New Trends and Issues Proceedings on Humanities and Social Sciences

Volume 4, Issue 3 (2017) 62-69

ISSN 2421-8030
www.prosoc.eu

Selected papers of 7th World Conference on Learning, Teaching and Educational Leadership, (WCLTA 2016) 27-29 October 2016, Danubius Hotel Flamenco Convention Center, Budapest, Hungary

Use of modern teaching equipment and innovative organizational form of ski training

Ivan Ruzicka[a]*, Department of Physical Education and Sports, Faculty of Education, University of Hradec Kralove, 3405, Kralove, Czech Republic.

Suggested Citation:
Ruzicka, I. (2017). Use of modern teaching equipment and innovative organizational form of ski training. *New Trends and Issues Proceedings on Humanities and Social Sciences.* [Online]. 4(3), pp 62-69. Available from: www.prosoc.eu

Selection and peer review under responsibility of Prof. Dr. Jesús Garcia Laborda, University of Alcala, Spain

Abstract

This paper analyses use of modern teaching aids and innovative organizational form of ski training. An innovative form of ski training, the so-called „circus training" and modern teaching aids shows on a significant efficiency of the time spent on skis in children at primary school age. The paper presents possibilities to increase personal enjoyment on skis and efficiency of the acquisition of basic skiing skills realized in an atypical way. This pilot study showed that almost three quarters of beginner skiers responded that they preferred activities based on the principle of circus training rather than a traditional „snake formation". The children participants also responded that they preferred use of teaching aids on the slope.

Keywords: Skiing, innovative organizational form, modern teaching aids, children of primary school age.

* ADDRESS FOR CORRESPONDENCE: **Ivan Ruzicka**, Department of Physical Education and Sports, Faculty of Education, University of Hradec Kralove, 3405, Kralove, Czech Republic.
E-mail address: ivan.ruzicka@praha5.cz / Tel.: +420 493 331 111

1. Introduction

Cross-country and downhill skiing in active life of children, youth and adult population place an important part in the process of growth and maintaining of a wide range of motor, mental, and social abilities and specific skills (Lind & Sanders, 2004; Mekota & Cuberek, 2007). Winter mountain environment can greatly influence human health in all its dimensions. Acquisition of basic skiing skills in childhood facilitates skiing to become a lifelong physical activity that improves quality of life (Schmidt & Wrisberg, 2000). Childhood is a convenient period of time for family education and school ski courses to develop a close relationship to skiing for whole life. Primary school age appears to be an ideal time for acquiring and stabilizing the basic skiing skills (Treml, 2006). However, the primary education seldom offers this possibility. One of the key reasons why pupils of primary school do not go to ski courses can be in the fears of teachers/ski instructors of high organizational and conducting demands. Instructors should try to adjust ski training to specific demands referring to the given age group. This can be for example a turn from traditional organizational forms of ski training to innovative, creative methods, using modern aids and organizational forms that make the activities on snow more efficient, but also playful and entertaining (Andersen, 2005; Coker, Fischman & Oxendine, 2006).

An advantage of teaching skiing of older school age and adolescent children is a fact that the best methods have been published and tested in practice. However, teaching skiing of pre-school age and primary school children is affected by a lack of high-quality and systematic methodical sources. A widespread organizational form of training in skiing practice is a linear form called "snake formation" or a training with the so-called "gradual downhill". They have good effect on older children. However, the extent of application of these organizational forms significantly decreases with decreased age of skiers. Limited opportunity to give a direct and immediate feedback in the first case and downtime in the latter can cause a significant decrease in motivation and loss of concentration of the participants. Based on this experience it is necessary to look for optimal ways to make the first steps on skis easier for small skiers while contributing to a high level of process efficiency and its overall impact.

