

**L'AQUILA EUROPEAN CITY OF SPORT: A SURVEY ON PHYSICAL
EDUCATION IN SCHOOLS OF ALL LEVELS DURING THE COVID-19
PANDEMIC**

**L'AQUILA CITTA' EUROPEA DELLO SPORT 2022: UNA INDAGINE
SULL'INSEGNAMENTO DELL'EDUCAZIONE FISICA NELLE SCUOLE DI
TUTTI GLI ORDINI E GRADI NEL CORSO DELLA PANDEMA COVID-19**

Maria Vittoria Isidori,

Università degli Studi dell'Aquila

mariavittoria.isidori@univaq.it

Alessio Santelli

Università degli Studi dell'Aquila

alessiosantelli@gmail.com

Abstract

The Covid-19 pandemic determined a radical revision of the activities in the Physical Education curriculum in schools (DPCM 17-5-2020). This survey, which is part of the project 'Le Città Europee dello sport' financed by EU funds, is carried out in 10 public schools of all levels in the municipality of L'Aquila, and aims to detect, through interviews with privileged testimonials (16 subjects) and the administration of a questionnaire to curricular and support teachers (63 subjects), to what extent it is possible to guarantee the inclusive function of sport during the pandemic since many aggregative functions are at risk. Its purpose is to design intervention models involving schools and sports associations in order to reconcile aggregative activities and security requirements imposed by Covid. The results of our investigation, in terms of variations in teaching of physical education before and during the pandemic, shows a reduction in the group size in favor of individual activity even when didactics is conducted in presence.¹

¹ Although the present work is the result of a common commitment on the part of the authors, the introduction and the discussion are to be attributed to M.V. Isidori, while the paragraphs relating to the sample, method, results and conclusion are to be attributed to A. Santelli.

Abstract

La pandemia Covid-19 ha determinato una revisione radicale delle attività nel curriculum di Educazione Fisica nelle scuole (DPCM 17-5-2020). Questa indagine, che fa parte del progetto “Le Città Europee dello Sport” finanziato dall’ UE, è realizzata presso 10 scuole di ogni ordine e grado del comune dell’Aquila mira a rilevare, attraverso interviste semi strutturate a docenti responsabili delle attività di educazione fisica nelle scuole (16 soggetti) e la somministrazione di un questionario a docenti curricolari e di sostegno (63 soggetti), in che misura e in che modo è possibile garantire la funzione inclusiva dello sport durante la pandemia dal momento che molte funzioni aggregative sono a rischio. L’indagine ha inoltre lo scopo di progettare modelli di intervento che coinvolgano le scuole e le associazioni sportive con l’obiettivo di riconciliare le attività aggregative e le esigenze di sicurezza imposte dal Covid. I risultati della nostra indagine, in termini di variazione dell’insegnamento di educazione fisica prima e dopo la pandemia, mostrano una riduzione della dimensione dei gruppi in favore dell’attività individuale anche quando la didattica è condotta in presenza.

Keywords: Sport, Inclusive School, Integrated System

Keywords: Sport, Scuola inclusiva, Sistema integrato

INTRODUCTION

The values expressed by sport are universally recognized as potential mediators of an inclusive and sustainability-oriented culture. During the sixth international conference of ministers and senior officials responsible for physical education and sport at school in 2015, WHO implemented a global agreement that combines sports policies and the so-called Sustainable Development Goals (SDGs) through education programs. The 2030 Agenda emphasizes the role of the sport as a crucial factor for promoting, among other things, economic growth, and decent work, and for reducing inequalities between those who are at risk of marginalization. It also focuses on fragile, marginalized and excluded children, by tracing a scenario that connects themes and processes: health, learning, education, training, and individual, collective, and environmental development (UNESCO, 2015; WHO, 2015). More specifically, physical education affects many of the mentioned goals: it guarantees a healthy life, promotes the well-being of all the subjects involved, and guarantees quality education and gender equality. The

benefits of sport at school, on a social and behavioral level, as well as on a physical level are well-known: it educates in learning social rules and discipline (especially team sports); it helps to develop both a sense of belonging to the group and to the reference context, and to prevent diseases such as obesity and diabetes. It also increases psychophysical well-being and stimulates competitiveness within the limits of sporting correctness and fair play (D'Anna, et al., 2019; Mamak, et al., 2020; Sibilio et al., 2008).

