressions and a variety of tools, such as expert interviews and case studies for practical prevention work (see Figure 3). The interdisciplinary online portal *KomPass* provides a range of thematic modules, options for in-depth research, online seminars and virtual classroom, tools for synchronous and asynchronous communication and collaboration (such as wiki², blog, forum, instant messaging, FAQs³) for certain functionaries (e. g. school management), specialised professionals and small groups (e. g. school crisis teams) and large groups (e. g. fellow teachers) and offers interested professionals the chance of debate, exchange and in-depth training, as well as possibilities of user-generated content to pass on implicit knowledge and personal experiences.

The online learning portal *KomPass* is available to the learner to be used in a self-directed way, as outlined in the previous section, even after the completion of the *KomPass* qualification programme for crisis teams. Self-direction ensures a high degree of leeway and individual knowledge construction, but also positively promotes activity in the learning process. The online learning portal *KomPass* includes a total of 13 modules (see Figure 5).

Modules 1-6 mainly include basic thematic information. One of the main topics is to learn the basics of threat assessment, because a targeted act of school violence is the final point of a process in which psychological, situational, and interpersonal aspects are involved (Hoffmann et al. 2009). Recognizable warning signs are present in the student's behaviour and communication before the act of violence is committed. These warning signals are never just a single action, but a dynamic pattern of different behaviours (Hoffmann and Roshdi, 2013). School staff will raise awareness for warning signs to identify them. Furthermore, sensitivity is created to distinguish between a person, who is at risk of being

on a pathway to violence, from a person, who shows warning behaviours because of other motives (Meloy, Hoffmann, Roshdi, and Guldemann, 2014). The main concern is to become aware of any student who needs help and to notice warning signs shown by troubled students so that support can be given (Hoffmann and Roshdi, 2013).

Modules 7-12 deal with the work of crisis teams, especially with certain tools, strategies and measures of school crisis prevention. Users are offered a guideline how to establish such a team and how to set up an internal and external network. The team should not engage solely in the prevention of targeted violence, but should also integrate other issues such as suicide prevention. The integration of other matters provides the potential for better motivation as there are more cases to manage, and a broader range of activities and topics arise (Hoffmann and Roshdi, 2013). Users are offered tools for implementing a structure for crisis prevention, crisis preparation, crisis management, as well as post-crisis management.

Module 13 deals decisively with the effects of an implementation of the school's crisis team approach to school development.