Development of motor abilities and skills depends to a large measure on physical and mental maturation and in the case of group skiing teaching also on social maturation of an individual (Linhart, 1982). In pre-school and primary school age, children are able to focus on a routine activity for a relatively short period of time. The acquisition of new motor skills is relatively quick, but it may be superficial and unstable. According to Langmeier & Krejcirova (1998), a development of adequate skills and motor performance depend not only on the age, but also on external conditions: if appropriately supported, they have faster and differentiated rise. However, the main pillars of ski training of young skiers also include the used methods (Príbramsky, 1999) and the application of appropriate teaching skills of ski instructors (Ruzicka, 2001). In terms of the age and the process of acquiring skiing skills Treml (2006) claims that the best time for learning is between the age of 6 and 10. An instructor can draw the attention by varied activities, systemization of the subject matter and adequacy of its scope. A key area is the formation of motion images that are primarily bound to positive motor experiences at this age (Weinberg & Gould, 2003; Coker, Fischman & Oxendine, 2006). Therefore it is necessary to use appropriate forms of work – to interconnect the selected skiing activities with children world of amusement and games, for the activities to stay attractive and not stereotyped, and thus help the children stay concentrated and interested (Moran, 2004).

One of the main risks of ski training may be an overloaded approach to teaching, oriented entirely towards achieving high levels of skiing skills, at the expense of a positive experience. It is primarily the population of children who enter a next educational process with the same feeling that used to accompany the previous physical activity experience (Jackson & Csikzentmihalyi, 1999). A positive impression can be reached better with a help of attractive teaching aids and inventive organization of training. It is recommended to focus more on the process than on the goal, and yet (or perhaps because of this) achieve great results in terms of mastering skiing skills and also formation and strengthening the relationship of small children to skiing.

The most appropriate environment for systematic development of skiing skills of children at this age group is an experience-based training area, the so-called ski playground (Treml, 2006). Commercial ski kindergartens are usually well-equipped to meet the specific age demands of young children and offer a sufficient number of proper aids and equipment. They provide good stimulation; however, they cannot be used for a group school teaching. Therefore it is necessary for the teachers to project and realize such area on their own, according to their own possibilities and their specific plan.

Last but not least essential aspect of an effective teaching of primary school children is a concept of managing the entire process. Organization of teaching is a tool that transforms target ideas into intense and also varied and entertaining lessons (Chevalier, 1996). A playful approach should be one of the key pillars of a ski instructor of children. According to Ruzicka (2001) the use of modern teaching aids, and teaching forms based on games considerably strengthens the principle to distract pupils' attention from "technical" demands of training towards spontaneity and experiencing - from the actual content to creative forms. This will be reflected back in the overall quality and results of the teaching process. Using a varied range of equipment commonly available at school and using applications of appropriate innovative forms of work will have a positive effect on the level of involvement and concentration of children (Shedden, 1983; Murphy & Martin, 2002; Zídek, 2004; Lind & Sanders, 2004).

The so-called circus training fits perfectly the needs of primary school ski courses (Strobl & Friedrich, 1999). However, in school concept it does not belong to frequently used forms, although it corresponds to the needs of winter courses within primary education. Circus training takes place in a designated area on a gentle slope with a flat finish, where beginner skiers use prepared stations with the given tasks for skiing skills practice. Ski instructor, moving in the designated area mostly without skis, works primarily as a facilitator using a wide range of aids and activities. Circus training naturally carries the necessary aspects of playfulness, spontaneity, efficiency, safety, and last but not least a direct possibility to use varied aids. It allows children to master the basics of downhill skiing in an entertaining way and to be able to move on the slope safe on their own, without worries that can inhibit the speed of acquiring skiing skills.

2. Method

2.1. Aim

The paper is based on a skiing instructor practice with children of primary school age. The aim is to verify a possibility of teaching skiing with the use of modern didactic aids and innovative organizational forms of teaching – the so-called circus training.

2.2 Methods

The methods focused on verifying the possibility of teaching skiing with the use of modern didactic aids and innovative organizational forms. For verification of the described methods in practice, a direct conducting of ski training was used, combined with methods of inquiring, observation and structured interview.

2.3. The participants and development of the research

The basic research sample A comprised a pair of PE teachers in their roles of a skiing instructor + an assistant (average age: 35 years; average length of practice: 7,3 years); the research sample B consisted of ski course participants – there were 22 first-year pupils of the basic school in Hradec Kralove (Czech Republic), their age was 6 – 7 years. The verification was conducted within winter ski course according to a prepared schedule: the pupils participated in ski training at the extent of 2 lessons (each at the length of 45 minutes) in the morning and 2 lessons in the afternoon, in the total of 5 training days. The data were collected at the end of the course.

