

Concept Paper

Educational Legacy of the Rio 2016 Games: Lessons for Youth Engagement

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Received: 30 April 2020; Accepted: 26 May 2020; Published: 28 May 2020



Abstract: The promise of the Rio 2016 Games was to influence the entire population of Brazil, but the major impact was expected to be on children and the youth. The development of youth education programs promoting Olympic and Paralympic values was one of the main commitments that organizers made in 2009 to host the 2016 Olympic and Paralympic Games. This article draws on the available literature on Olympic and Paralympic education and youth engagement and examines several of such programs previously implemented in such host cities as Beijing, Vancouver, and London. The purpose was to explore the ways in which implementing such educational legacy programs by the Rio 2016 and other sporting mega-event organizers can inspire and sustain youth engagement. The inductive thematic analysis was applied in the close examination of the content, strategies, and outcomes of the Rio 2016 Olympic and Paralympic education program. The results suggest that to leave an enduring youth legacy, policymakers, future mega-event organizers, and educators need to understand it as a continued endeavor beyond the hosting period and embed the related educational efforts into broader educational and youth-focused structures. This article also outlines lessons for youth engagement that can be drawn from Rio's and other host cities' Olympic and Paralympic education practices.

Keywords: Rio 2016 Olympic and Paralympic Games; youth engagement; Olympic and Paralympic education; legacy; Brazil

1. Introduction

The literature addressing sporting mega-events suggests that hosting the Olympics and Paralympics yields a series of long-term benefits, including economic, social, sporting, environmental, and political legacies within a host city and nation. These legacies can be in a tangible or intangible form. Tangible legacies can include new sporting or transport infrastructure or urban regeneration and beautification, which enhance a city's appeal for tourists and improve the living standards of local residents [1]. Intangible legacies may include an increased sense of national pride, new and enhanced workforce skills, enhanced community spirit among the host country's population, and increased environmental awareness and consciousness [1]. Before Beijing 2008, because the charter documents and handbooks of the International Olympic Committee (IOC) and the International Paralympic Committee (IPC) did not include the conception of legacy, all Olympic and Paralympic Games could be regarded as having “unplanned legacy” [2]. A positive legacy is not a given and needs to be strategically planned and embedded in the host city's vision from the earliest stages and integrated within the project [1]. In recent years, the legacy of hosting the Games has become vital to both the bidding process to satisfy the IOC's legacy considerations and as a pitch for the host city to its constituents [3].

The current approach to the social legacies of the Games includes culture and education and is built on the fundamental principles of Olympism, such as inclusion and cooperation, human dignity,

mutual understanding, the spirit of friendship, solidarity, and fair play [1]. Every host city commits to carrying out Olympic and Paralympic education programs, and many nations implement such programs without ever hosting the Olympics or Paralympics. Three significant assumptions underlie such programs: First, sport is an educational tool to develop friendship, respect, commitment, and ethical values, and through carefully designed and delivered educational interventions, it can promote social inclusion and a more acceptable social behavior, particularly among at-risk children and young people [4,5]. Second, these educational interventions have a potential for creating a culture whereby youth will stay involved in their communities into their adulthood. Third, historically, youth leadership, organizing, and engagement have inspired innovative approaches to social change efforts [6].

The article uses the Rio 2016 flagship education program *Transforma* as an occasion to engage with the wider academic debate around sporting mega-events and explore the following questions:

- What is the educative impact on the youth of the Olympic and Paralympic values education programs?
- How can the Olympic and Paralympic values education programs boost youth engagement as one of their enduring impacts?

The purpose is to better understand the ways that implementing such educational legacy programs by the Rio 2016 and other sporting mega-event organizers can inspire and sustain youth engagement. The contribution of this paper, therefore, is to provide a critical evaluation of the Rio's *Transforma* program within a broader perspective of previous practical experiences with such programs, on the one hand, and a specific focus on youth engagement within the literature on the legacies of sporting mega-events.

The paper draws on the secondary data available on the *Transforma* program's website and Facebook page during and after the Rio 2016 Games. As this analysis delved into understanding Olympic and Paralympic values education programs and their educative impact on youth, the qualitative research method was appropriate to address its basic research questions. I accessed, downloaded, and analyzed the pedagogical materials, activities, news, and training session notes from involved schools, as well as notes on the Olympic and Paralympic athletes' involvement in the program, among other materials. I also corresponded with the program's leadership in 2017 to obtain additional materials and progress reports on its implementation and impact that were not available on the website or Facebook page.

I used data-driven inductive thematic analysis, which allowed the identification of broader patterns in the available textual data and the development of themes as the categories for analysis [7]. The analysis involved the following six-phase procedure: Familiarization with data, generation of initial codes, the search for themes among codes, review of the themes and connections among them, definition and naming of the themes, and a final write-up [8,9]. Although suggested as a linear, step-by-step method, the analysis was an iterative and reflexive process that developed over time [7,9]. I used inductive codes that arose from the reports and documents and sought to identify connections among the themes and sub-themes to determine coherent patterns.

In examining the Olympic and Paralympic values education programs and their impact on youth, the paper is structured as follows. The next section introduces the debates on the approaches, content, scope, and challenges of the Olympic and Paralympic education programs, as well as the relevant points of criticism. Furthermore, the insights from the previous development and implementation of such programs in other host cities, such as Beijing, Vancouver, and London, will complement the scholarly debates. This brief overview serves two goals. First, it provides a broader perspective of previous practical experiences with such programs and their youth engagement efforts. Second, it helps to better situate the Rio 2016 Olympic and Paralympic education program and discern lessons for youth engagement for the future Olympic and Paralympic host cities. This section also draws on the youth engagement literature stream to provide a background and contextualize the discussion of the lessons later.

Next, the paper sketches a sociopolitical and economic context of the Rio 2016 Games' planning and implementation, as well as a series of major challenges that Brazil and Rio de Janeiro in particular

faced in the months leading up to the Games. Not only did these challenges limit the impact of the Rio Olympic and Paralympic education on Brazil's children and youth, but the economic hardships forced discontinuation of the program in 2017 and the shutdown of the virtual platform that hosted the training content.

In the fourth part, the discussion centers on the documents that described the contents, strategies, and outcomes of the Rio 2016 *Transforma* program. It was implemented in 16,000 schools across the nation and reached eight million school-age youths. Furthermore, the analysis compares aspects of the Rio 2016 *Transforma* program with the Olympic and Paralympic values education programs implemented by the previous hosts. Finally, the paper presents key findings and the potential insights that such findings provide as to the lessons and recommendations for future mega-event organizers, policymakers, and educators if such sporting mega-events are to leave a long-lasting educational legacy.

2. Olympic and Paralympic Values Education Programs

2.1. Olympic Education Programs: Historical Background, Approaches, Content, and Challenges

The term “Olympic education” refers to a variety of educational initiatives or practices associated with the values of Olympism. The first Olympic education program was implemented in 1972 on the occasion of the Munich Olympic Games, followed by a three-year program for the Montreal Olympics, which set the initial standard and contributed to the development of Olympic education worldwide [10]. The key component of such programs and activities was the idea that the Olympic Games promote a values-based sport, intercultural respect, and world peace via the philosophy of Olympism [5]. The five educational values of the Olympic Movement, based on the Fundamental Principles of Olympism, serve as the pedagogical cornerstone for the Olympic Education programs:

- Pursuit of excellence,
- Joy of effort,
- Fair play,
- Respect for others,
- Balance between body, will, and mind [11] (p. 2).

Across several decades, the Olympic Movement has established a global network for disseminating Olympic values not only through the conduct of the Olympic Games, but also through the organization of the Olympic education programs around the world [12]. In 2005, the IOC developed a global youth strategy and an educational values program, which was implemented thanks to its sponsors [11]. The result was the “Olympic Values Education Toolkit” that intended to support educators, coaches, and youth leaders in teaching the Olympic values. It became available in different languages on the IOC website.