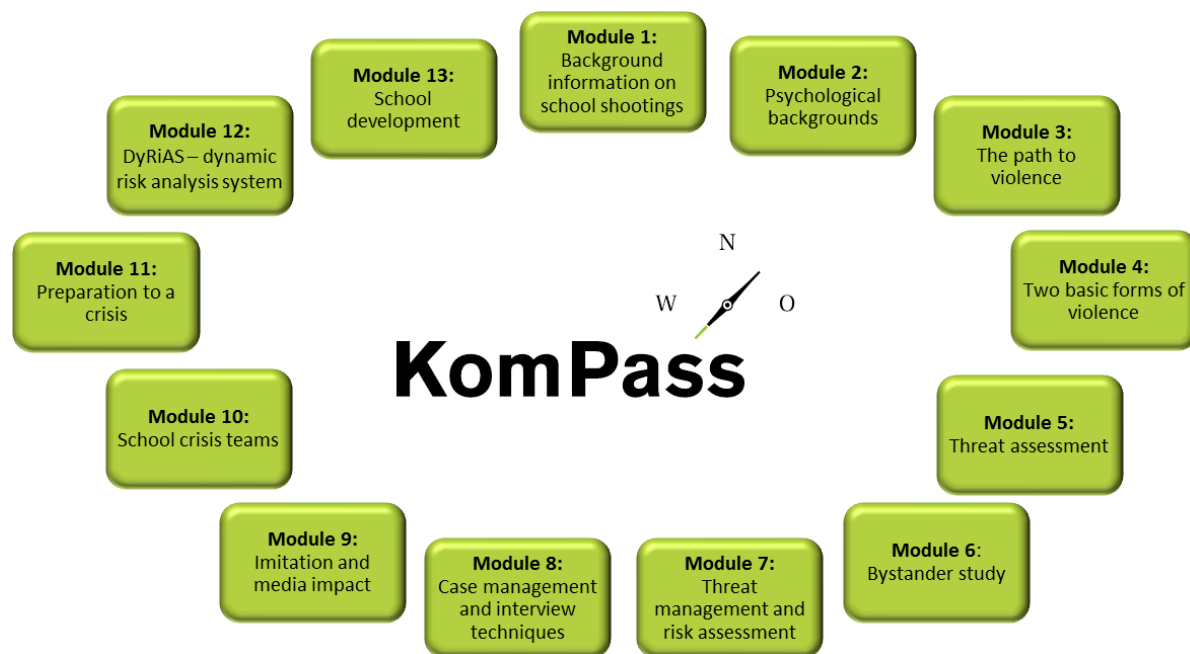


Figure 5: Content of online learning portal *KomPass*

Based on the chosen model of constructivist instructional design, different roles for coaches and learners with various functions follow (Bloch, 2010, S. 30ff.). As eLearning changes the relationship between the trainer and learner, *KomPass* also adopted a different role perception for trainers and learners.

Role of the KomPass coach

In the instructional design of *KomPass*, trainers are considered as coaches. Labelling the trainer as coaches implies that they encourage and promote the learning processes of the participants and support communication and collaboration within the online portal *KomPass*. For the perception of the role, this also means that coaches should neither control nor direct the learning processes of the participants of the *KomPass* qualification for crisis teams. Coaches should neither provide concrete directions or instructions in the learning process nor transmit knowledge to the participants. Coaches manage learners, maintain students' motivation and manage people who leave the programme. Furthermore, an asynchronous service of the coaches in the social network is provided, which means that the coaches take care of the help section and discussion forums. The service is asynchronous due to different institutional resources in that nationwide project *KomPass* that cannot guarantee coaches' time of presence, such as required in chats. For exchange and communication, the asynchronous messenger tools of the *KomPass* portal can be used accordingly.

In the context of the *KomPass* qualification programme for crisis teams, the coach's task is not to teach the actual topic to the participants. Knowledge is transmitted via the online learning portal *KomPass*. Coaches have an advisory and supervisory role and play a significant role in the online phases by enabling the digital learning process and encouraging learners to exchange. During the attendance phases (kick-off, closing and follow-up event), however, they are in a lecturer's and trainer's role: they introduce learners to the features and tools of the portal, create motivation to use the portal, and are available as experts for substantive questions on the actual topic and allow reflection and discussion (Nagel et al., 2014).

Role of Learner

The participants of the *KomPass* qualification programme for crisis teams organize their learning by allowing them to pass through the content according to modules, study packs and exercises provided in the *KomPass* online learning portal. The acquisition of learning content is done individually, and knowledge-oriented content is turned into self-directed work. Self-directed work gives the students a high degree of leeway to achieve individual knowledge construction and by delivering the right information to the right person at the right time. The learners actively develop knowledge themselves and have an authentic experience and encounter with the learning content.

MONITORING AND EVALUATION IN KOMPASS

In a funded project, a systematic evidence for the sustainable effectiveness of a program is required (see, e.g. White, 2010; Caspari, 2008; Bamberger, 2006). Against this background and based on the scientific international debate on Impact Evaluation, a results-based

monitoring and evaluation system (M & E) system was developed for the project. This allowed the project to document their own effects and show relationships between project success and external influences.

The objective of the monitoring and evaluation system was to provide information so that evidence-based decisions could be made to maintain and improve the quality of the services offered (Bloh, 2010, pp. 55ff.). Monitoring activities questioned the processes and procedures of the project regarding the achievement of objectives. Evaluation activities, however, focussed on the objectives and concept development regarding the effects. The M&E system used for the *KomPass* project is partly based on the four-level model to evaluate vocational training by Kirkpatrick (2006) (see Figure 6).

