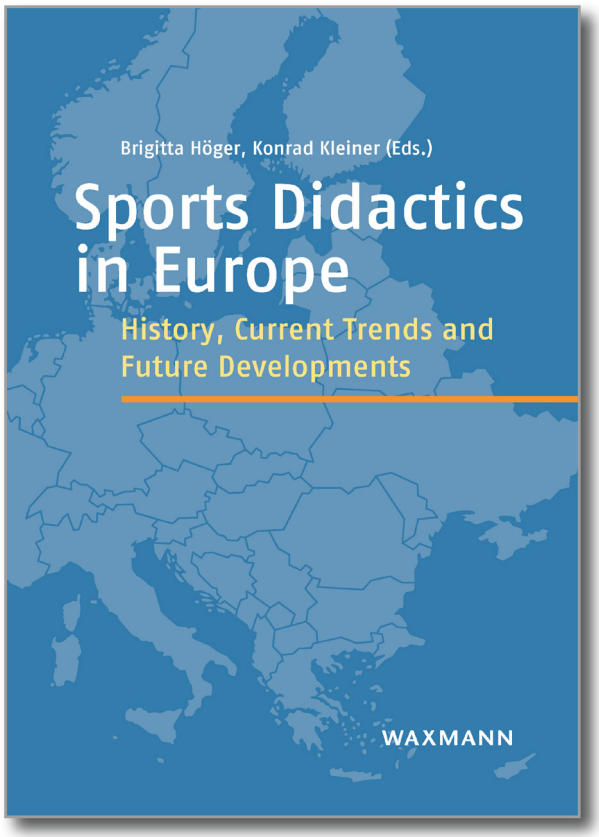
DIGITAL OFFPRINT

Elke Gramespacher, Eric Jeisy,
Nicolas Voisard & Jürgen Kühnis

Sports Didactics in Switzerland – Developments towards a Sports Science Discipline



Brigitta Höger,
Konrad Kleiner (Eds.)

Sports Didactics in Europe

History, Current Trends and Future Developments

2022, 430 pages, br., € 39,90,
ISBN 978-3-8309-4167-5

E-Book: € 35,99,
ISBN 978-3-8309-9167-0

WAXMANN

Steinfurter Str. 555
48159 Münster
Germany

Fon +49 (0)2 51 – 2 65 04-0
Fax +49 (0)2 51 – 2 65 04-26

info@waxmann.com
www.waxmann.com

Further book information here.

Sports Didactics in Switzerland – Developments towards a Sports Science Discipline

Elke Gramespacher, Eric Jeisy, Nicolas Voisard & Jürgen Kühnis

Abstract: In Switzerland, the development of Sports Didactics is connected closely to the history of the school subject physical education (PE) and teacher education. It is marked by a strong link between theory and practice as a result of the tradition of Swiss physical education manuals (part 1). Sports didactic discourses and concepts hence refer primarily to the action and competency orientation in physical education as well as to issues of assuring and developing instructional quality (part 2). Since the turn of the millennium, there has been a noticeable trend in the Swiss higher education context toward increasing institutionalization of Sports Didactics and increasing empirical study of Sports Didactics topics at the national level (part 3) as well as in internationally compatible research projects (part 4). On account of these developments in the past two decades, the Swiss Sports Didactics scientific community has been strengthened both in Switzerland itself and in relation to its international integration.

1. Educational policy framework and historic development

1.1 The special status of physical education and the tradition of Swiss physical education manuals

The Swiss education system is organized in a federal structure, and the responsibility for education lies with the 26 cantons. Standards regarding the required amount of hours for school subjects, the setting of educational goals and competency requirements, and the publication of teaching manuals traditionally fall within the remit of the cantons. Physical education (PE) has a special political and legal status in this connection, as it is the only school subject that has been legally regulated at the federal level since 1874. The background for these regulations is primarily of a military nature, as physical education was also intended as preparation for military service and was therefore made compulsory at the federal level only for boys up to 1970. Physical education for girls fell under the responsibility of the cantons (Pühse, Gerber, Mengisen, & Repond, 2005).

A key feature of the subject's special status is the publication of national teaching manuals for physical education lessons: The first manual [entitled "Turnschule"] was published in 1876, and a six-volume manual still in use today entitled "Sporterzie-

hung" was published in all of Switzerland's national languages starting in 1997 (ESK, 1997). According to Egger (2009), the publication history and perspectives of these manuals can be used to trace the educational orientation and development of physical education, from a curriculum reflecting the needs of the military (1876–1912) to an emphasis on "functional physical development" (1927 and 1942) and, finally, to a demand for holistic education (since the 1970s).

1.2 Tertiarization and university integration of sports teacher education

In relation to curricular content and to the qualification of physical education teachers, more efforts were made than in other subjects to achieve national cohesion. This became evident as early as 1924 in the establishment of a Swiss physical education teaching diploma degree. The Swiss physical education teaching diploma degrees served to standardize physical education teachers education. In this context, the Swiss Federal Institute of Sport Magglingen was founded in 1944; today it is a part of the Bern University of Applied Sciences [BFH] and at the same time a part of the Swiss Federal Office of Sport ["Bundesamt für Sport", BASPO].

The establishment of physical education teacher education at Swiss universities was instrumental for the development of sports didactics. It contributed to the foundation of institutes or departments of Sports Science as well as to the establishment of corresponding professorships for Sports Didactics and sports pedagogy. However, the professorships were initially devoted more to teacher education than to research (Hotz, 1997). Since around 2000, existing sports institutes and organizational units have been integrated gradually into faculties, and the longstanding tradition of the Swiss physical education and sports teaching diploma degrees was replaced first by licentiate degree programs and then, starting in 2005, by two-stage bachelor's and master's degree programs in sports or movement science. Since that time, it has been possible to study and earn a doctoral degree in sports or movement science.

Since 2003, Switzerland's cantonal teacher education institutes (entitled "teacher-seminars") have been transferred to the Universities of Teacher Education (SKPH, 2006). All training and continuing education of teachers at the kindergarten and primary levels and the majority of that at the lower secondary level (as well as occasionally for the upper secondary level) has since been conducted one of the – currently 16 (see www.sportstudien.ch) – Universities of Teacher Education. At these institutions, the subject physical education is generally part of a multi-field qualification.