Scholars and practitioners have debated what constitutes appropriate approaches, scope, components, and content of Olympic education programs. Some argued that effective value-oriented sport education programs should include activities other than sports, such as arts, games, role plays, and simulations, to offer situations of moral conflict and thus opportunities for children to develop their abilities in moral reasoning from various points of view [4]. Others pointed out that beyond teaching Olympic values during physical education (PE) classes, many social issues, such as health, environmental, and intercultural awareness, are already part of the school curricula, and including them in the Olympic education programs encourages a critical attitude toward contemporary issues and promotes positive attitudes [10,13].

Several studies have argued against an uncritical approach to Olympic education [5,13,14]. More specifically, Teetzel rightly pointed out that teaching only positive elements of Olympism and the Olympic Games is inaccurate, as they fail to fully consider the difficult and contentious aspects of fairness, equality, and ethical behavior associated with the Olympic and Paralympic Games [5]. The IOC faces a series of problems and accusations, such as promoting a “winning-at-any-cost” mentality,

exploiting athletes, fostering national rivalries, and failing to stop cheating and corruption within the Olympic Movement itself, among other issues [5,12]. Thus, including these issues in classroom discussions of the Olympic Games can encourage students to think critically about what actions are admirable or dishonorable in sport [5,13].

Other scholars have argued that Olympic education should disseminate the values of Olympism beyond schools and PE and integrate these values and ideas into everyday life [12]. There is also a need to teach cross-cultural competencies explicitly not only to schoolchildren, but also to the athletes and their coaches [15]. International travel and sports participation alone do not meet the goals of the Olympics, and interacting with athletes from other countries without education can reinforce existing negative stereotypes and misunderstandings, instead of reflecting the ideals of Olympism and respect for and sensitivity to the cultures of other athletes [15]. Furthermore, the founder of the modern Olympic Movement, Pierre de Coubertin himself, envisioned that for the celebration of the Olympic Games, both athletes and spectators needed to be prepared through a pedagogy that cultivated Olympic values [16].

Georgiadis outlined a series of challenges with the implementation of the Olympic education programs, which are also relevant for the Paralympic education programs. He cautioned that these issues might contribute to the discontinuation of these programs and listed the following challenges:

- The inability or difficulty of integrating the programs in mainstream school education;
- The absence of necessary knowledge and skills among teachers, as well as inadequate information and training of the people involved in program implementation;
- The inexistence of a systematic evaluation procedure;
- A lack of clarity regarding the role of this new resource and the shortage of materials and equipment;
- Insufficient funding;
- Insufficient support from state agencies, resulting in an inadequate organization and poor promotion [10] (p. 6714).

These challenges are true for any educational program or policy implementation in general. With changes in the government's priorities, even well-designed and well-performing programs run the risk of suffering restructuring, as it happened in the UK. A mechanism through which the "youth legacy" could be achieved, the school sports partnerships were working to engage previously excluded young people in sports [17]. The UK coalition government attempted to withdraw funding for school sports partnerships, which was met with considerable public opposition. That decision happened despite strong evidence that those sports partnerships have both increased the number of children engaged in competitive sport and extended the range of sports available, enhancing sport participation of previously excluded youth [17].

2.2. Paralympic Education Programs

The term "Paralympic Education" integrates Paralympic ideals into a formal educational system and offers a range of pedagogical approaches. These approaches are aimed at developing a positive attitude toward people with disabilities in children and young people through PE activities, stressing the importance of respect for individual differences [18].

The first material related to Paralympic education in schools was prepared by the Organizing Committee of the Atlanta Olympics in 1996. Its main goal was threefold:

- To create general awareness in schools about people with disabilities;
- To encourage children and youth with disabilities to see sport as an option for leisure and personal development;
- To stimulate interest in physical activity as a lifestyle choice for better health [18] (pp. 50–51).

Greece was the first country to not only develop educational material for schools for the Athens Games, but also to include an extra hour for PE called Olympic and Paralympic Education in the

curricula of all its schools between 2002 and 2003. The program was intended to promote Olympic and Paralympic values and positive attitudes among students without disabilities and PE teachers toward the inclusion of disabled students in the class. In 2004, the IPC established a partnership with the European Paralympic Committee and started the two-year pilot project in six European countries—Germany, Belgium, Greece, Latvia, Czech Republic, and Sweden—to introduce a Paralympic School Day (PSD) [18].

Several studies have been conducted since the first PSD actions started in 2003, resulting in the first educational manual released by the IPC in 2006. In addition to being a school event, the Paralympic sports could be used as curriculum content for PE, as in some Rio 2016 initiatives, with proposals for promoting the teaching of Paralympic sports in schools, also for children without disabilities [18].

2.3. Criticism of the Olympic and Paralympic Education Programs

Some scholars see the nature of modern Olympism as contested and inconsistent due to a number of moral and political issues surrounding the Olympic Games and Olympic Movement [12,19]. They question whether Olympism is a coherent philosophy that can inspire people. First, critics challenge the universal nature of Olympic values [5]. The European roots of the Olympic Games are perceived as a form of cultural imperialism, and some scholars expressed concerns that the values of Olympism could be imposed upon athletes from other regions of the world [5,12]. Such imposition implies the superiority of Western values in the Olympic Movement and, consequently, a lack of universality.

Second, critics see Olympism as a utopian goal, unrealistic to implement today [5,12,19]. They claim that the Olympic Games became an outlet for a host of serious issues, among them: Exploiting athletes for exciting and entertaining television programming; boosting sales for the companies that have partnered with the IOC to become exclusive sponsors; emphasizing consumerism and dehumanizing aspects of competition; promoting the agendas of multinational corporations; for the evidence of racial, gender-, and ethnicity-based discrimination in the Olympic arena; for corruption and bribery scandals involving the IOC members; and the lack of accountability of the Organizing Committees. The IOC's interest in promoting Olympism to young people is claimed to be commercial at its foundation since young people are a future sport audience and brand consumers [12]. Beyond the IOC, the critique can also be extended towards sponsors and issues of corporate social responsibility [20]. Given all of the criticism around the Olympic ideals, the Olympic Games, and the IOC practices, skeptics question whether the values associated with Olympism and the Olympic Games present a proper platform for the educational development of the youth [5,12].

The third line of criticism disapproves of the uncritical approach of the Olympic education programs, which was already mentioned above [5,10,13]. Teetzel, among other scholars, argued against the Olympic education model that did not stimulate critical thinking [5]. She explained that since the Olympics are not free of unethical behaviors and do not automatically bring out the goodness of sport and athletes, an accurate discussion of the Olympism should acknowledge the goals and aspirations of Olympism without asserting that they are implemented perfectly in practice.

The Paralympic education programs are relatively new and have not been as publicized and studied as the Olympic education programs. However, some of the criticism directed at the Olympic education programs can be applied to the Paralympic ones as well. The Paralympic Movement faces its own issues, among them: The athlete classification system; the appropriate framing language for the Games; a contested place of technology; poor media coverage of the Paralympic sport; and the overall Paralympic Movement visibility [21]. Critically engaging the youth in discussing these issues within the Paralympic education program, instead of just presenting them with facts, personalities, and athletes' stories, may encourage the students to question the social context, practices, and values of the Paralympic Movement.

Despite the inherent contradictions of Olympism, scholars claim that it can still be used as a source of inspiration and offer many teachable moments [5,11]. One such example is the respect for

multiculturalism promoted by the Olympic Games, which bring together individuals from around the globe and contribute to participants seeing the world as a global community [5]. Negative incidents do not discount the potential educational value of the Olympic Games, and the Olympic ideals are worth promoting and pursuing [5]. However, educators are cautioned against “oversimplifying the benefits that humanity can receive from participating in or watching the Olympic Games” [5] (p. 328).

2.4. Recent Examples of the Olympic and Paralympic Education Practice

This section summarizes the key aspects, strategies, and outcomes of three recent Olympic and Paralympic education programs implemented by the Organizing Committees of the Beijing 2008, the Vancouver 2010, and the London 2012 Games. This exploration helps to better situate the Rio 2016 *Transforma* program within a broader perspective of previous experiences with such programs.