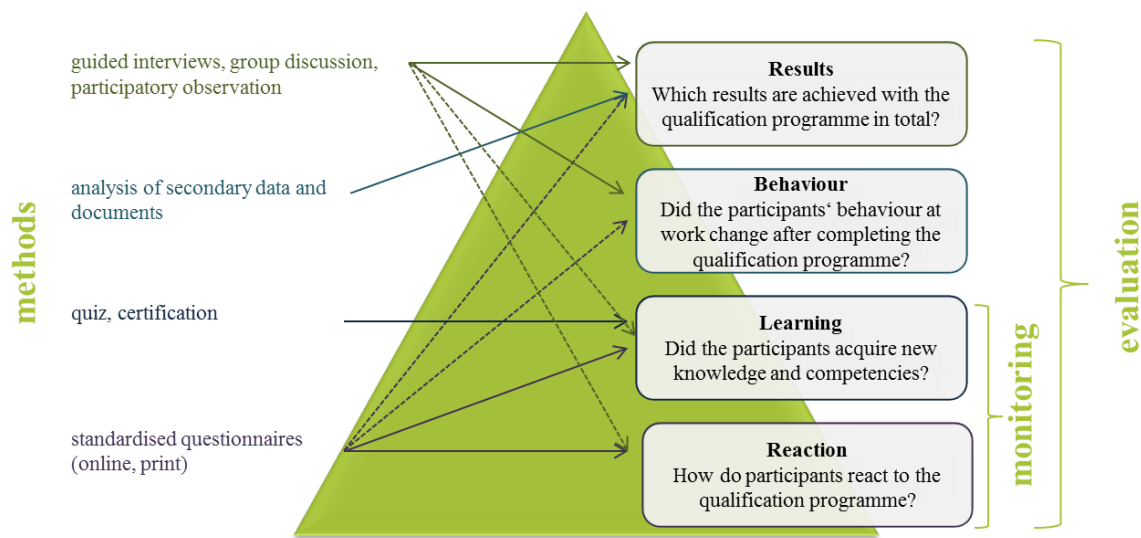


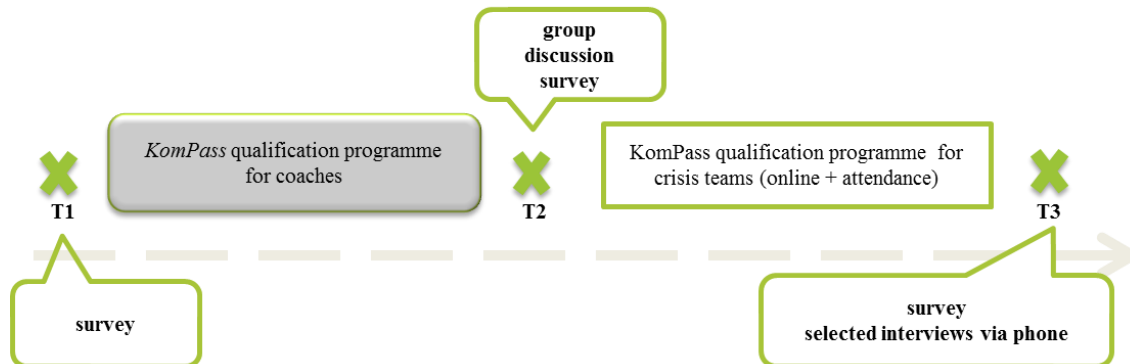
Figure 6: *KomPass*’ monitoring and evaluation system based on Kirkpatrick (2006)

In this model, four levels are defined on which the success of a qualification can be measured: reaction, learning, behaviour, and results. The level “reaction” captures how the participants experienced the training and directly reacted to it. The aim of the second stage of “learning” is to capture the extent to which participants acquire new knowledge, skills and attitudes in the context of further education. Whether the acquired knowledge was ultimately transferred to the working practice is checked at the next level “behaviour”. The fourth level focuses on understanding the results or effects that arose from the qualification. A quasi-experimental design with a comparison group was chosen to comply with the model shown, to systematically exclude confounding variables, and to make statements about what effects the project *KomPass* and its programmes had. Different data collection methods were applied to minimize the limitations of each of the evaluation instruments. Qualitative methods of data collection, such as semi-structured interviews, group discussions, certification tasks, standardised questionnaires and quantitative methods, such as surveys, complemented each other (see Figure 7). In order to make a causal or plausible cause-effect attribution for the two *KomPass* qualification programmes, data was collected at three different time points in the testing phase (pretest T1 - posttest T2- ex-posttest T3) (see Caspari, 2008; Stockmann, 2007).