However, ISTAT data (2021) on the physical activity of the very young are not exactly comforting: only 52% of children aged between 3 and 17 years practice a sport continuously. It means that about half of young people do not do it or do it occasionally. In light of this, the need to move is fundamental for young people, including of course those with special educational needs SEN, because it has to do with well-being understood as the realization of their physical, emotional, mental, social and spiritual potential inspired by a harmonious commitment in harmony with oneself, family and friends, the community and the world in general (Ghedini, 2017). These considerations assume a particular significance given the ISTAT data before the pandemic, according to which in Italy, in 2019, just over one in five individuals was at risk of poverty and social exclusion. These data must be interpreted more from a socio-economic perspective than from an educational one. The Italian sports organizations clearly highlighted the need to develop knowledge and skills useful for a restart of grassroots sport, so that the crisis, due to the effects of the Covid emergency, could be overcome through training events, updating courses, and assistance opportunities that can have medium and long-term effects on the strength and the sustainability of sport organizations.

From the didactic and educational points of view, school closures caused by the COVID-19 pandemic have forced school leaders to shift from a traditional instruction to an on-line environment. This has made it particularly urgent to improve the quality of educational services and the so-called "school setting" (D'Alonzo 2020; Isidori 2019), recommended by the cited sustainability objectives of the 2030 Agenda and Inclusive Education (ONU). While online learning is not a new concept in the field of education, the quick shift of moving traditional education to a virtual setting was a daunting task in a short amount of time. Transitioning to a virtual setting forced many educators to learn new technologies and skills and caused stress among teachers and students (Smith, 2020).

Compared to face-to-face education, distance education involves some advantages and challenges due to systemic differences (Bilgic, & Tuzun, 2020). Most schools have decided to use synchronous sessions via online platforms provided by companies such as Google and Microsoft. Teachers have to be confronted with this fast-digital transition and required the transform their teaching methods throughout the network-based education. In this adaptation period, it is expected there might occur some limitations, especially since such an applied and socially active lesson are physical education and sports. However, interpersonal experiences must be reconciled with ministerial indication on the “protection of public health” linked to the pandemic which do not always promote educational aggregation typically solicited by sport (Gilbert, 2019).

The survey presented below is inspired by the considerations set out so far, and by the attempt to stimulate a reflection around a series of questions: what are the resources available to schools and teachers to ensure the performance of physical education activities during the pandemic? Have these activities made it possible to guarantee their inclusive function, to prevent the risk of increasing educational poverty conditions linked, to some extent, to the pandemic? Can schools contribute to the expansion of European 'cities of sport' models in which the role of sport is strategic towards economic, social, political and educational sustainability? Are teachers able to ensure the satisfaction of training needs, related to physical education, in particular in the case of BES and in online teaching settings, such as those imposed by the pandemic?

The possibility of implementing effective didactics, based on evidence, facilitates the learning and the participation processes of all learners, and represents an essential feature of the inclusive approach. Although the complexity of the concepts and processes involved in the inclusive didactics can be problematic from an epistemological point of view, and difficult to investigate in the transfer between different disciplinary fields, they can nonetheless open up perspectives and dimensions that would otherwise remain missing, and trace hybrid spaces that can better represent the variability of educational processes and human functioning (Damiani & Gomez Paloma, 2021).

Those engaged in research (scholars, researchers, and teaching researchers) must accompany the educational institutions towards a change for an effective improvement in the values and in the co-development directions mentioned. One way to achieve this consists in the identification

of adequate theories and practices; in the problematization of crucial issues and sustainable solutions; and in the re-evaluation of dimensions that are not always adequately valued within each educational and scholastic context (Ianes & Canevaro, 2016). In line with this, we intend to detect the means available to the schools of L'Aquila in order to guarantee its inclusive function through sport, and, by also promoting teachers' training, to design an intervention model involving the "third sector", namely, the territory and families. The aim is to ensure that the isolation determined by the pandemic won't aggravate the risk of marginalization of the weakest groups. The proposed project is part of the research activity "L'Aquila European City of Sport 2022" financed by EU funds.

1. SAMPLE

The sample includes 63 subjects (61F/2M), average age 45 years. 63.49% of subjects serve in primary school, while 26.98% teach physical education in high school. The rest of the sample is equally distributed across the various school grades. Again, 26.98% of the entire sample is specialized and committed in special needs teaching. There are also 16 teachers (15F/1M), average age 50 years, who are in various capacities responsible for the management of physical education in the schools of the municipality of L'Aquila that have joined the mentioned project (4 primary schools, 3 secondary of first grade, 3 secondary of second grade).

2. METHODS

As for the methodology, our survey involves the following phases:

- Carrying out interviews with privileged testimonials. These are in particular reference teachers for sports activities in within the school complexes.
- The administration of a questionnaire (after a try out) addressed to the representatives of sport activities in schools, teachers of physical education, and teachers of support.
- Design and development of an intervention model, and of a device for monitoring research objectives and outcomes, within the project "L'Aquila città Europea dello sport 2022".