2.4.1. Beijing 2008 Educational Program

On the occasion of the Beijing 2008 Games, the Organizing Committee and the Ministry of Education developed an Olympic education program for thousands of primary and secondary schools [10]. The Beijing 2008 Olympic Education Program was established in 2005 and involved 400 million youth nationwide in 400,000 schools [12,22]. At that time, China had a relatively short and discontinuous history of its involvement in the Olympic Games, and Chinese students had limited exposure to the Olympic Movement and Olympic-related knowledge [23].

A study of Beijing’s program found that hosting the Games catalyzed the imagination of a future in which China would be more tightly integrated into the international community [22,23]. Through activities such as the Heart-to-Heart Program, Chinese students had opportunities to communicate with their peers abroad and further embrace the Olympic spirit of friendship and mutual understanding [23].

Olympic Education in China generated vast amounts of published materials. The Organizing Committee published five textbooks and distributed 1.1 million copies to schools across the nation; the Olympic Education Standing Office published several books of its own, and the District Olympic Education offices produced their own books [24]. The Chinese aimed to create the best Olympic Education Program ever, which they saw as Beijing’s contribution to the Olympic Movement [24].

The Chinese schools were given a great deal of freedom to design their own Olympic Education activities. Many schools held mock Olympic Games with an opening ceremony, engaging the students where regular education could not [24]. By the end of 2007, a total of 1100 schools were involved in the Program, with each participating school seeking to establish a relationship with one of the 205 National Olympic Committees and five National Paralympic Committees worldwide [24].

Among major findings from the evaluation of the educational outcomes of the Beijing 2008 Olympic Education Program were: Relatively low comprehension and satisfaction levels of junior and senior high school students; a significant imbalance between urban and rural areas in terms of the educational opportunities because of economic differences, as well as differences in levels of enthusiasm about the Olympic education among different cities; and an inadequate training system for teachers [22]. After the Games concluded in 2008, the implementation of the official Beijing Olympic education program was abruptly stopped, leaving the issue of educational legacies of the largest campaign in the history of Olympic Education unclear [23].

2.4.2. Vancouver 2010 Educational Program

Vancouver 2010 pioneered a totally web-based educational program [25]. Through an online learning environment, the 2010 Olympic and Paralympic Winter Games cultural and education package was distributed to 2100 schools within the district of British Columbia and made available to the other 12 national provinces of Canada. The IOC’s Teaching Values resource, featured on Vancouver’s *Share the Dream* program website in the lead-up to and during the time of the Games, registered more than 200,000 hits [12].

The Canadian Olympic School Program has been in place since 1988, and consists of educational materials in French and English provided free of charge online to Canada's primary and secondary school teachers [26]. After the Vancouver 2010 Games, over 56,000 educators participated in the program [26].

In 2008, the Vancouver Education Program launched two more components, including the Pan-Canadian Paralympic School Week, a week-long program offering "an opportunity for students to learn about the Paralympic Movement, to explore the significance of human interdependence, and to recognize and celebrate wide-ranging examples of Paralympian achievements" [25]. The curriculum was developed by the British Columbia Ministry of Education in partnership with the Canadian Paralympic Committee and the Organizing Committee. The second new component to the Olympic and Paralympic Education Program was the Sharing the Dream Webcast Series, with its first student-led webcast interviews and discussions that connected Canadian students with students from around the world [25].

Another specific focus of the Vancouver Olympic Education was on Aboriginal students, and the Canadian Olympic School Program partnered with Aboriginal sports organizations to profile Aboriginal Olympians and to promote role models that would be inspirational to Indigenous students [26]. Moreover, the Vancouver 2010 Organizing Committee worked closely with the Lil'wat, Musqueam, Squamish, and Tsleil-Waututh First Nations to achieve Aboriginal participation in the planning and hosting of the Games for the first time [27]. The organizers set out several partnership goals, and two of them were particularly relevant for this article: First, to improve health and education and to strengthen communities through sport, economic development, and cultural involvement; and, second, to create a sporting legacy for the youth [27]. The Vancouver 2010 Organizing Committee also started the Aboriginal Youth Legacy Fund, an initiative supporting Aboriginal youth sport, cultural development, and projects that increased awareness and understanding of Aboriginal peoples in Canada [27].

It is also worth mentioning an alternative to the pro-Olympic materials produced by the Vancouver-based Olympic Resistance Network [28]. The Network created a workshop titled "Teaching 2010 Resistance" to engage teachers in a more balanced understanding of the aspects of Olympism than that provided in the Olympic educational materials and to help avoid one-sided arguments in the classroom. This initiative shows how the lack of open dialogue and critical pedagogy may create resistance among educators and impact the outcomes of Olympic education.

2.4.3. London 2012 Educational Program

The London 2012 bid was not unique in its promise of a lasting post-Games legacy, particularly for the youth. However, the experiences of previous host cities showed how challenging it was to make them a reality [17]. The organizers proposed an extensive education legacy seeking to obtain a positive impact on young people's choices, values, and aspirations [17]. London 2012 launched "Get Set Goes Global" internationally, offering access to its online materials to 200 international networks [11].

London's 2012 bid set out a vision for the Games "to build relationships with millions of young people and connect them to the meaning of sport and the Games like never before" [29]. The *Get Set* Olympic education program was created by the London 2012 Organizing Committee. Currently, *Get Set* is managed jointly by the British Olympic Association and British Paralympic Association, which assured the sustainability of the program and its accompanying resources [11]. The educational scope of *Get Set* was broadly conceived to engage the youth in learning through participation beyond just PE and sport, but also through geography, leadership, volunteering, and other areas [30]. The examination of *Get Set* concluded that its educational content left out critical Olympic scholarship and neglected a series of relevant issues related to the Olympic values and practices, including politics, economics, corruption, and discriminatory attitudes [13]. While the London 2012 Organizing Committee, like other Organizing Committees of hosting nations, had to satisfy several political, economic, corporate, and educational agendas, the London 2012 organizers could still have embraced a more critical and reflexive stance in *Get Set* [13].

The Young Ambassador program was crucial for developing social capital through social interaction among young people and delivering the youth legacy [31]. However, Griffiths and Armour have questioned the use of the term “legacy” when it is used to refer to intangibles, such as motivation, aspiration, or achievement, when “legacy” is defined as something that is passed down to future generations [17]. The authors argued that it was unclear how the process of legacy in these areas would happen or how such outcomes could be measured and attributed in some causal fashion to the Games. Instead, they suggested conceptualizing “legacy” as a process of helping children and young people develop social capital through their involvement in the Games and activities in schools and sports clubs.

Despite the intuitive appeal of the proposed link between sports engagement and social benefits, it is important to point out that there remains a lack of empirical evidence to support such a causal relationship [17]. While it could be argued that because the UK’s Physical Education and Sporting Strategy (PESS) took place in schools and was available to all, it was socially inclusive and well suited to generate social capital with and for all young people [17]. However, although PESS was set in a school context and was compulsory for all children from age 5 to 16 in the UK, research pointed to evidence that outcomes varied for different groups in society based on the young people’s social class, gender, religion, ethnicity, and ability, which needed to be considered [17].

In sum, although there appears to be a link between social engagement, sport, and physical activity for young people, there remains a lack of evidence to support a causal relation [17]. However, despite the lack of empirical evidence of this relationship, many still claim that participation in sport can act as a form of social participation, which can promote social capital, individual empowerment, and networking opportunities [4,29,31].

2.5. Understanding Youth Engagement

Neither scholars nor practitioners have developed a shared conception of what youth engagement means. Drawing on the available literature, youth engagement can be defined as a continual and meaningful involvement of young individuals in the issues and activities that concern others and the larger community [32,33]. Such sustained involvement in the shared and goal-oriented initiatives is considered a fundamental component of a young person’s successful development [6,33,34]. However, if young people, their needs, and their interests are not taken seriously and their participation has no impact on their lives, positive effects seem to be unlikely [35].

Youth engagement may range from more traditional methods, such as volunteering, boycotts, youth organizing, and civic activism, to newer pathways, such as blogging and online activism [6]. Full engagement involves a cognitive component, an affective component, and a behavioral component [36]. The available research suggested that understanding youth development and the specific factors contributing to it is critical to the design and implementation of youth engagement strategies and programs, be those in the context of such mega-events as the Olympics and Paralympics or in other educational and community contexts. Beyond skills and knowledge, young people need a variety of other personal and social assets to function well during adolescence and adulthood [6,33,37].