Around a decade later, centers for Sports Didactics were founded (e.g., in Bern and Lausanne). These institutions are generally organized jointly by a university and a University of Teacher Education, offer master's degree programs with an emphasis on sports didactics, and enable doctoral degrees with a Sports Didactics orientation. Sports didactic research and services are the two core tasks of these Sports Didactic Centers. The professionalization of subject didactics also received support in matters of educational policy by the Swiss Conference of Subject Didactics ["Konferenz Fachdidaktiken Schweiz", KOFADIS] (Labudde, Hertig, Rossé, Senn, & Sturm, 2015).

Thus, the development of higher education and research projects conceived by Sports Didactics scientists (see part 3 and part 4) is not only related to Swiss Sports Didactics but also part of a principal Swiss didactic development that started already in the 1990s (Andenmatten et al., 1998).

On account of the federal structure of the Swiss education system, the degree programs offered by the Universities of Teacher Education, the university institutes of Sports Science, and the Sports Didactic Centers are characterized by an (inter) cantonal variability regarding their standards and the curricular content that leads to qualification as a physical education teacher (for a summary, see www.sportstudien.ch). However, the tertiarization and the associated academization of teacher degree programs were also controversially discussed in Switzerland at the beginning (e.g., Weber, 2009; Kühnis, 2010).

2. Basic Sports Didactics developments, discourses and concepts

2.1 From the didactics of learning theory to competency-oriented physical education

On account of the tradition of national teaching manuals, Sports Didactics in Switzerland was usually marked for one to two decades at a time by a particular Sports Didactics concept. The manuals published in 1978 and 1997 were particularly influential in shaping the current didactic discourse of the subject. They were both written by a broad group of authors (including experts on sports didactics, sports scientists, and physical education teachers) and both have a strong practical orientation. Besides various collections of exercises geared toward specific grade levels and sports and classified into categories of movement, they include relevant scientific fundamentals and Sports Didactics concepts. However, the series of manuals hardly establish any links between these concepts, games, and exercises.

A comparison of the manuals published in 1978 and 1997 reveals a striking shift in focus from the teachers to the learners. The learning goals are described in the earlier manual as "guidelines for learning and teaching in physical education" and form the frame of reference for planning, controlling, and testing intended behavioral changes in physical education (Egger, 1978, p. 118). In the later manual (ESK, 1997), on the other hand, the focus of didactic reflection is placed on the motives for engaging in physical activity. Movement, games, and sports should be experienced as meaningful activities. The experience of a wide range of movements, the discovery of one's own body and its performance limits, the act of expressing oneself with one's body and by means of movements, the fostering of one's own well-being, social exchange, and competition with peers are key dimensions of meaning that should be addressed in physical education. Physical education should therefore offer as many different learning opportunities as possible to enable students to gain individually meaningful (subjectively meaningful) and valuable (functionally meaningful) experiences. Physical education is no longer bound to particular sports, as still suggested by the manual of

1978. Rather, the 1997 manual describes exercises and games in various categories of movement (e.g., running, jumping, throwing) for all levels of education in the Swiss school system (kindergarten to the upper secondary level).[1]

The concept of dimensions of meaning ["Sinnrichtungen"] in the latest Swiss physical education manual (ESK, 1997) is based on the works of Kurz (1977; 1990) on elements of school sports and the perspectives of meaning in sports. More recent studies on "multi-perspective physical education" take up this concept but accentuate the question of the pedagogical content of individual perspectives, such as venture, health, or getting along (cf. Neumann, & Balz, 2011).

By focusing on competency in the current language-specific regional curricula for German-speaking Switzerland ["Lehrplan 21"], French-speaking Switzerland ["Plan d'études romand"[2]], and the Italian-speaking canton of Ticino ["Piano di studio"], Switzerland is following the international discourse of output orientation (for more details see Gramespacher, Ferrari, Moser, & Kühnis, 2019). Accordingly, the German-Swiss "Lehrplan 21" (and, in parts, also the "Plan d'études romand") retains older concepts from the national teaching manual (ESK, 1997); for instance, it is based on pedagogical perspectives (Kurz, 2008). What is new is that the German-Swiss "Lehrplan 21" identifies concrete ability- and skill-oriented sub-competencies for six competency domains[3] that students are supposed to acquire by the time they graduate from secondary school, thus ensuring a cumulative development of competencies. The "subject curriculum for physical education" thus remains rooted in Switzerland's Sports Didactics tradition yet can and should be extended by application- and problem-oriented tasks for different categories of movement (Fankhauser et al., 2015; Messmer, 2012; 2018).

2.2 Action ability and quality

The Sports Didactics concept of action ability has been of key significance at least since the introduction of a Sports Didactics concept grounded in learning theory by Egger in the 1978 manual (Egger, 1978). Action ability refers to the level of content. Students are supposed to develop sporting abilities through action and at the same time receive support in their development. This discourse additionally encompasses

1 The school system in Switzerland is arranged in three levels called "cycles": Cycle 1 includes the kindergarten level (two obligatory school-years from the age of four years on) as well as the 1st and 2nd grades, cycle 2 includes the 3rd to 6th grades, and cycle 3 (lower secondary level) includes the 7th to 10th grades (D-EDK, 2016).

2 French-speaking Switzerland (Romandie) consists of the Swiss cantons of Fribourg, Geneva, Jura, Neuchâtel, Valais and Vaud as well as the French-speaking part of the canton Bern.

3 The six competency domains in the school subject physical education (PE) are 'moving on apparatuses', 'moving in water', 'running, jumping, throwing', 'performance and dance', 'playing' and 'gliding, rolling, riding' (D-EDK, 2016).

rhythmic education, which has the promotion of physical activity as one of its goals and also has Swiss roots (above all Émile Jaques-Dalcroze; 1865–1950). However, the importance of psychomotor learning for kindergarten and primary school pupils does not receive sufficient attention in the concepts focusing on action ability (Stibbe, 2011).

