The Effectiveness of Online Sports Co - Curricular Activities in Times of Covid 19

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Abstract
The widespread flare-up of Novel Coronavirus, also known as COVID-19, has had a significant impact on any aspect of human life, including schooling, and the exasperating range of the incurable infection created chaos within the educational system, forcing the closure of educational institutions all over the world. Subsequently, educational institutions have moved to online teaching to abridge the effects on learners' academic learning, likewise, sports co - curricular activities are also being taught using online learning platforms. Hence, this study was carried out to investigate the effectiveness of conducting sports co -curricular activities through online learning platforms to both learners and teachers. Quantitative research design was employed where two sets of questionnaires were used in collecting data from 80 Senior 2 learners and 10 sports teachers at a secondary school in Klang. The data was analysed using descriptive analysis and findings indicated that that online platform is a viable approach to carry out online sports activities amid the times of COVID-19 due to the transition in education. Finally, implications and suggestions for further research are made which is to shed light on learners' thoughts, opinions, views, and feelings on the implementation of online sports co - curricular activities.
Keywords: Education 4.0 (IR), 21st Century Learning, Covid -19, Sports Co-curricular Activities, Online Learning

Introduction
        The Malaysian Higher Education has executed an education 4.0 program in line with the 4th industrial revolution. The education 4.0 program is focused at giving graduates the capabilities and competencies required by the digital-driven industry. In some ways, Instruction 4.0 completes the phenomena of digital integration in our everyday lives, in which people and machines are balanced to evacuate solvent, troubleshoot, and, of course, discover new ideas of advancement. Information is pervasive in education 4.0, and teaching and learning process has become vigorous. It is not troublesome to imagine what instruction 4.0 holds for us, given the development of technology breakthroughs. In conjunction with that, in this latest century, the learners' learning style is different from the previous era, since they develop more viable and individually fascinated by the learning process (Kozinski, 2017).

In the 21st Century, Information and communication technology (ICT) encompasses an exceptional part to connect, share information and distinguishing resources adapt and enhance in reaction to generate new knowledge. Concurring to this, abilities like rote memorization have been decreased and new criteria for what students need to be able to do must be changed by picking up additional aptitudes such as critical thinking, problem solving, social collaboration and communication skills. All of these aptitudes can be made practical exteriors of curricula by relying on co-curricular exercises which lead to an exceptional progression in students' performance.

However, in order to decrease extreme circulation of COVID-19, enhancements have been fundamentally based on restrictive measures, counting the evading of social intuitiveness, the disallowance of developments in the national region, and the shutdown of all inconsequential activities, as well as instructive education. The sudden closed down of schools have caused the whole country to shift to online learning. This caused a tremendous chaos among the teachers as they faced various hindrances to conduct online classes. Adding on, they also have to abandon the co - curricular activities as they are lacking in confidence to use the online learning platforms for the implementation of online co - curricular activities. This has resulted in learners' health and wellbeing being affected due to abandonment of co-curricular activities.

Education is a wide-ranging idea which upsurges over the classroom. Total instruction is the type of education that centers on the overall progression of the child. Such education includes curricular and co-curricular activities. Curricular activities are an indispensable portion of an educational program that is undertaken in the classroom, laboratory or library. Co-curricular activities are the gears of the non-academic curriculum that make a change to produce distinctive aspects of the personality improvement of the child and students. Emotional, physical, spiritual, and ethical development must be supplemented and accompanied by co-curricular activities for a child's whole development. Co-curricular activities are characterized as the activities that empower to supplement and complement the curricular or crucial syllabi exercises (Garrett et al., 2021). These are an imperative feature of educational institutions to form the students' identity as well as to invigorate classroom learning. These activities take place outside of school hours and are alluded to as extra-curricular exercises. Co-curricular activities cover a wide range of points to support a child's cultural, social, and aesthetic development.

According to Siddiky (2019), when diverse sorts of co-curricular activities are included in the school or college level, their essential objective is to contribute towards an all-round improvement of the students. Some of the fundamental focal points of co - curricular activities to the learners listed were such as it helps students to comprehend the noteworthiness of wellness and keeps them enthusiastic. Besides that, psychological, ethical, civic, social, disciplinary, cultural, and recreational qualities are also advanced through co-curricular exercises.