It is also necessary to understand that certain negative experiences may result in young people becoming disconnected from their community for reasons such as stigma and discrimination that resulted from behavioral health issues, chronic health issues, school failure, family issues, poverty, issues with gender identity, or sexual orientation, among others [36]. Youth engagement strategies purposely aimed at children and youth facing such challenges could work toward filling gaps in the opportunities available in specific young individuals’ lives by incorporating “opportunities for physical, cognitive, social, and emotional development; opportunities to deal with issues of ethnic identity, sexual identity, and intergroup relationships; opportunities for community involvement and service; and opportunities to interact with caring adults and a diversity of peers who hold positive social norms and have high life goals and expectations” [37] (p. 302).

However, there is limited research measuring the impact of these experiences on the development of young people, resulting in limited evidence of why and how youth engagement programs work. Few researchers have evaluated which features of youth engagement programs influence development, which processes within each activity are related to intended outcomes, and which combinations of features are best for which outcomes [37]. In the context of the Olympics and Paralympics, the available research demonstrates little evidence of how any legacy or values education program can be used to develop young people [31].

3. Socioeconomic and Political Context of the Rio 2016 Games

Every Olympic and Paralympic Games experienced its own set of challenges, and Rio 2016 was not an exception. To list just a few, the Beijing 2008 Games struggled with human rights violations, pollution, and media censorship [38]. The greatest challenge to the London 2012 Games was the threat of terrorist attacks, which made the organizers plan for security costs of 1.3 billion USD for such logistics [39]. The Sochi 2014 Games ran four times over budget, ultimately costing 50 billion USD, making them the most expensive summer or winter Olympics in history [33]. Security of the Games and possible violence were another major concern for the Sochi organizers, particularly after suicide bombings killed 16 people in Volgograd, located 700 km northeast of Sochi, in December 2013, only two months before the Sochi Games [40].

The Rio 2016 organizers dealt with many similar challenges, such as pollution, security threats, skyrocketing Games expenses, along with several other issues. South America's first Olympiad arrived in the middle of a severe economic and political crisis. In 2009, then-president Luiz Inácio Lula da Silva spearheaded Rio's successful bid to host the Olympics, which he ended up not attending in August 2016 [41]. Both the 2016 Olympics and Paralympics and the 2014 World Cup were meant to showcase Brazil's arrival on the world stage as an economic powerhouse. The discovered offshore oil field seemed to ensure that the nation would prosper forever: In 2010, the economy expanded at a Chinese-like rate of 7.6% [42]. However, with the shifting international oil landscape and falling prices, this assumption was not only overstated, but dramatically incorrect: In 2015, Brazil's economy shrank by 3.8% [43] and then by additional 3.6% in the next year [44].

Brazil's economic and political problems began in early 2014, the year of the World Cup: Street protests, crackdowns on activists during that event, deteriorating economic and political situations, corruption scandals, the spread of the Zika virus, and concerns about logistical planning for the Olympics all contributed to a complicated outcome. Determined by party politics rather than by a long-term economic strategy, poor policies negatively affected the economy and increased public debt [43]. A global bust in commodity prices, spurred by an economic slowdown in the major commodities consumer, China, also contributed to Brazil's deteriorating economic situation [45]. Furthermore, the corruption scandals worsened the political climate in 2015–2016, resulting in president Rousseff's impeachment. Along with the largest state oil company, several major construction companies involved in preparations for the Olympics have been indicted for their involvement in a multi-million-dollar corruption scheme [45]. Further concerns have been raised about the Olympic and Paralympic facilities being completed on time [46].

Another set of issues directly relating to the Olympics also plagued Brazil during this period. Though bacterial and virus pollution of Rio's waters has improved, contracting Zika in Rio troubled athletes, coaches, personnel, and visitors from around the globe. It was a challenge to convince people to attend the Rio Games—while original estimates had about 200,000 Americans that expected to attend the Rio Games, that number was closer to 100,000 according to a senior US official [47].

The drop in expected Games attendance affected ticket sales. As of late May 2016, only 67% of tickets to the Olympic Games and just 33% of tickets to the Paralympic Games had been sold [46]. By comparison, tickets to the London 2012 Games had sold out for every sporting event except soccer by February 2012 [46]. However, the Rio organizers reported that before the opening of the Olympics, they sold over 80% of the six million available tickets to the Olympic Games, with foreign visitors

buying 25% of the tickets [48]. The Rio Paralympic Games ultimately sold more than two million tickets (out of 2.5 million), making them the second most successful Paralympic Games after London 2012, with 2.7 million tickets sold [49].

The security concerns of the Rio Games were addressed by doubling security expenses to 850 million USD and deploying 85,000 civil and military police to patrol the city [42], which was double the number during the London 2012 Games [47]. Such militarization measures raised concerns of activists about transparency and basic rights in Brazil—first, there was no clarity about how the security budget would be spent, and second, Brazil’s anti-terrorism act from March 2016 was vague enough to criminalize and restrict political protests [50].

Furthermore, political developments in Brazil have been significantly affecting education. The Executive Order 746 (dating September 2016) forced the reform of secondary education in Brazil, making the teaching of the Arts, Sociology, Philosophy, and Physical Education non-compulsory for secondary education students [51]. Another legislative initiative, a Constitutional Amendment Proposal 241 passed in December 2016, froze federal investment in education for 20 years and released the national government of its duty to transfer education funds to the states and municipalities, which generated protests across Brazil. The critics argued that Constitutional Amendment 241 will end the National Plan for Education, which civil society fought ten years to get approved [52].

4. Rio 2016 Olympic and Paralympic Education Program

4.1. Background of Sports Education in Brazil

Youth sports education in Brazil began in 2003 with the Second Half Program (SHP), which was one of the Olympic education proposals mentioned in the Rio 2016 bid. Using sport as a tool, the SHP aimed to deliver moral education and to promote citizenship to counteract the social exclusion and social vulnerability of youth. The Program engaged children and youth during after-school hours, providing them with sporting and non-sporting activities and snacks. Different estimates suggested that the SHP was able to serve 2–3 million children and youth in Brazil’s public schools, cutting their dropout rates, improving the participants’ self-esteem, family, and community relationships, thus counteracting social exclusion [53].

The underlying assumption in the SHP’s implementation was that merely participating in sport should instill moral and Olympic values [4]. Both the Program’s organizational methods and the lack of a clear pedagogy limited the scope of the sports education appropriate for an Olympic values education program [4]. The Ministry of Sports that ran the Program possessed neither the human resources nor the management capacity to implement it nationwide, and outsourced it to local governments, nongovernmental organizations, and nonprofit national institutions.

While the SHP continues to be implemented by the Federal Government nationwide, it did not become the flagship education program of the Rio 2016 Games. In 2013, the Organizing Committee launched a new Olympic education program called *Transforma*, which was implemented in partnership with the Ministry of Education. However, as the evidence showed, neither the Rio 2016 Candidature File nor the three Legacy Journals contained details of the specific outcomes for the Olympic and Paralympic values education or the boosting of sport participation among Brazilian youth [53].

4.2. Rio 2016 Olympic Education Program

Transforma worked together with public and private schools, creating opportunities for students from the first grade through high school to experience Olympic and Paralympic values through educational materials and activities, to learn and play new sports, and to experience the Games. Before being taken down in 2017, the Program’s website showcased the educational content, activities, and news from involved schools, as well as training sessions, Olympic and Paralympic athletes’ school visits, and participation in the Program, among other materials. The online educational platform was developed in partnership with the Ministry of Education of Brazil and hosted the contents of

17 training courses in Portuguese for Brazilian school teachers. Other mega-sport event organizers intended to copy *Transforma's* content, activities, and achievements for the 2018 Juvenile Olympics in Buenos Aires and the 2019 Pan-American Games in Peru [54].