The evaluation design ensured the effectiveness and sustainability of the project and its programmes keeping in mind that the project's aim was to improve teachers' skills and professionalization in the field of school crisis prevention. Both the evaluation and the optimization of the learning environment built upon the results of the evaluation, which was of central importance to the project. The evaluation was integrated into the online learning portal and could be flexibly completed during a qualification by the participants who were notified in advance of the evaluation.

Time frame of evaluation

KomPass qualification programme for coaches



Time frame of evaluation

KomPass qualification programme for crisis teams

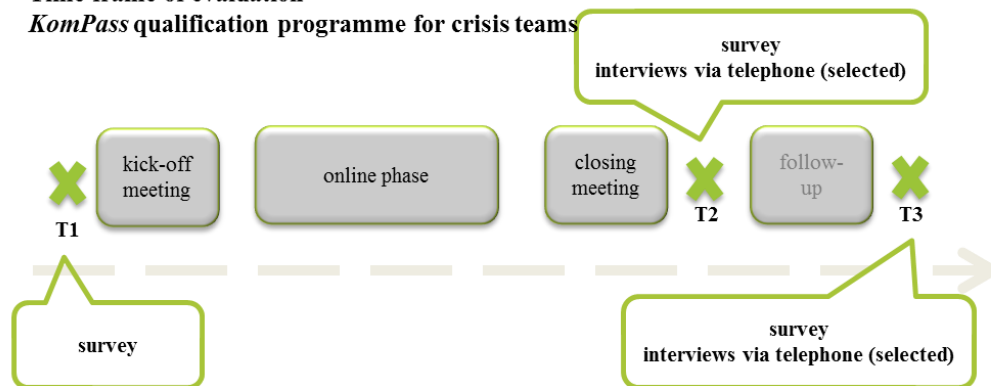


Figure 7: The time frame of evaluation for both qualification programmes within *KomPass*

RESULTS AND BENEFITS OF KOMPASS PROJECT

With the online learning portal *KomPass* and the associated *KomPass* qualification programmes for coaches and crisis teams, the general objectives of the funding program were achieved – the availability of learning and teaching content that was prepared with the help of multimedia. A first evaluation showed positive results. Not only was a value created for the learner, but also the instructors (the *KomPass* coaches) were given a new, flexible

and structured tool, which made it possible to convey complex content in various ways to the learners. With its blended learning approach, the project has created a pilot in the field of teacher training in regard to serious targeted violence in schools. *KomPass* has managed to provide a training program with a high didactic quality, which is clearly tailored to a targeted audience and sets adapted learning objectives. In the exploitation plan of the project, strategies are outlined on how to use the developed and to the needs of the target group adapted ELGG-based online portal with other content.

The *multiplier approach* selected for the *KomPass* project has not only proven itself in our experience, but also according to the systematic research of Prof. Dr. Scheithauer, who found it to be extremely successful and efficient. The NETWASS project of Prof. Dr. Scheithauer has also been completed and shows systematically and impressively that the selected approach for *KomPass* to qualify multipliers, which in turn own responsibility to train (future) school crisis team members, is not only efficient but also effective and sustainable, in comparison to other didactic models (e. g. qualification by scientist/project staff). This is justified by the existing relationship of trust between the multipliers and the schools (e. g. competent school psychologists or teacher trainers). This contributes much stronger to the perceived sense of security in teachers, and teacher-student relationships and the climate in schools is greatly improved (see Leuschner et al.). In similar projects with intended broad impact this approach should come again into play.

In the following section, the results of the *KomPass* qualification programme for crisis teams will be explained. The results of the *KomPass* qualification programme for coaches – although existing – will not be detailed.

In the evaluation process, it was differentiated between the following three groups: (1) participants of the *KomPass* qualification programme for crisis teams (incl. student teachers) (= *KomPass* crisis teams), (2) participants of the comparable attendance day qualification “training for school-based crisis teams” (= QSK crisis teams), and (3) prospective participants of a qualification programme for crisis teams.

The results demonstrate the usefulness of the project. Similarly, the scientific and economic connectivity of the project is extremely promising. *KomPass* was perceived very positively by the portal users. Table 1 lists selected results of the *KomPass* crisis team at measurement time point T2 (posttest, N=60).