2.4. Research questions

The following questions were posed to achieve the research goals:

Basic questions for teachers – ski instructors:

1. How do you evaluate the inclusion of circus training form of teaching skiing in the ski course?
2. How do you evaluate the use of modern aids in ski training?
3. What do you consider the greatest benefit of the inclusion of circus training form of teaching and use of modern aids in ski training?
4. Will you personally use this approach to teach skiing with the given age group in next ski courses?

Basic questions for children - course participants:

1. How long have you been learning skiing?
2. Do you prefer ski training with the use of modern aids or without?
3. Which form of ski training did you like more: riding in the track behind the teacher (the so-called snake formation) or exercises in circus training form with the use of modern aids?

2.5. Data processing

Data analysis was realized using graphical and logical techniques for description, illustration, discussion, and evaluation.

3. Results

3.1. Evaluation of the survey among teachers – ski instructors

1. How do you evaluate the inclusion of circus training form of teaching skiing in the ski course?

A) We met this organizational form in practice within the ski course for the first time. The children were definitely well-motivated by the use of didactic aids to master basic skiing skills. There was no need to look for or to use other motivational elements. Beginner skiing lessons proceeded very effectively and time went quickly, but effectively, thanks to a variety of activities.

B) With this form of training the children were active, enthusiastic and cheerful all the time of the training and they often communicated their feelings during the activities. Even in case of a failure the children were not afraid to take a new attempt; they seemed to have a strong drive to repeat the given exercises over and over again, until they achieved an improvement. The given organizational form and corresponding environment enabled to perform the exercises in a new, innovative, and experience-based way.

C) Enthusiasm in this training group was exceptional. It was a strong experience for all participants.

2. How do you evaluate use of modern aids in ski training?

A) Use of modern aids helped the children to experience an extraordinary time so strong, that some even did not want to have a break for a rest or snack.

B) I have never thought of using all the variety of common aids we have at school before. It has been a great inspiration for further teaching on the slope.

C) The children did not even realize that they practised repeatedly the same skiing skills, thanks to an inclusion of activities with the selected teaching aids. There was even no decline in their attention or enthusiasm. A mere exchange of aids induced essential changes that helped to keep the children interested in basically the same motor activity, which would otherwise had induced undesirable stereotype.

3. What do you consider the greatest benefit of the inclusion of circus training form of teaching and use of modern aids in ski training?

A) The biggest benefit of this form of training is an opportunity to prepare more positions and downhill tracks of different difficulty based on the acquired level of motor skills.

B) Involvement of all the participants in organization, opportunity to involve parents as well as the course participants themselves in skiing area preparation.

C) Active involvement of all the pupils at the same time, all of them moving. It is an advantage that as the children ride up the ski lift, they watch their mates riding down the slope and thus can think about the upcoming activity in advance.

4. Will you personally use this approach to teaching skiing with the given age group in next ski courses?

A) Yes, definitely.

B) Yes, I will use it in future, as much as possible, and I will also recommend it to my colleagues.

C) For sure.

3.2. Evaluation of children – answers of the course participants

1. How long have you been learning skiing?

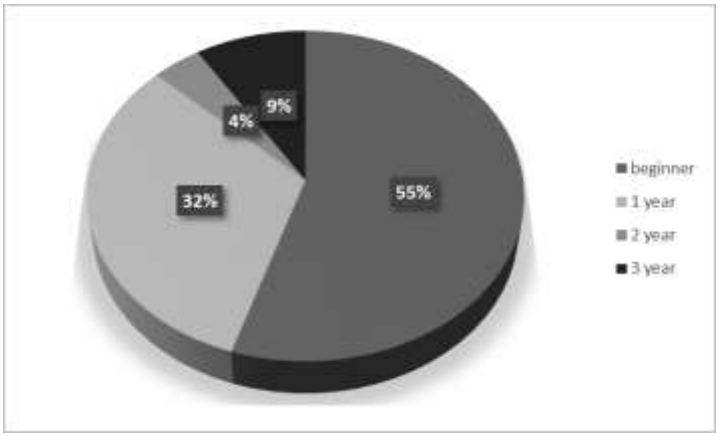

Figure 1. Length of skiing practice of the children participants

In the absolute majority of cases it was their first skiing and ski course experience for the children participants of the model course. About one third of the participants were finishing their first skiing season and about 13 % children had been skiing for two or three years (slightly richer ski experience).