Transforma offered training courses for four categories of “multiplying agents” (pedagogical coordinators, PE teachers, young agents, and mentors), who carried the sports experiences and Olympic and Paralympic values to the rest of their respective schools. The Program offered on-site workshops for PE teachers to learn and teach different Olympic and Paralympic sports in their schools. Through school challenges, experimentations of new Olympic and Paralympic sports, digital educational content for distance learning, and *Transforma* sports festivals, the Program attempted to engage schools around the nation [55,56]. A survey of more than 600 teachers who participated in the training highlighted the benefits from the *Transforma* program and its contribution to the improved educational outcomes in participating schools [57].

Transforma was considered an innovative program, as it did not just encourage youth participation in sport, but also introduced several new Olympic and Paralympic sports modalities to the participating students [58]. Because some sporting equipment was difficult to acquire, *Transforma* held workshops to teach PE teachers how to make them from available alternative materials. Several members of the Tokyo 2020 Organizing Committee visited schools that participated in the Educational Program to adapt it for Japan's Olympic and Paralympic Education program [59].

Transforma also trained almost 2,000 youth agents, the Program's student leaders from age 13 to 17, and for many of them, this was their first contact with Olympic and Paralympic sports [60]. The training entailed not only learning about the Olympic and Paralympic values and sports, but also working on the youths' mobilization and leadership skills, so when they returned to their schools, they would be able to spread the spirit of the Games among their friends and teachers [60]. The main objectives of youth agent training were:

- To awaken in the young person the attitude of co-responsibility for the promotion of improvements in the school climate through the Olympic and Paralympic Values;
- To develop skills that enable young people to act as transforming agents of the local reality, mobilizing more people from the school for the actions of the program;
- To engage young people in the Rio 2016 Olympic and Paralympic Games;
- To promote integration and exchange of experiences and knowledge among young people;
- To equip young people with tools of social mobilization [61].

The program expected the youth to participate in the periodic meetings and to carry out the activities proposed by the program, to act as a multiplier of Olympism in school, and to be school transformers [61]. The implementation and sustainability of this training rested on the mentors, whom *Transforma* also trained as part of the program. After almost three years in implementation, the program reached eight million children and youth in 16,000 public and private schools in 3000 municipalities [62]. The program announced that it did not intend to offer financial support, printed material, and sports equipment for schools, but also promised to provide the School Kit (signs, booklets, posters, and manuals) to those institutions that requested it [55].

In addition to the school activities, *Transforma* took 50,000 students from Rio state public schools to watch the Paralympic Games and meet the athletes from around the world [63]. The initiative provided the students with tickets, transportation, snacks, and t-shirts. Another remarkable initiative was the #FillTheSeats international crowdfunding campaign supported by Rio 2016 and the IPC [63]. The campaign raised 450,000 USD and even secured the support of British Royal Prince Harry, allowing 15,000 socially vulnerable children to attend the Paralympic Games [64]. *Transforma* managed the trips, and the Rio state government also teamed up with the Organizing Committee to provide 33,000 tickets for state school students to attend the Games [64].

The *Transforma Connection*, a virtual exchange project, provided a cultural exchange experience for students from 17 Rio schools and 17 schools abroad (from Peru, Canada, France, Spain, Argentina,

USA, UK, Italy, Cabo Verde, Russia, Netherlands, Switzerland, Uruguay, and Norway). The initiative consisted of cultural object exchange and the making and sharing of videos about local sports and the daily school routines of the participants [63]. The respective Consulates with offices in Rio de Janeiro helped organize the student exchange [63]. In July 2016, all of the exchange participants from the 34 schools met in Rio and exchanged typical cultural objects that they brought from their native countries [60].

To engage the broader community, over two years, *Transforma* organized 24 sporting festivals across Rio de Janeiro, Sao Paulo, and Belo Horizonte, where residents could experience the Olympic or Paralympic sports [60]. The intention behind those festivals was not only to raise awareness about many different sports modalities and to interest people in starting to practice sports, but also to interest them in watching the Games. One of the curious outcomes of these festivals was the fact that non-impaired adults became interested in Paralympic sports [60]. The problem with sustaining this interest is that very few communities and schools possess Paralympic sports facilities, which makes it more difficult to practice these sports. While it is still possible to practice some Paralympic sports at regular sporting facilities with small adjustments, many schools and communities are deprived of such facilities as well.

In sum, *Transforma* was an ambitious program working on many fronts in a relatively short period for its implementation. The program touched and changed the lives of many disadvantaged young people, particularly in Rio, by giving them opportunities they would have never had in their schools or communities. While it intended an emancipatory approach and engaged young people in debates, discussions, and collective projects, it had a limited reach to its target population. Moreover, the program intended to develop mobilization and leadership skills of a small group of young people to become agents of change in their communities. Still, without favorable structural changes and the needed support, it would be difficult for the youth to translate the gained knowledge into practical applications and sustained engagement in their communities.

Eventually, the concerns raised over the possible discontinuation of the program after the Games came true. Brazil's economic and political problems that started in 2014 halted the *Transforma* program in 2017, shut down the virtual platform that hosted the training content, and undercut the impact that the program could have on Brazil's children and youth. However, *Transforma* inspired a new sports education program for youth called *Impulsiona*, developed and implemented in 2017 by a Rio-based nonprofit called Instituto Peninsula. The new program built on many of the elements of *Transforma*, but limited its face-to-face training only to Rio de Janeiro and São Paulo.

4.3. Rio 2016 *Transforma*: Missed Opportunities

While much enthusiasm and creativity went into designing and implementing *Transforma* to mark South America's first Olympic and Paralympic Games, they were not enough to sustain the program's impact. A series of challenges that were not addressed by the organizers turned into missed opportunities to leave an educational legacy for Brazil's youth. These challenges undercut *Transforma*'s expected benefits, particularly the lack of systematic evaluation and insufficient funding and support. The official data about how much was spent on the *Transforma* planning and implementation is not available. In its Candidature File, the organizers promised active involvement and benefits to 65 million young Brazilians and 180 million youths across South America [65]. The fact that the program's leadership reported reaching only eight million school-age youth across Brazil and the lack of data about South American youth possibly point to insufficient funding and support and a lack of systematic evaluation.

Differently from the Vancouver 2010 and London 2012 programs that continued after their respective Games with the support of local stakeholders, *Transforma* seemed to lack such backing from state agencies and local stakeholders for its continuation after the hosting period. Moreover, it seems that the changes to secondary education created difficulties with integrating the program contents into mainstream school education in Brazil and possibly contributed to its discontinuation.

Furthermore, *Transforma* lacked a critical pedagogy to frame its materials [55], similarly to London's, Vancouver's, and Beijing's program contents. As a result, it was another example of a missed chance to build a more balanced understanding of Olympism and Paralympism and to engage youth in critical discussions.

Another lost opportunity for *Transforma* was reaching out and including Indigenous youth as the Vancouver 2010 organizers did. There was no information available on the subject. Brazil's Indigenous population is about 900,000 [66], and thousands of them practice sports on their reservations and have their own Indigenous Games [67]. Engaging Indigenous youth in the program activities and in sport participation could have increased awareness and understanding of Brazil's Indigenous people and their culture.

In sum, the missed opportunities theme seems to be a recurring one for the Olympic and Paralympic values education programs, including for the Rio 2016 *Transforma* program. However, because London's and Vancouver's programs still continue, there is a possibility to improve the outcomes, differently from Rio's and Beijing's programs that suddenly stopped. Nevertheless, the Rio 2016 experience may offer some lessons and recommendations for future mega-event organizers for developing a long-lasting educational legacy.

5. Educational Legacies and the Lessons for Youth Engagement

The challenge for organizers, policymakers, and practitioners seeking to deliver an enduring Olympic and Paralympic legacy specifically focused on youth is to ensure that young people know what is available to them and feel empowered to seek participation opportunities, rather than being passive recipients of those legacy opportunities [17]. In this sense, legacy should be understood as "an evolving engagement process over which they [the young people] have some control [. . .], a process that enables children and young people to develop a critical stance towards sport and the Olympic Games" [17] (p. 7).