The "pedamotor action model" ["Pädamotorisches Handlungsmodell"] developed by Arturo Hotz (1997; 1998) is also a part of this discourse. This model was applied first in the training of snow sport teachers (Disler, Hotz, & Rüdisühli, 2000). The pedamotor action model places the dialogue between learners and teachers at the center of actions in training or physical education lessons. The task of teachers is thus to support learners in their core tasks of assimilating, processing, and implementing learning-relevant information and to observe, assess, and advise them in the process (c.f., BASPO, 2009). The "pedamotor action model" achieved its broad effect through "Jugend + Sport" [J+S], a national youth sports program funded by the Swiss Federal Office of Sport (see www.jugendundsport.ch), in which it is one of the core didactic concepts applied in the training of coaches in extracurricular school sports as well as in sports outside of the school.

Since the turn of the millennium, Switzerland has seen the development of a discourse of quality in physical education. It began with a national research project on quality in physical education (Egger, Kühnis, Nussbaum, & von Däniken, 2002). In 2007, the Federal Office of Sport developed (on the basis of preliminary work by the Swiss Association for Physical Education in School) the practically oriented, online "qims" instrument (see www.qims.ch) for the comprehensive assessment of quality in physical education (Schmidt, 2007; Ulrich, Mengisen, & Schmidt, 2011). Cantonal studies on aspects of quality in physical education are available for the cantons of St. Gallen (Büchel, Brühwiler, Egger, & Perret, 2014; Büchel, Brühwiler, Egger, Hochweber, & Perret, 2015) and Schwyz (Kühnis et al., 2017; Kühnis, Eckert, Mandel, & Steffan, 2017), among others. Initial evaluations of competency-oriented curricula (e.g., Baumberger, 2018; Lentillon-Kaestner, Deriaz, Voisard, & Allain, 2018) and the project "Evaluation of the Quality of Learning and Teaching in Physical Education [QUALLIS]" (Herrmann, Seelig, Wälti, & Pühse, 2018; Herrmann, 2019) are developing the discourse further (see part 3).

2.3 The "Bewegte Schule" concept

The "Bewegte Schule" concept facilitates a comprehensive examination of movement in daily life at school and was developed during the last decades (e.g., Illi, Breithecker, & Mundigler, 1998; Brägger, Hundeloh, Posse, & Städtler, 2020). Originally, the concept focused on flexible ergonomic sitting as a central aspect of movement, health, and learning at school. In addition, the concept integrates children's body awareness and their competency to realize and to change limiting factors concerning the extent of their movement (Illi, & Zahner, 1999). "Bewegte Schule" is not only a Swiss concept that was continuously differentiated and implemented. Moreover, "Bewegte Schule" has been adopted, reflected on, and investigated in other countries, for example in

Germany (see Thiel, Teubert, & Kleindienst-Cachay, 2013). Currently, there are analyses focusing on the contribution of "Bewegte Schule" to cognitive learning at school (e.g., Schmidt, Benzing, & Kamer, 2016).

3. Examples of areas of application for physical education and sports

Current projects for Sports Didactics development focus on issues like the current curricula and instructional development. They are conducted at sports institutes of universities, Universities of Teacher Education, and Sports Didactic Centers and in organized sports and pertain both to physical education and to organized sports.

Initial evaluations of the most recent language-specific regional curricula for the school subject physical education have been conducted in French-speaking [Romandie] and in German-speaking Switzerland. The evaluation in Romandie was completed as part of the project "Grading in Physical Education and Sports [NOTEPS]". It involved comparing the summative effects of grading for physical education at the lower secondary level between three cantons (Lentillon-Kaestner et al., 2018). In the canton of Geneva, the grade students receive counts toward qualification for the next grade level, in the canton of Jura the physical education grade is not relevant for moving up to the next grade level, and in the canton of Vaud the grade has been replaced by a personalized sports booklet. The comparison of the cantons of Geneva and Vaud produced an interesting result. In the canton of Geneva, where the grade is relevant for moving up to the next grade level, great emphasis is placed on Sports Didactics work. Clearly defined competencies are trained specifically in long teaching units, and the increase in competence is verified by means of formative and summative methods of assessment. This instructional concept has an impact on the value systems of the students, who then also accept physical education as a real school subject. In the neighboring canton of Vaud, on the other hand, where personalized sports booklets play the main part in physical education, the focus is placed on the relationship between teaching and learning. The goal orientation and planning is influenced by the individual needs and expectations of the students, and there are no systematic summative evaluations. In Vaud the students appreciate the physical education lessons but have little acceptance for physical education as a school subject.

The first evaluation of the German-Swiss "Lehrplan 21" curriculum shows, among other things, that teachers at the primary level accept the new curriculum for the school subject physical education on the basis of a corresponding continuing education course (Baumberger, 2018).

Other development projects treat issues of instructional development. For example, the online tool "bewegunglesen.com" was developed as a means of providing teachers visual support for motor learning and the assessment of movement sequences (Owassapian, & Hensinger, 2014). It focuses on three physical education teacher competencies: observing students' movement, drawing precise conclusions, and giv-

ing appropriate feedback. Mainly, the tool offers access to self-testing. Teachers receive insight into the movement quality involved in most of the sporting activities they are supposed to teach in physical education lessons. The practical tool was adapted in Romandie by the Competence Center for Physical Education in School at the BEJUNE [Bern, Jura, Neuchâtel] University of Teacher Education (see www.lirelemouvement.ch).

Since 2017, lecturers from eight Swiss Universities of Teacher Education have been working on a nationally funded development project entitled "Teaching and learning in school sport, cross-lingual and cross-school level processing of didactic principles for school sport in Switzerland [LELEPS]". The core objective of the project was to define the essential aspects of physical education, taking into account the perspectives of sports didactics, general didactics as well as sports and educational science, in order to develop a scientifically based concept oriented on a competencies approach of teaching and learning for school sports in Switzerland. The project result is a basic framework for sports education and further education in Switzerland, published in German and in French (Hayoz, Lanthemann, Patelli, & Grossrieder, 2021a; 2021b).