2. Do you prefer ski training with the use of modern aids or without?
All the children (100 %) preferred ski training with use of special aids.

3. Which form of ski training did you like more: riding in the track behind the teacher (the so-called snake formation) or exercises in the circus training form with the use of modern aids?

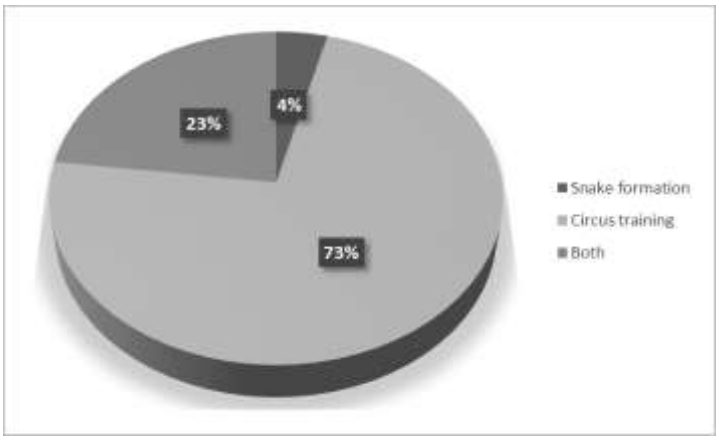

Figure 2. Popularity of the selected organizational forms in training

73 % of children valued most the activities based on circus training. The form of snake formation was preferred only by 4 % of the respondents. 23 % liked using both methods in acquiring basic skiing skills.

4. Discussion

It is apparent from the verbal assessment of the respondent teachers – ski course instructors, that use of aids and circus training organizational form met the requirements well and was useful. Either the increased demands on equipment preparation or the skiing area did not decrease teachers' aspiration to include this form in their future teaching practice.

Evaluation of the course participants: Answers to question no. 1 – "How long have you been learning skiing?" showed that for the absolute majority of the course participants it was their first experience with skiing or ski training. About one third of the children had started their first skiing season. Almost 10 % of the children had been skiing for three years and were slightly experienced skiers compared to the rest of the group. Generally the whole group was classified as beginner skiers or skiers with little experience. The mentioned classification helped evaluating the selected fields of use of teaching aids and training forms – as the participants were not influenced by a preceding educational experience, their evaluation was independent and impartial.

All the respondents (100 %) answered to question no. 2 – "Do you prefer ski training with the use of modern aids or without?" that they preferred use of aids on the slope. The results pointed clearly to the need to use appropriate aids in training. It is recommended, from a point of view of usefulness and availability, to use the same equipment that is commonly used in school physical education. Thus there are no financial demands on buying new material, and children are familiar with the common school equipment from PE lessons. That promotes easy, natural and safe approach to training.

Answers to question no. 3 – "Which form of ski training did you like more: riding in the track behind the teacher (the so called snake formation) or exercises in the circus training form with the use of modern aids?" showed that three quarters of respondents preferred activities based on the principle of circus training. Almost a quarter of all respondents appreciated combination of both mentioned ski training organizational forms as an optimal and complex approach. The least favourite training formation was a snake formation, a gradual downhill of the pupils in the track of an instructor, which is surprising. The form of snake formation works on reflecting and fixation of motor skills, it is effective in terms of pupils' engagement and it is often used in sport training of children and youth in general. The results suggest that the use of the aforesaid form is not optimal in school ski courses for young children. The circus training complies better with the needs of school courses. Based on this

study, the surveyed ski training organizational form, together with the use of modern teaching aids and experience-based approach, can be recommended for young children ski courses.