Many scholars and practitioners recognized that it had been a significant challenge across the world to get more people involved in sport, especially young people. The stakeholders associated with both the London 2012 and the Rio 2016 bids proposed to use the Games as a vehicle to endorse sport participation for all social groups, particularly targeting young people [31]. In its Candidature File to host the 2016 Olympics and Paralympics, the Rio 2016 Organizing Committee envisioned youth engagement as one of the event's main strategies [65]. Young people were an essential part of several legacies planned for the Rio 2016 Games, among them: Investments in sport and education in public schools (better sports facilities, improved PE teaching, and greater participation in the school and university Games) and fostering more meaningful connections among youth [68].

However, Brazil's unfavorable sociopolitical and economic conditions from 2014 on have significantly limited the delivery of the expected legacies, including youth-centered ones. For youth engagement to be one of the enduring impacts of the Olympic and Paralympic values education program, the policymakers, future organizing committee members, and educators would benefit from considering the following lessons learned from the experiences of previous host cities and Rio itself.

First, there needs to be a range of program opportunities that appeal to and meet the needs of diverse youth and that may work together in synergistic ways. In Rio's case, both the SHP and *Transforma* (or the smaller-scale *Impulsiona* program that succeeded it) have the potential to enrich and complement each other's approaches and content and jointly contribute to youth development and engagement, including that of Indigenous youth. The SHP has been implemented in Brazil's public schools for almost two decades and has reached many more children and youths than *Transforma* did in its almost three years of implementation. For a young person, getting involved in community issues (be that their school, residence, or social media community) can be empowering and has the potential to create lifelong habits and attitudes to stay engaged in democratic action [6]. With adequate and continued support, *Transforma's* youth leaders could have real opportunities to augment the SHP's activities and serve as role models for the other participants.

Second, drawing on London's experience in 2012 and on existing research, for the values education program to continue reaching and involving young people after the hosting period, it needs to be embedded in the broader educational and youth-targeting initiatives, possibly outside the school context. Critics argued that Brazil's schools have been disconnected from preparing the youth for real-world challenges. Thus, making Olympic and Paralympic education part of the efforts and policies that address the youth's challenges (discrimination, violence, income, safety, etc.) will not only make it more relevant to their lives, but will also further develop the program's critical and reflexive approach.

Third, a clear definition, documentation, and evaluation of the Olympic and Paralympic education outcomes with insights and involvement from youth may help other marginalized voices to be heard and suggest new pathways or policy proposals for civic engagement among marginalized groups [6]. Therefore, youth engagement strategies can serve to inform knowledge and practice on a much broader scale if properly conceived, documented, and shared. The examination of the Olympic legacy typically takes place before the Games, and studies of any impact of the mega-event usually lose momentum after the Games [31]. Moreover, as it happened with Beijing and Rio, their respective educational programs were halted after the Games, making it hard to carry out a long-term impact evaluation.

Finally, both the *Transforma* and *Impulsiona* programs have had a strong focus on sport and PE. With recent policy developments in Brazil that affected education and its funding, the opportunities for Olympic and Paralympic education in Brazil were drastically reduced. Learning from the British experience of cross-curricular youth engagement may prove helpful in counteracting this trend.

In sum, I hope these lessons can help future event organizers be more realistic in their legacy expectations. If the upcoming Olympic and Paralympic Games in Tokyo and Beijing are to leave an enduring youth legacy beyond the hosting period, the policymakers and the mega-event organizers would benefit from making these initiatives meaningful to the young people and from providing better supports for young people's positive development. While the sporting mega-events can be a means of engendering community spirit and increasing youth participation in physical activity and sport, the event can also provide an opportunity to examine the lives of youth and their engagement with the world [69].

6. Conclusions

This article examined the Rio 2016 Olympic and Paralympic education program *Transforma* as a means of engaging with the wider academic debates around sporting mega-events, legacy, and values education, and the extent of their capacity to inspire and sustain youth engagement. The contribution of this paper, therefore, is to offer some practical considerations to the literature on the legacies of sporting mega-events, with a specific focus on educational legacies for the youth. A brief overview of previously implemented Olympic and Paralympic education programs helped to better situate the Rio 2016 *Transforma* program and outline its implications and lessons for future organizing committee members, policymakers, educators, and researchers. These lessons highlight the importance of actively assessing and reflecting on:

- Providing a range of program opportunities that appeal to and meet the needs of diverse youth and that may work together in synergistic ways;
- Reaching out and involving young people beyond the hosting period and embedding these efforts into the broader educational and youth-targeting initiatives;
- Clearly defining, documenting, and evaluating the intended educational outcomes with insights and involvement from youth;
- Encouraging cross-curricular youth engagement beyond a strict focus on sport and PE.

The previous efforts of the Olympic and Paralympic Games organizers proved how challenging it is to create long-lasting educational legacies for the youth. The lack of systematic research about these intangible legacies contributes to such difficulties. As Chang noted, official reports prepared by the Organizing Committees that touch upon the Olympic values education programs have mostly been

descriptive in nature and lacked follow-up studies that sought understanding of youth experiences beyond these educational programs [23]. Therefore, scholars called for the need for future studies that could document the organization and evaluation of educational programs generated by mega-events, such as the Olympic and Paralympic Games, and include the voices and critical insights regarding youth experiences [20,23]. In a broader context of youth development and engagement, researchers point to the need for a more comprehensive longitudinal research that either builds on the existing youth initiatives or involves new efforts to understand what factors are most critical to youth development and sustained involvement in various cultural contexts [37]. The IOC and the IPC could support such longitudinal studies with a focus on youth to gain and share valuable insights with future mega-event organizers, policymakers, and educators.

This study has two methodological limitations. First, the data were coded and themes identified in the data only by me, which allowed for consistency in the method but lacked multiple perspectives from a variety of people with differing expertise. Second, the limited availability of the data and evaluation reports concerning the educational outcomes of the Rio 2016 *Transforma* program posed a challenge to translating the aspirational hopes of youth legacy planning into concrete benefits beyond program implementation.

Funding: This research received no external funding.

Acknowledgments: I am grateful to Max Stephenson Jr. of Virginia Tech Institute for Policy and Governance for his comments and suggestions on the earlier drafts.

Conflicts of Interest: The author declares no conflict of interest.

References

1. International Olympic Committee—IOC. *Olympic Legacy*; IOC: Lausanne, Switzerland, 2012; Available online: https://stillmed.olympic.org/Documents/Olympism_in_action/Legacy/Olympic_Legacy.pdf.pdf (accessed on 15 May 2020).
2. Darcy, S. Paralympic Legacy—Learning from the Sydney 2000 to prepare for Tokyo 2020. *J. Nippon Found. Paralympic Res.* **2016**, *4*, 43–61.
3. Misener, L.; darcy, S.; legg, D.; gilbert, K. Beyond Olympic Legacy: Understanding Paralympic Legacy through a research synthesis. *J. Sport Manag.* **2013**, *27*, 329–341. [CrossRef]
4. Knijnika, J.; Tavares, O. Educating Copacabana: A critical analysis of the ‘Second Half’, an Olympic education program of Rio 2016. *Educ. Rev.* **2012**, *64*, 353–368. [CrossRef]
5. Teetzel, S. Optimizing Olympic education: A comprehensive approach to understanding and teaching the philosophy of Olympism. *Educ. Rev.* **2012**, *64*, 317–332. [CrossRef]
6. Innovation Center for Community and Youth Development. *Youth Engagement: Discussion Brief*; Takoma Park, MD, USA. Available online: <http://www.extension.umn.edu/youth/research/learning/docs/youth-engagement-discussion-brief.pdf> (accessed on 2 November 2017).
7. Fereday, J.; Muir-Cochrane, E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *Int. J. Qual. Res.* **2006**, *5*, 80–92. [CrossRef]
8. Braun, V.; Clarke, V. Using thematic analysis in psychology. *Qual. Res. Psychol.* **2006**, *3*, 77–101. [CrossRef]
9. Nowell, L.; Norris, J.M.; White, D.E.; Moules, N.J. Thematic analysis: Striving to meet the trustworthiness criteria. *Int. J. Qual. Methods* **2017**, *16*, 1–13. [CrossRef]
10. Georgiadis, K. The implementation of Olympic education programs at world level. *Procedia Soc. Behav. Sci.* **2010**, *41*, 6711–6718. [CrossRef]
11. International Olympic Committee—IOC. Olympic Values Education Program. 2014. Available online: http://www.olympic.org/Documents/Reference_documents_Factsheets/Olympic_Values_Education_Programme.pdf (accessed on 2 December 2017).
12. Chatziefstathiou, D. Olympic education and beyond: Olympism and value legacies from the Olympic and Paralympic Games. *Educ. Rev.* **2012**, *64*, 385–401. [CrossRef]