Jeisy (2014) developed various learning and teaching models that show how to effectively design and empirically measure deep structural aspects of physical education. And Gramespacher, Gyger, Supino, Beckert, Koch and Weigel (2015; Gramespacher, Gyger, Supino, Beckert, & Weigel, 2018) addressed interdisciplinary teaching at the primary level with their evaluated development project kick & write®.

4. Current research questions and projects

From 2005 to 2013, third-party-funded Sports Didactics research projects were conducted primarily by the Sports Science departments of the Universities of Basel and Bern and by the Swiss Federal Institute of Sport Magglingen (Conzelmann, Nagel, & Zuber, 2015). Today, there are also research projects based at the Universities of Teacher Education and Physical Education Subject Didactics Centers. Some of the first Sports Didactics projects were funded by the Federal Office of Sport as part of the "Physical Education Research Concept 2013–2016". From 2016 to 2020, swissuniversities provided 25 million SFr. in funding with a program designed to help build up and develop all subject didactics as a scientific discipline. These measures are making valuable contributions to the establishment of subject didactics as a scientific discipline in Switzerland.

These developments have also served to broaden the range of research perspectives and questions in relation to sports didactics. For example, two currents have coexisted for several years in French-speaking Switzerland [Romandie]: On the one hand, a community of Sports Didactics experts at the Vaud University of Teacher Education advocates a less strict definition of Sports Didactics or rather an integrative sports and

educational science approach.[4] On the other hand, other researchers in Romandie work with a narrower definition of (sports) didactics that has its roots at the University of Geneva (Brechbühl, Bronckart, & Joannisse, 1998). At the moment, this second approach is on its way to gaining acceptance through the inter-cantonal research project "Evaluation in the context of regional curriculum in Physical Education and Sports for French-Speaking Switzerland [PEREPS]" (Voisard, 2018), funded by swissuniversities since 2017.[5] PEREPS is a "didactic engineering" project, and its goal is to try out innovative curriculum- and competency-oriented evaluation tests (Lenzen, Barthe, Cordoba, Deriaz, Poussin, Pürro, Saillen, Suter, & Voisard, 2022).

In the following, other research projects are presented, starting by projects, which were developed out of other Sports Science sub-disciplines and contribute to the development of sports didactics. Then Sports Didactics research projects that focus on curricula, teacher competencies, and instructional development will be added.

The project "Personality Development through Physical Education [BISS]" (Conzelmann, Schmidt, & Valkanover, 2011) was grounded in sport psychology and introduced the importance of students' self-esteem as an important perspective in Swiss sports didactics. Later on, Schmidt, Blum, Valkanover and Conzelmann (2015) substantiated these results and showed the high importance of motor ability and self-esteem for physical self-concept and perceived social acceptance in twelve-year-old students. Using structural equation modeling, the authors created a multiple mediation model revealing that both physical self-concept and perceived social acceptance are mediators between motor ability and self-esteem in the case of boys. In girls, on the other hand, the mediation between motor ability and self-esteem only takes place via physical self-concept. Further on, an intervention study was conducted in which primary teachers were trained to promote the self-concept in physical education. The study indicated that training them leads to a change in teaching practice but had almost no effect on students' self-concept (Oswald, Rubeli, Valkanover, Conzelmann, & Schmidt, 2020).

The research program "Basic Motor Competencies [MOBAK]" (Herrmann, 2018) also contributes to Sports Didactics from a movement science perspective. With the validated MOBAK test instruments, data on the competence areas "self-movement" (balancing, rolling, jumping, running) and "object-movement" (throwing, catching, bouncing, dribbling) can be collected efficiently and in a standardized way from students at kindergarten (Kühnis, Ferrari, Fahrni, & Herrmann, 2019; Herrmann, Seelig, Ferrari, & Kühnis, 2019) and primary level (Herrmann, 2018). Currently, MOBAK is

4 The study of teaching and apprenticeship processes and the development and effects of different contexts of these processes at the intersection between different scientific approaches: psychosocial, psychological, activity analytical, physiological, neuroscientific, and so on (Lentillon-Kaestner, 2017, p. 53).

5 PEREPS is an inter-institutional project based at the BEJUNE [Bern, Jura, Neuchâtel] University of Teacher Education in which the Universities of Geneva and Fribourg as well as the Vaud University of Teacher Education are also involved.

not only increasingly noticed and implemented internationally (Gerlach et al., 2018), but MOBAK data are also analyzed in other socioculturally significant contexts (e.g., Carcamo-Oyarzun, & Herrmann, 2020; Gramespacher, Herrmann, Heim, Ennigkeit, & Seelig, 2020). In this sense, the longitudinal study "Development of Basic Motor Competencies during Childhood [EMOKK]" also focuses not only on the development of basic motor competencies in childhood, but examines relationships between motor developments and factors influencing school and extracurricular activities (e.g., Herrmann, Bretz, Kühnis, Seelig, Keller, & Ferrari, 2021). Furthermore, this is the first Sports Didactics study to collect data in the three large language regions of Switzerland (German-, French-, and Italian-speaking Switzerland).

The project "Competency Profiles of Physical Education Teachers at the Preschool and Primary Levels [KopS]" (Valkanover, Oswald, Blum, & Conzelmann, 2014) demonstrated that teachers rate competencies as (very) important, and that this does not change with increasing professional experience. In addition, the inter-cantonal project "Professional Competencies of Physical Education Teachers and their Effects on Instruction and Student Achievement [EPiC PE 3:1]", is based on a competency model for physical education (e.g., Messmer, & Brea, 2014; Messmer, 2018), focuses on the cognitions of lower secondary level physical education teachers (e.g., Vogler, Messmer, & Allemann, 2017), and draws, among other things, on the model of sport-related competence developed by Gogoll (2011; 2013; 2016).