In brief, as said by Rosli (2017), by getting involved in different sorts of co - curricular activities, learners will be able to unwind, rejuvenate and boost their creativity and thinking skills. Fortunately, as time went on, knowing the advantages of co - curricular activities, educators out there were productive in getting themselves well-suited to the circumstance and they have made teaching co-curricular activities through online platforms a triumph.

Nevertheless, these benefits would not be fulfilled through online learning. In conjunction with that, according to Andrew (2020), as the widespread continues and millions of children return to online tutoring, experts caution that students are at greater risk of

gaining too much weight, which may lead to obesity. This is mainly because virtual learning eliminates a number of the physical activities students would ordinarily get at school, such as walking to classes, taking part in physical exercises, and running amid recess.

According to the World Health Organization, rates of overweight and obesity continue to develop in adults and children. From 1975 to 2016, the prevalence of overweight or hefty children and adolescents who matured 5–19 years extended more than four-fold from 4% to 18% universally. In order to overcome this inconvenience, numerous schools are effectively responding to social changes by offering a diverse school curriculum through online classes and creating new approaches to education (Ng, 2020). The changes necessitated by the crisis may present an opening to adjust to the education needs of the developing Fourth Industrial Revolution. In conjunction with that, many schools have begun implementing online co – curricular activities so that the students' wellbeing and academic performance are not affected.

In short, co - curricular activities play a major part in a learner's life too in spite of academic learning. However, the current switch to online learning due to the Covid -19 pandemic has made educators take steps not to abandon the co- curricular activities as there are many benefits of co- curricular activities to the students. In line with this, many educators have implemented co - curricular activities through online learning platforms. There are uncountable studies done in the past focusing on benefits and the impacts of co - curricular activities. In many studies preceding Covid – 19, the possibility of online classes has been researched. However, not many studies were done on the viability of conducting online sports co - curricular activities. At this juncture, it is imperative to know more approximately the effectiveness of carrying out sports co - curricular exercises through online platforms in conjunction with the switch from conventional strategies of educating to online educating. The findings of this study will contribute to the benefits of all the sports teachers and learners out there.

Research Questions
1. To investigate the effectiveness of the implementation of sports co-curricular activities through online learning platforms for teachers and students.

Literature Review
Education 4.0
The education industry has massively changed ever since the first industrial revolution took place. With the great discoveries of Artificial Intelligence (AI), robotics, big data and the internet, the impacts on employment and industry have expanded. Concurring to Dunwill (2016), Education 4.0 is defined as the utilization of technology in teaching and learning settings. The execution of Education 4.0 is fundamental because it is a more practical based approach in the teaching and learning settings. 2018, former Higher Education Minister Datuk Seri Idris Jusoh emphasized the subject of "Higher Education 4.0: Knowledge, Industry, and Humanity," kicking off the education 4.0 movement in Malaysia. As Malaysia holds the rise of the IR 4.0 on higher education, the Malaysian Ministry of Education plans to revamp the strategy of teaching and learning students that primarily centers the theme of Knowledge, Industry and Humanity with four principal guideline viewpoints: redesigning of learning spaces, incorporation of 21st century pedagogies, applying a fluid an organic curriculum, responding to developments and modern ranges of knowledge and incorporation of the most recent learning and teaching advances.

21st Century Learning
As the global recognizes the increase in globalization, it is moving towards the industrial revolution of the twenty - first century learning whereby learners need to be given opportunities to analyze the twenty-first century's capabilities like getting to know advancement, digital knowledge, career and life talents with the abilities of crucial thinking, adaptability, courage, determination and less dependable. Hence, there has been an overabundance of research carried out in the study of the twenty-first century learning. Qattan & Kandari (2020) confirmed that to meet the request of the twenty - first century learning is many-sided, and it plagues the schooling organization, the syllabus and academic designers, and teaches with the responsibility of classifying, executing, fulfilling as well as keeping up twenty first century's learning outcomes. Moreover, according to Hashim (2018), the advancement of information technologies in education has brought an enormous change to teaching-learning by providing a wide array of online information with the internet connection, which empowers learners to get all the 21st century skills by partaking in co - curricular activities.

Covid - 19 Leads to School Closures
The coronavirus (COVID-19), which originated in December 2019, has already spread over the globe, affecting nearly all nations and territories across the world (WHO, 2020). Earlier January 2020, the cutting-edge coronavirus widespread has been raging the country. This widespread has brought a serious short-period disturbance and not only could be sensed by various families all through the country but also youngsters' social life and education which has made education move towards e-learning. Adding on to this, in another study conducted by Wu (2020), it is specified that with reason to control the spread of torment, ministries have closed down classes and confined tenants at households, which has brought unprecedented challenges to conventional school instruction.