Quantitative results (mean on a scale of 1 to 7; 1: not correct at all; 7: fully correct)	
The content structure of the modules was comprehensible.	6,20
The online portal <i>KomPass</i> is suitable for teaching this subject.	6,26
The content was exciting.	6,15
The content was comprehensible.	6,23
The visualisation contributed to the understanding of the content.	6,12
Understanding the content was supported by illustrative examples.	6,08
References to practice were made.	6,27
The contents are important for the practice.	6,32
The contents motivate to establish a school's crisis team.	6,07
<i>Which of the following methods and tools have encouraged your learning process positively?</i>	
Learning packages	6,20
Case studies	6,30
Qualitative results	
“The relevant things you need to know for school in this context is compiled in the portal in a compact way.” <i>Quote of a KomPass crisis team member on the usefulness of the portal in an interview conducted over the phone</i>	
“The portal especially gives the impression that the latest findings are used.” <i>Quote of a KomPass crisis team member on the satisfaction with the use of the portal in an interview conducted over the phone</i>	
“I see the strengths of the portal first and foremost in its availability even after the end of the training.” <i>Quote of a KomPass crisis team member on the change of the professional practice through the use of the portal in an interview conducted over the phone</i>	

Table 1: Selected results of the *KomPass* crisis team on satisfaction at measurement time point T2 (post-test)

The use of the online portal *KomPass* (incl. the blended learning approach) was confirmed by the target group to be very profitable, and is expressed in knowledge gain and in the substantially higher certainty of action. The project duration was too short to already assume a systematic reduction of crises at schools at present time through the use of the *KomPass* portal and the subsequent establishment of school crisis teams.

The benefits of the portal and the qualification programmes are also shown by the evaluation results that were collected at a longer time interval after the qualification (T3 ex-post-test). The results are presented in comparison to the traditional attendance day qualification at LPH.

Quantitative results		
mean on a scale of 1 to 7 1: not correct at all; 7: fully correct	KomPass crisis teams (N=9)	QSK crisis teams (N=72)
I gained a personal benefit from taking part in the qualification programme.	5,50	5,38
I gained a professional benefit from taking part in the qualification programme.	5,30	5,11
The qualification was/is very useful for the development process at school.	5,40	5,48

Table 2: Benefits of *KomPass* qualification programme for crisis teams (in comparison to an attendance day qualification)

Not only the portal itself, but the *KomPass* qualification programme for crisis teams with its blended learning approach was very well received among end users, as a comparison with the traditional attendance day qualification at LPH shows at T2 (see Figure 8).

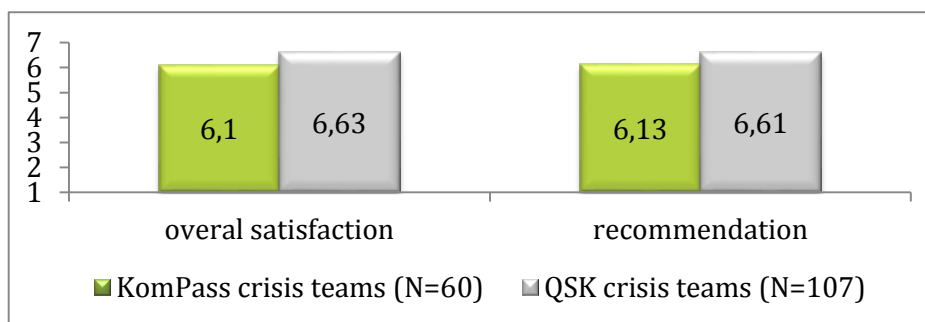


Figure 8: Satisfaction with the *KomPass* qualification programme for crisis teams (mean on a scale of 1 to 7, 1: not correct at all; 7: fully correct)

The following five impact-oriented indicators were formulated at the start of the project for the 13 modules and the *KomPass* qualification programme for crisis teams to measure the satisfaction and the success of learning through the online portal *KomPass* and the blended learning approach (see Table 3).