3. MATERIALS

A. The *questionnaire*: consists of 49 items designed to:

1. Detect the school levels of teachers in which he/she is engaged;
2. Type(s) of training of teachers (including that in technologies);
3. Knowledge of the recommendations on physical activity for health of pupils (OM, Ministry of Health, MI).

The questionnaire investigates the type of physical activity conducted in presence and at distance and the difficulties encountered; the collaboration of experts; the possibility of proposing extra-curricular actions to develop students' commitment, especially with Special Needs SEN, towards sport. It ends with questions on the type of projects pursued by schools to favor inclusion within the territorial network. In all cases a comparison has been proposed between the period before and during the pandemic.

B. The *semi-structured interviews*: aimed to detect information both on the availability of gyms at schools and any adjustments to spaces during the pandemic, and the knowledge of the recommendations on physical activity for the health of pupils (World Health Organization or the Ministry of Health) before and during the pandemic and sources of such information. In addition, they also aim to understand whether schools organized physical activity in DaD and also whether they took part in interinstitutional network projects (afternoon sports activities, the so-called “summer plan”) or collaboration with experts outside the school to carry out interventions focused on students with BES.

4. RESULTS

The teaching of physical education in the pandemic period (a.s. 2020-21), was conducted in DaD, mainly in synchronous mode (81%), and little in asynchronous mode (19%), with lessons given at least once a week. The teaching of physical education before the pandemic was conducted in presence in group (team games, 68.96%). Even though during a certain period of time during the pandemic it was possible to conduct physical activity in presence, team games have nevertheless suffered a sensible reduction from 68.98% to 33%. In addition, as expected, there is an increase in teachers who engage children in individual activities (41% during the pandemic, 17.24% before the pandemic) (FIG: 1). Relay games remain unchanged in the two

periods. With reference to inclusive actions, most of the teachers (58.62%) are able to guarantee a personalized physical education program.

As for the results of the semi-structured interviews, schools seem to have spaces dedicated to physical education activities that have been adapted to the hygienic needs imposed by the pandemic such as disinfecting devices, purifiers, etc. (7 out of 12 subjects respond positively in this regard). Schools are also equipped with gyms and any adjustments to spaces during the pandemic is made in line with the requirement imposed by the Ministry of Health. Most of the subjects interviewed claim to be aware of the recommendations on physical activity for the health of pupils (World Health Organization or the Ministry of Health), even those relating to the period of the pandemic and claim to have received such information at institutional level and in any case directly from the Health Ministry.

The educational activities promoted by public institutions were equally distributed between the synchronous and asynchronous modes (in the period of the pandemic in which the only form of delivery allowed was the remote one). There were also educational organizational difficulties. Adhesion and participation in interinstitutional network projects (afternoon sports activities) took place in a reduced number of cases for afternoon activities (3 of the 12 interviewed subjects answered affirmatively) while half of the subjects interviewed said that the coordinated institute adhered to the ministerial project called “Summer Plan”. Finally, and more importantly, it does not appear that collaborative actions have been undertaken with experts outside the school to promote interventions aimed at pupils with BES.

5. DISCUSSION

Most of the teachers and referents who participated in the survey said they were informed about the measures and the ministerial indications to explain the methods of carrying out physical education at school during the pandemic. This is confirmed by our survey where most of the teachers (81,03%) say they know the indication WHO and MI provided on Covid-19 and physical activity and have received this from institutional bodies. The results of our investigation, in terms of variations in teaching of physical education before and during the pandemic, are evident and expected: there is a reduction in the group size in favor of individual activity even when didactics is conducted in presence. *Online physical education classes*

(OLPE) explore the relationship between course material, teaching methods, and implementation and student results. In addition, student perceptions, interests, and achievements in different distance education (blended or hybrid) on physical education lessons were also prominent research topics (Williams et al., 2020).

However, there are serious problems such as the delivery via OLPE, evaluation, and assessment procedures of teaching and course outcomes (Killian et al., 2020). And this is so because during that period asynchronous activities have been frequently used. It is assumed that both the education system and its stakeholders (e.g., schools, teachers) were not adequately prepared for such an urgent transition to distance education, and in fact those practices reflected the features of remote teaching. Expectedly, the difficulties that physical education teachers may encounter during distance education influence the quality of education (Tolga, 2021).