Furthermore, there are research projects focusing on gender issues (e.g., Lentillon-Kaestner, & Patelli, 2016; Bréau, 2018; Gramespacher, & Weigelt-Schlesinger, 2019; Adler, & Gramespacher, 2021). The main conclusions suggest gender-specific interventions in physical education aimed at promoting girls' empowerment in physical education and in sports. These projects helped get the topic "girls and women in sports" onto the sports policy agenda in Switzerland. The project "Quality of Teaching and Learning in Physical Education [QUALLIS]" (Herrmann et al., 2018; Herrmann, 2019) continues the discourse of quality development in physical education. The validated evaluation instrument QUALLIS is based on experience in the measurement of "good physical education teaching" (Herrmann, Seiler, Pühse, & Gerlach, 2015). Moreover, the interdisciplinary project "Social Participation of Children with an Intellectual Disability in Inclusive School and Club Sports [SoPariS]" is a joint project of the Sport Didactic Center Bern and the Institute for Special Education (both at the University of Teacher Education Bern) as well as of the Institute for Sports Science at the University of Bern. The project is studying integration opportunities and limits in physical education (e.g., Furrer, Valkanover, Eckhart, & Nagel, 2020; Steiger, Mumenthaler, & Nagel, 2021) on the basis of initial Sports Didactics guidelines (Valkanover, & Wüthrich, 2017). Steiger (2019) succeeded in using the repertory grid technique to measure convictions of physical education teachers on migration-related heterogeneity in physical education classes.

It is not possible in this context to report on all completed and ongoing research and development projects. However, the examples presented above indicate the dynamic development of Sports Didactics projects in Switzerland.

5. Discussion and outlook

The traditional political and legal status of physical education led to a number of characteristic features that are still shaping Sports Didactics in Switzerland today. Particularly worthy of mention in this context is the publication of teaching manuals, the most recent of which (ESK, 1997) also influenced the three current competency-oriented curricula in Switzerland. Whereas the current competency-oriented curricula address the practice of physical education teaching, the recent development of research on Sports Didactics has been driven above all by the tertiarization of teacher education, not least due to the fact, that it has involved institutionalization processes providing structural support for Sports Didactics research. Sports didactics also is and will remain important for students, because although the universities now offer Sports Science as an academic discipline without teaching qualification, more than 50% of the graduates of a university Sports Science degree program in Switzerland become physical education teachers (Nagel, Conzelmann, Schlesinger, & Studer, 2012). Sports didactic research has received an additional boost since the turn of the millennium through the integration of sports institutes into faculty structures, through the establishment of Sports Science degree programs, and through the tertiarization of teacher education at Universities of Teacher Education, as well as through the foundation of Sports Didactic Centers. Since this time, Sports Didactics research has developed in French-speaking as well as in German-speaking Switzerland and has become associated with one of the two reference disciplines – sports or educational science – depending on institutional affiliations. As a result, Sports Didactics in Switzerland has increasingly developed into a Sports Science discipline whose independent status is also institutionally visible through the foundation of Sports Didactic Centers and inter-cantonal cooperation among universities.

The development of Sports Didactics as an independent academic discipline has also been supported by the Swiss Conference of Subject Didactics [KOFADIS] as well as by the funding programs of swissuniversities and the Swiss National Science Foundation [SNF]. These programs make it feasible to conduct inter-cantonal joint research projects and potentially strengthen their output – and thus also their (inter) national visibility. This is a solid foundation, but the future of Sports Didactics research in Switzerland does not hinge solely on the possibilities for funding. What is also, and above all, important is that the existing inter-cantonal joint projects at the institutional and individual level are viable in the long term[6] and that the research and development projects further differentiate the national Sports Didactics discourses while (at the same time) linking them to internationally significant research perspectives.

6 We would like to thank Dr. Gallus Grossrieder (co-director (2014–2018) of the Sports Didactic Center Bern) for his collaboration on this text.

References

Adler, K., & Gramespacher, E. (2021). Mädchen im Fokus: Kindliches Aktivitätsverhalten im Übergang Kindergarten – Schule. In K. Adler & C. Andrä (Eds.), *Bewegung, Spiel und Sport bei Kindern im Krippen- und Kindergartenalter. Forschung aus der Praxis für die Praxis* (pp. 278–304). Chemnitz: Universitätsverlag.

Andenmatten, C., Bütikofer, K., Del Don, C., Eggenberger, K., Labudde, P., Röllin Bautz, M., & Siber, P. (1998). Impulse für die Fachdidaktik in der Schweiz. *Beiträge zur Lehrerinnen- und Lehrerbildung, 16* (2), 222–230.

Baumberger, J. (2018). *Kompetenzorientierter Sportunterricht. Eine explorative Studie an Primarschulen zur Umsetzung des Lehrplans 21 Bewegung und Sport*. Aachen: Meyer & Meyer.

Brägger, G., Hundeloh, H., Posse, N., & Städtler, H. (2020). *Bewegung und Lernen. Konzept und Praxis Bewegter Schulen* (2. Aufl.). Basel, Weinheim: Beltz.

Bréau, A. (2018). *Faire et refaire le genre en éducation physique et sportive. Une analyse de l'activité située des élèves au sein de classes mixtes et non mixtes* (Doctorat en Sciences du Sport et de l'Éducation Physique). Lausanne: Université de Lausanne.

Brechbühl, J., Bronckart, J.-P., & Joannisse, R. (1988). *Contribution à la didactique du sport*. Genève: Université de Genève, FAPSE.

Büchel, S., Brühwiler, C., Egger, P., Hochweber, A. C., & Perret, J. (2015). *Sportunterricht in der Volksschule des Kantons St. Gallen. Die Perspektive der Schülerinnen und Schüler* (Projektbericht). St. Gallen: Pädagogische Hochschule St. Gallen, Institut für Professionsforschung und Kompetenzentwicklung. http://doi.org/10.18747/PHSG-coll3/id/232

Büchel, S., Brühwiler, C., Egger, P., & Perret, J. (2014). *Sportunterricht in der Volksschule des Kantons St. Gallen. Untersuchung der IST-Situation* (Projektbericht). St. Gallen: Pädagogische Hochschule St. Gallen, Institut für Professionsforschung und Kompetenzentwicklung. http://doi.org/10.18747/PHSG-coll3/id/236

Bundesamt für Sport [BASPO] (Ed.). (2009). *Kernlehrmittel Jugend und Sport*. Magglingen: BASPO.