Effect level	Time point	No.	Indicators of <i>KomPass</i> qualification programme for crisis teams
result	T3	5	40 % of the participants of the <i>KomPass</i> qualification programme for crisis teams feel competent in the early detection of, and in dealing with crises a year after completion of the qualification programme.
behaviour	T3	4	60 % of the participants of the <i>KomPass</i> qualification programme for crisis teams have established a crisis team at their school six months after completion of the qualification programme.
learning (e. g. knowledge acquisition, change of attitude)	T2	3	The participants of the <i>KomPass</i> qualification programme for crisis teams answer 75 % of the questions in the quiz correctly.
	T2	2	80 % of the participants of the <i>KomPass</i> qualification programme for crisis teams appreciate the school's own crisis team as indispensable.
reaction	T2	1	80 % of the participants of the <i>KomPass</i> qualification programme for crisis teams recommend the qualification programme.

Table 3: Impact-oriented indicators set at the beginning of the project

Figure 9 shows the project results obtained on the five impact-oriented indicators of the *KomPass* qualification programme for crisis teams according to the Kirkpatrick pyramid.

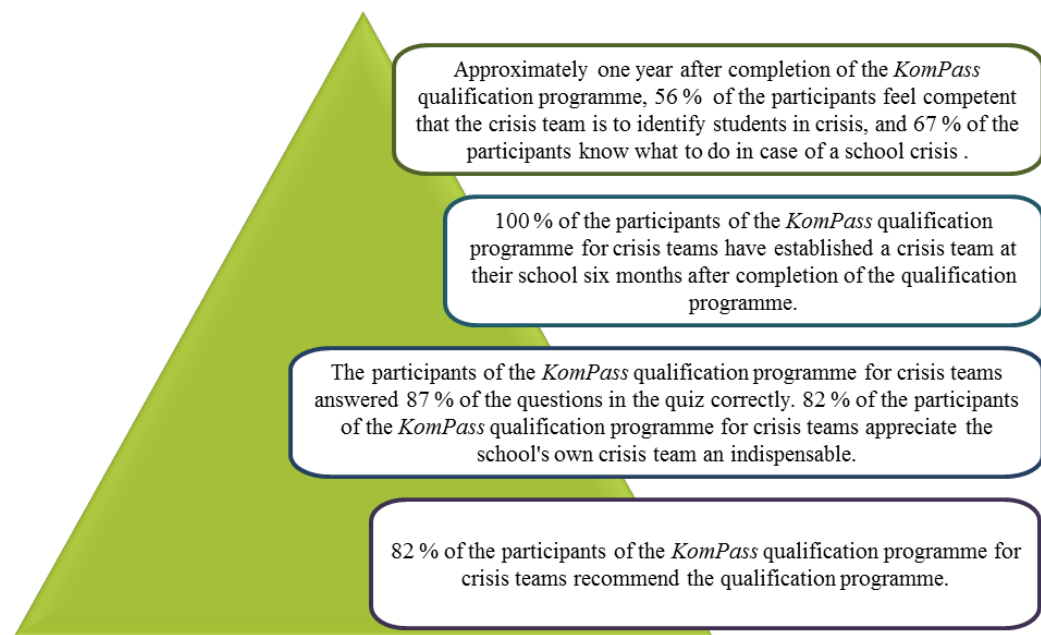


Figure 9: Obtained project results on the five impact-oriented indicators of the *KomPass* qualification programme (according to Kirkpatrick pyramid)

Overall, it should be noted that without exception, all indicators were met or even surpassed the target value in some cases. Concerning indicator 3, it is for example noteworthy that the participants of the *KomPass* qualification programme for crisis teams answered 87 % of the questions in the quiz at time point T2, whereas only 78 % of the questions were answered correctly at the first measurement time point (T1). The knowledge growth of the QSK crisis teams was considerably 4 % lower (T1: 79 %; T2: 83 %). Indicator 4 was reached, but the number of end-users involved was small (n=9); and 93.3 % (n=15) of participants already had a crisis team at their respective schools ahead of the qualification, so this success is not only due to *KomPass*. Nevertheless, the participants lacked confidence to act at time point T1 and their ability to do so was increased significantly with the *KomPass* qualification. Regarding indicator 5, it should be mentioned that the construct of handling security was sampled at three time points by several items, including self-reporting and quiz results. Figure 10 shows a further exemplary result for this purpose. It is evident that the competence of the participants to act, and to recognize pupils in problem situations, significantly increased both in the *KomPass* and even the QSK qualification programme (T2), compared to T1. However, some months later, this sense of handling security falls drastically among the participants of the attendance day qualification programme, while it remains relatively constant among the participants of the blended learning qualification programme *KomPass*. The results of those who have not participated in any qualification in the meantime are constantly at the initial level. This remarkable evidence shows the effect of the online portal *KomPass* and shows that a blended learning approach can achieve better long-term results in comparison to a pure attendance day qualification programme.