In line with the international literature, which sees physical education teachers confident in the possibility of motivating students by means of online programs that enhance their physical and moral attitudes, it is also possible to recognize an approach oriented towards healthy lifestyles at personal and community levels (OMS guidelines). Clearly, the most fragile pupils require both the adoption of more inclusive programs especially if teaching activities are carried out at distance, and the development of a compliance between teachers and learners. The fragility of the weakest groups, also for physical education has also been confirmed by the coordinators. It is on this educational dimension that we will have to invest in blended teaching periods. Another dimension on which it is necessary to invest is, without doubt, the use of projects and experts also in view of the already evoked need for an interinstitutional network aimed at developing inclusion and sustainability.

CONCLUSION

The interventions directed to schools and teachers were mainly informative (i.e., about the rules and safety measures). In addition to moving to an online learning environment during the COVID-19 pandemic, special educators were faced with multiple challenges ranging from equity issues for students, providing instruction in a virtual environment, and providing special education services as determined in student individual education plans (IEPs) (Bilgic & Tuzun, 2020; Bijen & Ferman, 2020). However, the bigger the challenge, the bigger the opportunity

for special educators as they learn to virtually teach in a pandemic world (Smith, 2020; Dagkas, 2018).

This aspect assumes a particular meaning in the case of physical education. It is indeed necessary, also thanks to the collaboration of the coordinators of physical activity in schools, to both implement teachers and coordinators training more focused on teaching projects tailored to pupils with disabilities (especially SEN) (Bloemen, et al., 2015; Neville, et al., 2019; Rekaa, et al., 2019), and design intervention models partly inspired by the “European city of sport”, involving schools and its surrounding area with the goal of establishing a cooperative relationship between schools, families and territory. An important contribution to the school setting and education, even in this moment of crisis, is given by the interdisciplinary paradigm “Embodied Cognitive Science” (ECS), and, more particularly, by the concept known as “environmental extended learning” which contributes to the construction of teaching methodologies for inclusive teachers. It can also be seen as a complex training device used in complex contexts. Consistent with the biopsychosocial model, the learning environment is represented by the designation of different components such as objects, individuals, sociality, contexts, and their culture. So, in this context “Wide ECS Environment” (WEE) can be therefore understood as the extended and integrated environment able to enrich and enhance the ECS school curriculum from a threefold teachers); physical-material (including learning spaces, times, and places such as indoor and outdoor environments); pedagogical-didactical (including all educational and didactic devices). The quality of the school and the educational success of pupils are influenced by these elements and their interaction (Damiani&Paloma 2021; Paloma&Damiani 2015; Savino, et al., 2015). Finally, as already highlighted, it would also be important to start a systematic educational reflection on the role that the territory should play in sustainable projects like the one mentioned in this survey. In particular, it seems necessary to promote a creative environment which understands the territory as a complex, interconnected structure, rather than as a void space used to accommodate various infrastructure.

<i>DaD</i> physical education During the pandemic (school year 2020/2021)	Synchronous mode 81%	Asynchronous mode 19%
Individual Physical Education In presence (school year 2019/2020)	Before the pandemic 17.24%	During the pandemic 41%
Physical Education Group In presence (school year 2019/2020)	Team Games Before the pandemic 68.96%	Team Games During the pandemic 33%

FIG: 1. The teaching of physical education in the schools of the municipality of L'Aquila before, during and after the pandemic.

REFERENCES

- Bilgic, H. G., & Tuzun, H. (2020). "Issues and Challenges in Web-Based Distance Education Programs in Turkish Higher Education Institutes". Turkish Online Journal of Distance Education, 21(1), 143-164.
- Bijen F., & Ferman K. (2020). Teaching Strategies for Physical Education during the COVID-19 Pandemic. Journal of Physical Education, Recreation & Dance. Volume 91, pp. 48-50.
- Bloemen, M. A. T., Backx, F. J., Takken, T., Wittink, H., Benner, J., Mollema, J., F de Groot, J. (2015). Factors associated with physical activity in children and adolescents with a physical disability: a systematic review. Developmental Medicine & Child Neurology. V. 57, Issue2, pp. 137-148.
- Dagkas, S. (2018). "Is Social Inclusion through PE, Sport and PA Still a Rhetoric?" Evaluating the Relationship between Physical Education, Sport and Social Inclusion". Educational Review, v70 n.1 pp 67-74.
- Damiani, P., & Gomez Paloma, F. (2021). KEY POINTS BETWEEN NEUROSCIENCE AND EDUCATION FROM THE "EMBODIED COGNITION PERSPECTIVE, *Giornale Italiano di*

Educazione alla Salute, Sport e Didattica Inclusiva/Italian Journal of Health Education, Sports and Inclusive Didactics - Anno 5 n. 2 - IT - <https://doi.org/10.32043/gsd.v5i2.371>

D'Anna, C., Forte, P., & Gomez Paloma, F. (2019). Physical education status in European school's curriculum, extension of educational offer and planning. *Journal of Human Sport and Exercise*, 14(4proc), S805- S817. Doi: <https://doi.org/10.14198/jhse.2019.14.Proc4.43>

D'Alonzo, L. (2020). *La gestione della classe per l'inclusione*. Brescia: Morcelliana.