Carcamo-Oyarzun, J., & Herrmann, C. (2020). Construct validity of the MOBAK test battery for the assessment of basic motor competencies in primary school children. *Revista Española de Pedagogía, 78* (276), 291–308. https://doi.org/10.22550/REP78-2-2020-03

Conzelmann, A., Nagel, S., & Zuber, S. (2015). *Stand der Sportwissenschaft in der Schweiz 2014*. Bern: Institut für Sportwissenschaft; Magglingen: BASPO.

Conzelmann, A., Schmidt, M., & Valkanover, S. (2011). *Persönlichkeitsentwicklung durch Schulsport. Theorie, Empirie und Praxisbausteine der Berner Interventionsstudie Schulsport (BISS)*. Bern: Huber.

Deutschschweizer Erziehungsdirektoren-Konferenz [D-EDK] (2016). *Lehrplan 21: Bewegung und Sport*. Luzern: D-EDK.

Disler, P., Hotz, A., & Rüdisühli, U. (2000). *Schneesport Schweiz – die Kernkonzepte*. Uttigen: SSSA.

Egger, K. (1978). *Turnen und Sport in der Schule* (Bd. 1: Theorie). Bern: Eidgenössische Sportkommission [ESK].

Egger, K. (2009). Sportpädagogik in der Schweiz. In H. Haag & A. Hummel (Eds.), *Handbuch Sportpädagogik* (2., erw. Aufl., pp. 490–494). Schorndorf: Hofmann.

Egger, K., Kühnis, J., Nussbaum, P., & von Däniken, P. (2002). *Qualität des Sportunterrichts. Projektbericht* (Schriftenreihe des Instituts für Sport und Sportwissenschaft der Universität Bern). Bern: ISSW.

Eidgenössische Sportkommission [ESK] (Ed.). (1997). *Lehrmittelreihe Sporterziehung* (Bd. 1–6). Bern: EDMZ. Retrieved from https://www.sportunterricht.ch/lektion/Lehrmittel/

Fankhauser, D., Ferrari, I., Huber, C., Messmer, R., Moshfegh, Y., Plattner, M., & Steinegger, A. (2015). *Aufgaben im Sportunterricht. Kompetenzorientierte Aufgaben für den Sportunterricht auf der Sekundarstufe 1 und 2*. Pädagogische Hochschule FHNW, Pädagogische Hochschule Zürich, Bundesamt für Sport BASPO. Retrieved from https://itunes.apple.com/ch/book/aufgaben-imsportunterricht/id952652427?l=en&mt=13

Furrer, V., Valkanover, S., Eckhart, M., & Nagel, S. (2020). The Role of Teaching Strategies in Social Acceptance and Interactions. Considering Students With Intellectual Disabilities in Inclusive Physical Education. *Frontiers in Education, 5,* 586960. https://doi.org/10.3389/feduc.2020.586960

Gerlach, E., Herrmann, C., Dania, A., Heim, C., Jidovtseff. B., Quitério, A., Vrbas, J., Kossyva, I., Adamakis, M., Zounhia, K., Seelig, H., Ennigkeit, F., Vandeloise, V., Morgado, L., Mornard, M., Cloes, M., Costa, J., Martins, J., Onofre, M., Fernandes, D., Picado, A., Mota, J., Vlček, P., & Scheuer C. (2018). European MOBAK-Network: Basic motor competencies. In C. Scheuer, A. Bund & M. Holzweg (Eds.), *Changes in Childhood and Adolescence: Current Challenges for Physical Education* (pp. 81–90). Berlin: Logos.

Gogoll, A. (2011). Sport- und bewegungskulturelle Kompetenz. Eine Voraussetzung für den Aufbau von Handlungsfähigkeit im Bereich Sport und Bewegung. *Sportpädagogik, 35* (5), 46–51.

Gogoll, A. (2013). Handlungsfähigkeit, Sinn und Kompetenz im Sportunterricht. In P. Neumann & E. Balz (Eds.), *Sport-Didaktik. Pragmatische Fachdidaktik für die Sekundarstufe I und II* (pp. 53–62). Berlin: Cornelsen Scriptor.

Gogoll, A. (2016). Wann ist Abseits? Modellbasierte fachliche und sprachliche Aufgabenentwicklung im Fachbereich Bewegung und Sport. In S. Keller & C. Reintjes (Eds.), *Aufgaben als Schlüssel zur Kompetenz* (pp. 315–325). Münster: Waxmann.

Gramespacher, E., Ferrari, I., Moser, P., & Kühnis, J. (2019). Schulsport in der Volksschule der Schweiz: Entwicklungen, Perspektiven und Herausforderungen. *Leipziger Sportwissenschaftliche Beiträge, 60* (2), 49–71.

Gramespacher, E., Gyger, M., Supino, F., Beckert, C., Koch, P., & Weigel, P. (2015). kick & write® 2014 – An Interdisciplinary Project in Swiss Primary Schools. *Česká kinantropologie, 19* (4), 23–33.

Gramespacher, E., Gyger, M., Supino, F., Beckert, C., & Weigel, P. (2018). kick & write® – ein Projekt zum Thema Fußball. In E. Gramespacher & R. Schwarz (Eds.), *Bildungspotentiale des Fußballs. Soziokulturelle Projekte und Analysen.* Wiesbaden: Springer VS. https://link.springer.com/chapter/10.1007%2F978-3-658-19502-1_3

Gramespacher, E., Herrmann, C., Ennigkeit, F., Heim, C., & Seelig, H. (2020). Geschlechtsspezifische Sportsozialisation als Prädiktor motorischer Basiskompetenzen. Ein Mediationsmodell. *'motorik'. Zeitschrift für Psychomotorik in Entwicklung, Bildung und Gesundheit, 43* (2), 69–77. http://dx.doi.org/10.2378/mot2020.art13d

Gramespacher, E., & Weigelt-Schlesinger, Y. (2019). Was interessiert Mädchen in der Schweiz an Sportvereinen? Befunde der Aufsatzstudie aus dem Projekt *Girls in Sport*. In J. Frohn,

E. Gramespacher & J. Süßenbach (Eds.), *Stand und Perspektiven der sportwissenschaftlichen Geschlechterforschung* (Schriften der Deutschen Vereinigung für Sportwissenschaft, Bd. 279, pp. 156–171). Hamburg: Feldhaus, Edition Czwalina.