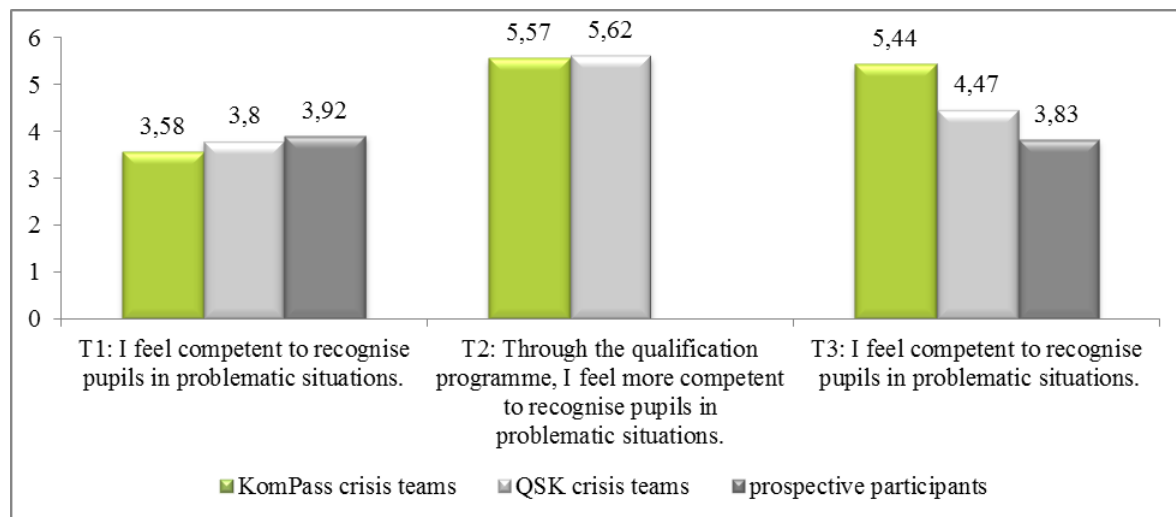


Figure 10: Exemplary result on handling security gained through the *KomPass* qualification programme for crisis teams

PROSPECT OF KOMPASS PROJECT

With the end of the project in June 2015, five *KomPass* qualification programmes for coaches were carried out in Hamburg, Hesse, Saarland, Rhineland-Palatinate, and Saxony-Anhalt, and the first *KomPass* qualification of crisis teams took place in Hesse. The project was judged to be a full success by the evaluation and was implemented sustainably in the qualification programmes of LPH only five months later. The *KomPass* qualification programme for crisis teams has already proven that it addresses the needs of the target audience with its specific design (as shown by the evaluation results). Credibility gaps that usually arise between the large-scale aspirations of projects and what they can deliver in terms of uptake have been proven to be absent in this project. First evaluation results show that the targets set in terms of output have been fulfilled. In terms of scalability it should be mentioned that with its design, the programme is easily expandable on an organizational and sectoral level to include additional school types (e. g. elementary/primary schools) as well as other states of Germany. The second programme of the project – the qualification of *KomPass* coaches – can ensure the future upscaling of the project.

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¹ The *KomPass* qualification programme for crisis teams was simulated with student teachers at the University of Saarland in winter semester 2013/14 and summer semester 2014 as part of the curriculum.

² A wiki is a tool that allows user to create and change content (Häfele and Maier-Häfele, 2004, p. 55). In the online portal *KomPass*, the pages of the wiki are linked to the content and vice versa and provide information on a keyword and links to further information within the modules. Every registered user of the online portal *KomPass* is allowed to add or change content.

³ FAQs (Frequently Asked Questions) are provided by *KomPass* in three categories – technical, project related and content related and the answers have been provided by the respective project partner.

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