13. Kohe, G. Stimulating a sociological imagination in Olympic learning legacies: A critique of the London 2012 initiatives. In *Olympism, Olympic Education, and Learning Legacies*; Chatziefsthathiou, D., Müller, N., Eds.; Cambridge Scholars Publishing: Newcastle upon Tyne, UK, 2014; pp. 87–98.
14. Culpan, I.; Wigmore, S. The delivery of Olympism education within a physical education context drawing on critical pedagogy. *Int. J. Sport Health Sci.* **2010**, *8*, 67–76. [\[CrossRef\]](#)
15. Rhodes, G.; Zlotinsky, J. Initiatives beyond the competition: Common purposes connecting international sport and education. In *Olympism, Olympic Education, and Learning Legacies*; Chatziefsthathiou, D., Müller, N., Eds.; Cambridge Scholars Publishing: Newcastle upon Tyne, UK, 2014; pp. 2–11.
16. Müller, N. Olympic Education: University Lecture on the Olympics [Online Article]. Barcelona: Centre d'Estudis Olímpics, 2004. Available online: <http://olympicstudies.uab.es/lectures/web/pdf/muller.pdf> (accessed on 22 December 2019).
17. Griffiths, M.; Armour, K. Physical education and youth sport in England: Conceptual and practical foundations for an Olympic legacy? *Int. J. Sport Policy Politics* **2012**, *5*, 213–227. [\[CrossRef\]](#)
18. Borgmann, T.; Almeida, J. Paralympic sport at school: A literature review. *Movimento* **2015**, *21*, 49–64.
19. Gaffney, C. Mega-events and socio-spatial dynamics in Rio de Janeiro, 1919–2016. *J. Lat. Am. Geogr.* **2010**, *9*, 7–29. [\[CrossRef\]](#)
20. Postlethwaite, V.; Kohe, G.Z.; Molnar, G. Inspiring a generation: An examination of stakeholder relations in the context of London 2012 Olympics and Paralympics educational programmes. *Manag. Sport Leis.* **2018**, *23*, 391–407. [\[CrossRef\]](#)
21. Brittain, I. *The Paralympic Games Explained*; Routledge: London, UK, 2010.
22. Wang, Y.; Masumoto, N. Olympic Education at Model Schools for the 2008 Beijing Olympic Games. *Int. J. Sport Health Sci.* **2009**, *7*, 31–41. [\[CrossRef\]](#)
23. Chang, L. From Rhetoric to Action—Employing Olympism as an Educational Tool: An Examination and Evaluation of the School-Based Olympic Education Programs in the Beijing 2008 Olympic Games. Master's Thesis, University of Toronto, Toronto, ON, Canada, 2012.
24. Brownell, S. Beijing's Olympic Education Program: Re-thinking sushi education, re-imagining an international China. *China Q.* **2009**, *197*, 44–63. [\[CrossRef\]](#)
25. British Columbia. Vancouver 2010 Education Program Expands. Available online: https://archive.news.gov.bc.ca/releases/news_releases_2005-2009/2008EDUC0121-001571.htm (accessed on 15 December 2019).
26. International Olympic Committee—IOC. Canadian Olympic School Program. Available online: <https://www.olympic.org/canadian-olympic-school-program> (accessed on 15 December 2019).
27. Vancouver2010. Staging the Olympic Winter Games. Knowledge Report,. 2010. Available online: <http://library.la84.org/6oic/OfficialReports/2010/2010v2.pdf> (accessed on 15 December 2019).
28. Dumont, M. Schools and the Vancouver 2010 Winter Games. *Vancouver Observer*, 4 June 2010.
29. On the scene at sport accord: Olympic fever strikes Beijing, London aims for youth. *Around the Rings*, 2007. Available online: http://aroundtherings.com/site/A_25504/Title_On-the-Scene-at-Sport-Accord-Olympic-Fever-Strikes-Beijing-London-Aims-for-Youth/292/Articles (accessed on 22 December 2019).
30. British Olympic Association—BOA. *Get Set*. Available online: <http://www.getset.co.uk> (accessed on 15 December 2019).
31. Defroand, J. London 2012: Olympic 'Legacy', Olympic Education and the Development of Social Capital in Physical Education and School Sport: A Case Study. Master's Thesis, University of Birmingham, Birmingham, UK, 2012. Available online: <http://etheses.bham.ac.uk/3701/1/Defroand12MPhil.pdf> (accessed on 18 December 2019).
32. Pancer, S.M.; Rose-Krasnor, L.; Loiselle, L. Youth conferences as a context for engagement. *New Dir. Youth Dev.* **2002**, *96*, 47–64. [\[CrossRef\]](#)
33. Lerner, R.M.; Lerner, J.V.; Almerigi, J.B.; Theokas, C.; Phelps, E.; Gestsdottir, S. Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *J. Early Adolesc.* **2005**, *25*, 17–71. [\[CrossRef\]](#)
34. Nakamura, J. The nature of vital engagement in adulthood. *New Dir. Child Adolesc. Dev.* **2001**, *93*, 5–18. [\[CrossRef\]](#)
35. Wilson, L. Pupil Participation: Comments from a case study. *Health Educ.* **2009**, *109*, 86–102. [\[CrossRef\]](#)