Hayoz, C., Lanthemann, N., Patelli, G., & Grossrieder, G. (Eds.). (2021a). *Kompetenzorientiertes Lernen und Lehren im Bewegungs- und Sportunterricht: Fachdidaktisches Referenzmodell*. Bern: hep.

Hayoz, C., Lanthemann, N., Patelli, G., & Grossrieder, G. (Dir.). (2021b). *Apprendre et enseigner en éducation physique et sportive: repères didactiques pour une approche par compétences*. Lausanne: LEP.

Herrmann, C. (2018). *MOBAK 1–4: Test zur Erfassung motorischer Basiskompetenzen für die Klassen 1–4* (Hogrefe Schultest). Göttingen: Hogrefe.

Herrmann, C. (2019). Evaluation der Qualität des Lehrens und Lernens im Sportunterricht. *Bewegung & Sport, 73* (2), 12–17.

Herrmann, C., Bretz, K., Kühnis, J., Seelig, H., Keller, R., & Ferrari, I. (2021). Connection between social relationships and basic motor competencies in early childhood. *Children, 8* (1), 53. https://doi.org/10.3390/children8010053

Herrmann, C., Seelig, H., Ferrari, I., & Kühnis, J. (2019). Basic motor competencies of preschoolers: construct, assessment and determinants. *German Journal of Excercise and Sport Research, 49* (2), 179–187. https://doi.org/10.1007/s12662-019-00566-5

Herrmann, C., Seelig, H., Wälti, M., & Pühse, U. (2018). Evaluation of the quality of teaching and learning in sports – the QUALLIS evaluation instrument. *Specialist Seminar Future Directions in PE Assessment, abstract book*, Oct. 18–20, 2018, Eindhoven, The Netherlands, p. 46.

Herrmann, C., Seiler, S., Pühse, U., & Gerlach, E. (2015). „Wie misst man guten Sportunterricht?" – Erfassung der Dimensionen von Unterrichtsqualität im Schulfach Sport. *Zeitschrift für Sportpädagogische Forschung, 3* (1), 6–26.

Hotz, A. (1997). *Qualitatives Bewegungslernen. Bewegungsspielräume erkennen, erleben und gestalten* (3., vollst. überarb. u. erw. Aufl.). Bern: SVSS Verlag.

Hotz, A. (1998). *Qualitatives Bewegungslernen – Sportpädagogische Perspektiven einer kognitiv akzentuierten Bewegungslehre in Schlüsselbegriffen*. Zumikon: SVSS Verlag.

Illi, U., Breithecker, D., & Mundigler, S. (Eds.). (1998). *Bewegte Schule – Gesunde Schule. Aufsätze zur Theorie*. Wäldi: Eigenverlag IFB.

Illi, U., & Zahner, L. (1999). Bewegte Schule – Gesunde Schule. In U. Pühse & U. Illi (Eds.), *Bewegung und Sport im Lebensraum Schule*. Schorndorf: Hofmann.

Jeisy, E. (2014). *Choreografien des Lernens und Lehrens im Fachbereich Bewegung und Sport*. Aachen: Meyer & Meyer.

Kühnis, J. (2010). Sportlehrerausbildung in der Schweiz – zwischen Qualitätssicherung, Standardisierung und Professionalisierung. In T. Janik & P. Knecht (Eds.), *Neue Wege in der Professionalisierung von Lehrer/Innen* (Austria: Forschung und Wissenschaft. Erziehungswissenschaft, pp. 34–41). Vienna: LIT.

Kühnis, J., Eckert, N., Mandel, D., Imholz, P., Egli, S., Steffan, M., Arquint, L., & Schürpf, B. (2017). Zeitnutzung und Anstrengung im Sportunterricht. *Swiss Sports and Excercise Medicine, 65* (3), 54–59.

Kühnis, J., Eckert, N., Mandel, D., & Steffan, M. (2017). Sportunterricht aus Sicht der Schüler- und Lehrer/innen. Befunde einer Querschnittsstudie in der Zentralschweiz. *Bewegung & Sport, 71* (4), 10–14.

Kühnis, J., Ferrari, I., Fahrni, D., & Herrmann, C. (2019). Motorische Basiskompetenzen von 4–6-Jährigen in der Schweiz. Eine vergleichende Untersuchung in Regel- und Bewegungskindergärten. *Swiss Sports and Excercise Medicine, 67* (2), 54–58.

Kurz, D. (1977). *Elemente des Schulsports*. Schorndorf: Hofmann.

Kurz, D. (1990). *Elemente des Schulsports* (3. Aufl.). Schorndorf: Hofmann.

Kurz, D. (2008). Von der Vielfalt sportlichen Sinns zu den pädagogischen Perspektiven im Schulsport. In D. Kuhlmann & E. Balz (Eds.), *Sportpädagogik. Ein Arbeitstextbuch*. Hamburg: Feldhaus, Edition Czwalina.

Labudde, P., Hertig, P., Rossé, F., Senn, C., & Sturm, A. (2015). Konferenz Fachdidaktiken Schweiz: Eine Dachorganisation als ein Motor für professionelle Fachdidaktik. *Beiträge zur Lehrerinnen- und Lehrerbildung, 33* (2), 266–270.

Lentillon-Kaestner, V. (2017). Diversités des approches scientifiques: quels atouts pour la didactique en éducation physique. In *Documentation du colloque des didactiques disciplinaires du 19 janvier 2017* (pp. 53–54). Bern: Swissuniversities.

Lentillon-Kaestner, V., Deriaz, D., Voisard, N., & Allain, M. (2018). *Noter en éducation physique? Incidences sur l'enseignement et les élèves*. Louvain-la-Neuve: Editions Modulaires Européennes.