Decreto del Presidente del Consiglio dei Ministri (17 maggio 2020). Disposizioni attuative del decreto-legge 25 marzo 2020, n. 19, recante misure urgenti per fronteggiare l'emergenza epidemiologica da COVID-19, e del decreto-legge 16 maggio 2020, n. 33, recante ulteriori misure urgenti per fronteggiare l'emergenza epidemiologica da COVID-19. (GU Serie Generale n.126 del 17-05-2020).

Gilbert, E., N. (2019). Designing Inclusive Physical Education with Universal Design for Learning. *Journal of Physical Education, Recreation & Dance*, v90 n. 7, pp 15-21.

Ianes D., Canevaro A. (2016). *Orizzonte inclusione. Idee e temi da vent'anni di scuola inclusiva*. Trento: Erickson.

Isidori, M. V. (2019). (a cura di). *La formazione dell'insegnante inclusivo. Superare i rischi vecchi e nuovi di povertà educativa*. Milano: Franco Angeli.

ISTAT (2021). *La Pratica Sportiva in Italia*. <https://www.istat.it>

Killian, C.M., Woods, A.M., Graber, K.C., & Templin, T. (2020). Factors associated with high school physical education teachers' adoption of a supplemental online instructional system. *Journal of Teaching in Physical Education*, 1-10. <https://doi.org/10.1123/663jtpe.2019-0188>

Mamak, H., Temel, A. & Kangalgil, M. (2020). Examining the Self-Efficacy of Primary School Teachers and the Problems Encountered in Physical Education and Game Course. *Educational Policy Analysis and Strategic Research*, 15(3), 336-358. Doi: 10.29329/epasr.2020.270.16.

Neville, R. D., Makopoulou, K., & G. Hopkins W. (2019). Effect of an inclusive Physical Education (IPE) Training Workshop on Trainee Teachers' Self Efficacy. *Research Quarterly for Exercise and Sport*. 91(1): 1-13. DOI:10.1080/02701367.2019.1650877.

ONU – Organizzazione delle Nazioni Unite (2015). *Trasformare il mondo: l'Agenda 2030 per lo sviluppo sostenibile*.

Paloma, G. F., & Damiani, P. (2015). *Cognizione corporea, competenze integrate e formazione dei docenti. I tre volti dell'Embodied Cognitive Science per una scuola inclusiva*. Trento: Centro Studi Erickson.

Rekaa, H., Hanisch, H., & Ytterhus, B. (2019). Inclusion in Physical Education: Teacher Attitudes and Student Experiences. A Systematic Review, *International Journal of Disability, Development and Education*, 66:1, 36 55, DOI: 10.1080/1034912X.2018.1435852.

Savino, L., Rio, L., & Gomez, F. (2015). The adapted physical activity as a valuable tool to overcome social prejudice to the disabled persons. *Journal of Human Sport and Exercise*. 2015, 10(Proc1): S418-S424. doi:10.14198/jhse.2015.10.Proc1.34.

Sibilio, M., Raiola, G., Gomez Paloma, F., D'Elia, F., Galdieri, M., Baldassarre, G., Carlomagno, N. (2008). The value of the sport within social integration processes. *AIIESEP 2008 World Congress— Sport pedagogy research, policy & practice: International perspectives in physical education and sports coaching*.

Smith, C. (2020). Challenges and Opportunities for Teaching Students with Disabilities During the COVID-19 Pandemic, *International Journal of Multidisciplinary Perspectives in Higher Education*, Volume 5, Issue 1 (2020), pp. 167-173.

Tolga, Ş. (2021). Self-evaluated teacher effectiveness in physical education and sports during school's closedown and emergency distance learning. *International Journal of Curriculum and Instruction*. 13(2), pp. 1493-1507

UNESCO (2015). *Education 2030 Framework for Action. Towards inclusive and equitable quality education and lifelong learning for all* <https://en.unesco.org/>

WHO - World Health Organization (2015). Physical activity strategy for the WHO European Region 2016–2025.

Williams, L., Martinasek, M., Karone, K., & Sanders, S. (2020). High school students' perceptions of traditional and online health and physical education courses. *Journal of School Health*. <https://doi.org/10.1111/josh.12865>