5. Conclusions

With regard to the collected data and the concept of the research project, the results only indicate possible trend of further exploration and research in the given field of study. The pilot study was carried out only in one ski course, mainly because of a low budget. The author's effort aims to continue and extend the research in future. The research study has brought interesting conclusions and the methods for data collection for future research were verified and tested in practice. Yet for verification of the experience rate it would be more convenient to use a reliable diagnostic tool that would prove the effect of the given methods more conclusively and thus aspire to a wider use within school ski courses. The research findings allow a subsequent investigation. With regard to long experience of the ski instructors responding in the selected ski course their reflection is considered a significant value. With regard to the age of the interviewed children - participants of the ski course, the responses and presented results are considered to be of a pilot and additional value – they to illustrate the course of verification and potential solutions to the issue, but also for subsequent accurate targeting of further research in this field.

The aim of the research study was accomplished. The assumptions were verified and convenient tools provided responses to the research questions. The below-mentioned recommendations were formulated with regard to the findings of the research on teaching skiing in ski courses for children of primary school age:

1. To use the so-called circus training organizational form in school ski courses as much as possible. It has positive effects on the course of ski training – it provides a required variety, higher level of safety, efficiency and also motivation in training. It also helps to skiing independence of children. It is an appropriate means to induce a positive relationship of beginner skiers to skiing as such.

2. To maximise use of special didactic aids during training. I tis greatly recommended to use common school equipment – ropes, skipping ropes, hoops, cones, partially inflated overballs and gymballs , swimming noodles and rings, frisbee, bars, ski poles etc.

3. To select an appropriate terrain, preferably in a smaller ski resort, in an open space and with the slope gradient to 15°. To allow using a rope lift for beginners to increase an efficiency of training and positive experiences of beginner skiers, and also to prevent the risk of exhaustion from stepping up the hill. To reinforce a continuous interest of beginner skiers in the given activities (monitoring of the skiing area and the performed activities during riding up the lift).

References

Andersen, M. B. (Ed.). (2005). *Sport psychology in practice*. Champaign, IL: Human Kinetics.

Coker, C. A., Fischman, M. G. & Oxendine, J. B. (2006). Motor skill learning for effective coaching and performance. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (5th ed., pp. 18-40). New York: McGraw-Hill Companies.

Chevalier, P. (1996). *Ski alpin – wettkampftechnik und trainingsmethoden* (2nd ed.). Bern: Muri.

Linhart, J. (1982). *Zaklady psychologie uceni*. [The Basics of Psychology of Learning] Praha: SPN.

Mekota, K. & Cuberek, R. (2007). *Pohybove dovednosti, cinnosti, vykony*. [Motor Skills, Activities, Performance] Olomouc: UP.

Schmidt, R. & Wrisberg, C. (2000). *Motor learning and performance*. Champaign: Human Kinetics Publishers.

Watson, T. & Radwan, H. (2001). Comparison of three teaching methods for learning spinal manipulation skill: A pilot study. *The Journal of Manual and Manipulative Therapy*, *9*(1), 48-52.

Jackson, S. A. & Csikzentmihalyi, M. (1999). *Flow in sports.* Champaign, IL: Human Kinetics.

Langmeier, J. & Krejcirova, D. (1998). *Vyvojova psychologie.* [Developmental psychology] Praha: Grada Publishing.

Lind, D. & Sanders, S. (2004). *The physics of skiing*. New York: Springer.

Moran, A. P. (2004). *Sport and exercise psychology: A critical introduction*. New York: Routledge.

Murphy, S. M. & Martin, K. A. (2002). The use of imagery in sport. In T. Horn (Ed.), *Advances in sport psychology* (2nd ed., pp. 405-439). Champaign, IL: Human Kinetics.

Príbramsky, M. (1999). *Lyzovani*. [Skiing] Praha: Grada.

Shedden, J. (1983). *Skilful skiing*. US: EP Publishing.

Ruzicka, I. (2001). Lyzovani hrou. [Skiing by using the games]. Paper presented at *5th international conference Games programs in physical education processes.* Plzen: PdF ZCU.

Strobl, K. & Bedrich, L. (1999). *Ucíme lyzovat.* [We teach to ski]. Olomouc: UP.

Treml, J. (2006). *Lyzování deti.* [Children skiing] Praha: Grada.

Weinberg, R. S. & Gould, D. (2003). *Foundations of sport and exercise psychology* (4th ed.). Champaign, IL: Human Kinetics.

Zidek, J. (2004). *Lyzovanie.* [Skiing]. Bratislava: PEEM Publishing.