Lentillon-Kaestner, V., & Patelli, G. (2016). Effects of grouping forms, student gender and ability level on the pleasure experienced in physical education. *Journal of Teaching Physical Education, 35* (2), 251–261. https://doi.org/10.1123/jtpe.2014-0216

Lenzen, B., Barthe, C., Cordoba, A., Deriaz, D., Poussin, B., Pürro, C., Saillen, L., Suter, Y., & Voisard, N. (2022). Merging observational and interview data to study and improve the adaptability of the products of didactic engineering to ordinary teaching in physical education. *Physical Education and Sport Pedagogy, 27* (2), 186-199. https://doi.org/021.1999917

Messmer, R. (2012). Bewegte Aufgaben: Aufgabenkulturen im Fach Sport. In S. Keller & U. Bender (Eds.), *Aufgabenkulturen* (pp. 202–213). Seelze: Klett.

Messmer, R. (2018). What is the subject matter of physical education? *German Journal of Exercise and Sport Research, 48* (4), 508–515. https://doi.org/10.1007/s12662-018-0531-2

Messmer, R., & Brea, N. (2014). Aufgaben zum Bewegten Lernen – eine Analyse aus einer sportdidaktischen Perspektive. *Zeitschrift für Sportpädagogische Forschung, 2* (2), 63–76.

Nagel, S., Conzelmann, A., Schlesinger, T., & Studer, F. (2012). *Vom sportwissenschaftlichen Studium ins Berufsleben. Berufskarrieren von Absolventinnen und Absolventen Schweizer Hochschulen.* Magglingen: Bundesamt für Sport BASPO.

Neumann, P., & Balz, E. (Eds.). (2011). *Mehrperspektivischer Sportunterricht. Didaktische Anregungen und praktische Beispiele*. Schorndorf: Hofmann.

Oswald, E., Rubeli, B., Valkanover, S., Conzelmann, A., & Schmidt, M. (2020). Selbstkonzeptförderung im Sportunterricht: Evaluation eines fünfmonatigen Lehrer*innentrainings. *Zeitschrift für Sportpädagogische Forschung, 8* (2), 59–77.

Owassapian, D., & Hensinger, J. (2014). bewegunglesen.com – Das E-Learning-Tool zur Bewegungslehre. In M. Schuhen & M. Froitzheim (Eds.), *Das elektronische Schulbuch* (pp. 155–164). Berlin: LIT.

Pühse, U., Gerber, M., Mengisen, W., & Repond, R. M. (2005). Physical Education in Switzerland. In U. Pühse & M. Gerber (Eds.), *International Comparison of Physical Education. Concepts, Problems, Prospects* (pp. 632–658). Aachen: Meyer & Meyer.

Schmidt, M. (2007). *qims.ch. Qualität im Sport- und Bewegungsunterricht. Manual – für Experten und solche, die es noch werden wollen*. Magglingen: Bundesamt für Sport BASPO.

Schmidt, M., Benzing, V., & Kamer, M. (2016). Classroom-based physical activity breaks and children's attention: cognitive engagement works! *Frontiers in Psychology, 7* (1473), 317. https://doi.org/10.3389/fpsyg.2016.01474

Schmidt, M., Blum, M., Valkanover, V., & Conzelmann, A. (2015). Motor ability and self-esteem: The mediating role of physical self-concept and perceived social acceptance. *Psychology of Sport & Exercise, 17*, 15–23. https://doi.org/10.1016/j.psychsport.2014.11.006

Schweizerische Konferenz der Rektorinnen und Rektoren der Pädagogischen Hochschulen [SKPH] (Ed.). (2006). *Jahresbericht der SKPH 2005*. Bern.

Steiger, J. (2019). *Migrationsbedingte Heterogenität im Sportunterricht. Schüler- und fachbezogene Überzeugungen von Sport unterrichtenden Lehrpersonen*. Wiesbaden: Springer VS. https://link.springer.com/book/10.1007%2F978-3-658-25811-5

Steiger, A., Mumenthaler, F., & Nagel, S. (2021). Friendships in Integrative Settings: Network Analyses in Organized Sports and a Comparison with School. *International Journal of Environmental Research and Public Health, 18,* 6603. https://doi.org/10.3390/ijerph18126603

Stibbe, G. (2011). *Expertise zur Entwicklung von Sport und Bewegung in Schweizer Schulen* (im Auftrag des Bundesamts für Sport BASPO, Magglingen). Köln.

Thiel, A., Teubert, H., & Kleindienst-Cachay, C. (2013). *Die Bewegte Schule auf dem Weg in die Praxis: Theoretische und empirische Analysen einer pädagogischen Innovation*. Hohengehren: Schneider.

Ulrich, W., Mengisen, W., & Schmidt, M. (2011). qims.ch – a comprehensive and easy-to-use tool for reviewing the quality of physical education. *International Journal of Physical Education, 48* (2), 23–32.

Valkanover, S., Oswald, E., Blum, M., & Conzelmann, A. (2014). *Kompetenzprofile von Sportunterrichtenden Lehrpersonen der Vorschul- und Primarschulstufe (KopS)* (Projektschlussbericht). Bern: ISPW, Universität Bern.

Valkanover, S., & Wüthrich, S. (2017). Didaktische Leitideen und Massnahmen im integrativen Sportunterricht. *Schweizerische Zeitschrift für Heilpädagogik, 23* (7–8), 52–58.

Vogler, J., Messmer, R., & Allemann, D. (2017). Das fachdidaktische Wissen und Können von Sportlehrpersonen (PCK-Sport). *German Journal of Exercise and Sport Research, 47* (2), 335–347. https://doi.org/10.1007/s12662-017-0461-4

Voisard, N. (2018, 23 mars) (Dir.). *Evaluation en éducation physique et sportive dans le contexte du PER* (2ème Journée des didactiques disciplinaires du Centre romand de didactique disciplinaire). HEP BEJUNE: Bienne/Biel. Retrieved from https://www.2cr2d.ch/power-point-presentations_23-03-18

Weber, N. (2009). Lehrdiplom als Nebenprodukt? *mobile, 4*, 10–13.

Websites

- www.bewegunglesen.com
- www.jugendundsport.ch
- www.lirelemouvement.ch
- www.sportstudien.ch
- www.qims.ch