36. Davis, C. A Study of Best Practices in Youth Engagement and Leadership Development. *Hum. Serv. Collab.* 2016. Available online: http://www.endowmentforhealth.org/uploads/resources/id115/Youth_engagement_best_practices.pdf (accessed on 22 December 2019).
37. National Research Council and Institute of Medicine. *Community Programs to Promote Youth Development*; The National Academies Press: Washington, DC, USA, 2002. [CrossRef]
38. Hadad, C. China Falls Short on Olympic Promises, Critics Say. *CNN*, 12 August 2008. Available online: <http://edition.cnn.com/2008/WORLD/asiapcf/08/12/china.promises/> (accessed on 20 December 2019).
39. Watson, T. London Olympics organizers say they're up to the challenges. *USA Today*, 27 July 2011. Available online: http://usatoday30.usatoday.com/sports/olympics/2011-07-10-london-olympics-one-year-away_n.htm (accessed on 18 December 2019).
40. Putin's Olympic challenge. *The Australian*, 31 December 2013. Available online: <http://www.theaustralian.com.au/opinion/editorials/putins-olympic-challenge/news-story/2c73f906fd4f305cb296d593bb82c833> (accessed on 18 December 2019).
41. 'Suicide Bomber' Hits Russia's Volgograd Train Station. *BBC News*, 29 December 2013. Available online: <http://www.bbc.com/news/world-europe-25541019> (accessed on 18 December 2019).
42. Trevisani, P. Brazil's Political Drama Grinds on During Olympics: Rio 2016 Was Supposed to be the Exclamation Point on the South American Nation's Stunning Rise. *Wall Street Journal (Online)*, 6 August 2016. Available online: <https://www.wsj.com/articles/brazils-political-drama-grinds-on-during-olympics-1470506493> (accessed on 18 December 2019).
43. Leahy, J. Brazil's GDP shrinks 3.8%: The once vibrant economy is in its worst recession since records began. *The Financial Times*, 3 March 2016. Available online: <https://www.ft.com/content/57a3a1e8-e13e-11e5-8d9b-e88a2a889797> (accessed on 20 December 2019).
44. Yuk, P.K. Brazil's economy shrinks 3.6% in 2016. *The Financial Times*, 7 March 2017. Available online: <https://www.ft.com/content/e1c89278-c33c-3fbc-83ae-985497365cf6> (accessed on 20 December 2019).
45. Ordoñez, S. Brazil has 2 Kinds of Problems, and They're Both Bad. *CNBC*, 21 August 2015. Available online: <http://www.cnn.com/2015/08/21/brazil-has-2-kinds-of-problems-and-theyre-both-bad.html> (accessed on 20 December 2019).
46. Lazar, A. Brazil's Political, Economic Turmoil Haunt Olympics. *NBC News*, 5 June 2016. Available online: <http://www.nbcnews.com/news/us-news/brazil-s-political-economic-turmoil-haunt-olympics-n585561> (accessed on 20 December 2019).
47. Gomez, A. Zika is Among Reasons Many Americans Skipping Rio Olympics. *USA Today*, 22 June 2016. Available online: <http://www.usatoday.com/story/sports/olympics/2016/06/22/americans-rio-sumr-games-zika-virus/86143768/> (accessed on 20 December 2019).
48. Rio2016. O Programa de Educação dos Jogos Rio 2016 em Nove Momentos. [The Rio 2016 Educational Program in Nine Moments]. Available online: <https://www.rio2016.com/educacao/noticias/o-programa-de-educacao-dos-jogos-rio-2016-em-nove-momentos> (accessed on 1 November 2017).
49. International Paralympic Committee—IPC. Paralympics Ticket Sales Exceed Two Million. Available online: <https://www.paralympic.org/news/paralympics-ticket-sales-exceed-two-million> (accessed on 20 December 2019).
50. Viana, N. Brazil's security plans for the Olympics raise eyebrows. *Open Society Foundations*, 5 August 2016. Available online: <https://www.opensocietyfoundations.org/voices/brazil-s-security-plans-olympics-raise-eyebrows> (accessed on 20 December 2019).
51. Senado Federal. Sumário Executivo de Medida Provisória 746. [Executive Summary of the Provisional Measure 746]. Available online: <http://www.senado.leg.br/atividade/rotinas/materia/getPDF.asp?t=200143&tp=1> (accessed on 20 December 2019).
52. Fernandes, S. PEC 241 torna Plano Nacional de Educação inviável. Há 1072 ocupações em protesto. [The Constitutional Amendment Proposal 241 turns the National Education Plan inviable. 1072 people protest]. *Rede Brasil Atual*, 24 October 2016. Available online: <http://www.redebrasilatual.com.br/educacao/2016/10/2018pec-241-impede-plano-nacional-de-educacao2019-diz-une-pais-tem-1072-escolas-ocupadas-3822.html> (accessed on 15 December 2019).
53. Sousa, E.; Noronha, V.; Ribeiro, C. *Sistema de monitoramento e avaliação dos Programas Esporte e Lazer da Cidade e Segundo Tempo do Ministério de Esporte*; [The monitoring and evaluation system for the Ministry of Sport's Program Sport and Leisure in the City and Second Half Program]; O Lutador: Belo Horizonte, Brazil, 2010.

54. Altino, L. Programa foi concebido para aumentar o leque de esportes ensinados nas escolas. [The program was conceived to increase the range of sports taught at schools]. *O Globo*, 31 October 2016. Available online: <http://oglobo.globo.com/rio/bairros/projeto-transforma-do-comite-rio-2016-tera-continuidade-20371590#ixzz4Oyeo3g3s> (accessed on 20 December 2019).
55. Dos Santos, A.L.P. The Educational Program of the Olympic Games—Rio 2016. *Int. J. Sport Soc.* **2018**, *9*, 19–35. [CrossRef]
56. Kirst, F.V.; Tavares da Silva, O.G. Olympic Education in the Games Rio 2016: Transforma Program. *J. Hum. Sport Exerc.* **2018**, *13*, S86–S98. [CrossRef]
57. Ribeiro, T.M.P. *Análise do Legado Educacional: Programa Transforma Rio 2016*; Relatório para o Comitê Organizador dos Jogos Rio, 2016. [The analysis of the educational legacy Transforma Rio 2016 Program. Report for the Rio 2016 Organizing Committee]. Received through the author's personal correspondence; Centro Universitário Augusto da Motta: Rio de Janeiro, Brazil, 2016 July.
58. Nitahara, A. Legado da Olimpíada para a educação é tema de debate no Rio. [Olympic legacy for education is debated in Rio]. *Agência Brasil*, 19 October 2015. Available online: <http://agenciabrasil.ebc.com.br/educacao/noticia/2015-10/legado-da-olimpiada-para-a-educacao-e-tema-de-debate-no-rio> (accessed on 20 December 2019).
59. Villela, F. Rio 2016: Projeto coloca alunos de escolas em contato com atletas paralímpicos. [Olympic legacy for education is debated in Rio]. *Agência Brasil*, 3 September 2015. Available online: <http://www.ebc.com.br/nolicias/2015/0Qrio-2016-projeto-coloca-alunos-de-escolas-em-cantato-com-atletas-paralimpicos> (accessed on 2 November 2017).
60. Rio2016. Rio 2016 Education Program Trains Students to Promote Olympic and Paralympic Values in Schools. 2015. Available online: <https://www.rio2016.com/en/news/rio-2016-education-program-trains-students-to-promote-olympic-and-paralympic-values-in-schools> (accessed on 2 November 2017).
61. Rio2016. Manual do Tutor de Agente Jovem, Formação do Transforma. [Manual for the Mentor of the Youth Agent, Transforma Training]. Available online: <https://www.rio2016.com/educacao/participe/download> (accessed on 2 November 2017).
62. Transforma 2016. Transforma Rio2016 Facebook Page. 30 September 2016. Available online: <https://www.facebook.com/groups/transformario2016/> (accessed on 2 November 2017).
63. Rio2016. Projeto de Intercâmbio Cultural do Transforma Chega ao MAR em Encontro Final. [Transforma's Cultural Exchange Project Has Its Last Meeting at MAR]. 2016. Available online: <https://www.rio2016.com/noticias/projeto-de-intercambio-cultural-do-transforma-chega-ao-mar-em-encontro-final> (accessed on 2 November 2017).
64. International Paralympic Committee—IPC. #FilltheSeats Campaign Closes-15,000 Brazilian Youngsters to Attend Rio 2016. Available online: <https://www.paralympic.org/news/filltheseats-campaign-closes-15000-brazilian-youngsters-attend-rio-2016> (accessed on 2 November 2017).
65. Guimarães, A. Rio 2016, e agora? Oportunidades e Desafios. [Rio 2016, what now? Opportunities and Challenges]; 2009. Available online: <http://www12.senado.gov.br/publicacoes/estudos-legislativos/tipos-de-estudos/textos-para-discussao/td-67-rio-2016-e-agora-oportunidades-e-desafios> (accessed on 20 December 2019).
66. Fundação Nacional do Índio—FUNAI (National Indian Foundation); Instituto Brasileiro de Geografia e Estatística—IBGE (Brazilian Institute of Geography and Statistics). O Brasil Indígena [The Indigenous Brazil]. Available online: <http://www.funai.gov.br/arquivos/conteudo/ascom/2013/img/12-Dez/pdf-brasil-ind.pdf> (accessed on 15 May 2020).
67. Ministério da Cidadania. Jogos Indígenas: Rotina nas aldeias inclui a prática de modalidades tradicionais [Indigenous Games: Routine on reservations includes traditional sports practice]. 2015. Available online: <http://arquivo.esporte.gov.br/index.php/institucional/esporte-educacao-lazer-e-inclusao-social/jogos-indigenas/videos/141-noticias-jogos-indigenas/34605-jogos-indigenas-rotina-nas-aldeias-inclui-a-pratica-de-modalidades-tradicionais> (accessed on 15 May 2020).

68. Comitê de Candidatura Rio 2016. *Dossiê de Candidatura do Rio de Janeiro à sede dos Jogos Olímpicos e Paraolímpicos de 2016*. [Candidature File of the Rio de Janeiro as a host of 2016 Olympic and Paralympic Games]. 2009. Available online: https://www.rio2016.com/transparencia/sites/default/files/dossie_de_candidatura_v1_0.pdf (accessed on 20 December 2019).
69. Kohe, G.Z. London 2012 (Re)calling: Youth memories and Olympic 'legacy' ether in the hinterland. *Int. Rev. Sociol. Sport* **2017**, *52*, 24–44. [[CrossRef](#)]



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