Teaches surged to switch their face-to-face lessons online, this sudden move overpowered only the technically advanced instructors (Shamsudin & Yunus, 2022). They have been "quaranteaching" since then, primarily confined to their houses, only fitted with a computer and the internet (Pace et al., 2020). Wu (2020) also concurred that the whole e-learning guideline has brought unprecedented weight to the teachers, the program advancement errand is overwhelming, how to ensure the teaching standard, how to perform the teaching plan, how to create transcendent utilize of all sorts of guideline organize and teaching materials, these are all the issues that ought to be unraveled to execute the e-learning and continue the distance learning development.

Online Learning Platforms
Since the beginning of 2020, all learning institutions have been experiencing an exceptional immense "migration" from conventional face-to-face instruction to online instruction. Due to the Coronavirus illness (COVID-19) which started spreading like a wildfire all around the world, taking after the government's necessities of "nonstop teaching and learning," all learning institutions have started online instruction (Bao, 2020). Confined by the outbreak, the school grasped the teaching model "Web + Protocol-Guided Instruction" and created forums for the sharing of open information. In the arrangement to empower the communication and exchange between teachers, learners and parents, parents, learners and teachers are closely related through the open information communication instruments (Cai, & Wang, 2020). For example, the WeChat group, WhatsApp group, Messenger, Telegram,

Zoom, Google Meet and Team Viewer are examples of social media platforms adapted and utilised to deliver lessons during the pandemic. Teachers organize learning activities on the website, learners collect learning tasks on the website, and parents encourage learners to undertake tasks on the platform by (Yew et al., 2020; Chee et al., 2021).

Next, countries all around the world are attempting their best to respond to the pandemic with all the accessible sources and facilities. The literature review section from a study conducted by Dawadi (2020) on the impacts of COVID-19 said countries that are mechanically advanced such as Italy, France, Germany, Australia, the UK, and the US, have received remote learning to compensate for the adversity. On the contrary, nations without palatable establishments are switching to ordinary innovations, like television and radio, as a method to compensate for the mishap. For example, in South American nations like Argentina, Chile, and Brazil, where get to web and internet network may be a key matter, individual services have applied a mixture of new (mobile, advanced) and conventional innovations to convey lessons and assets from a single, coordinated national instruction entry for learners, instructors, directors, and guardians.

Furthermore, in Malaysia, the change towards e-learning has had a protracted battle due to significant issues; to be particular, the financial and computerized gap that remains to play an unimaginable role within the plausibility of e-learning in Malaysia (Clement & Yunus, 2021; Kamal, 2020). To overcome this issue, Malaysia has impelled an unused TV channel to supply instruction through TV programs to every learner, especially those without Web access. These programs are as well live-streamed on the Ministry's online learning stage which offers access to on-demand substance as well as computerized reading material (International Association of Universities, 2020). However, Goswami (2020) contrasted that learner tend to lose their attention in online learning, and it is very challenging for the engagement of learners or the whole class together. The student engagement plays a dynamic role in understanding the concept and makes teaching operative. To sum up, above-mentioned past studies support that the co - curricular activities could be held with the implementation of online teaching through different online learning platforms.

Challenges of Conducting Online Classes

Teaching and studying are a part of life. It is exceptionally troublesome to see at the entire educational framework deterred as an educationist and learner. The continuing research on the modern education environment is posturing new issues at all stages. There has never been an appropriate substitution for face-to-face instruction and moving from whiteboards to computer platforms has created a perplexity of conversation. In fact, we see a major advantage of technology. It is additionally great to see that teachers can share their information through learning, but it appears exceptionally troublesome to make it successful. Nearly all learning institutions have no or petite knowledge of carrying out online classes.
Undoubtedly, many teachers do not show up to own palatable abilities to conduct online classes as they have not one or the other been arranged to do the work nor have been included in online teaching some time recently (Dawadi, 2020). However, countries all around the world are attempting their best to respond to the pandemic with all the accessible sources and facilities. The worldwide lockdown of instruction teaching is reaching to cause a major and likely unequal disruption in learners' learning process, disturbances in inner appraisals and the termination of open assessments for capabilities or their substitution by a second-rate substitute. To conclude, all of the over-recorded past studies stated that the transition from conventional classroom to online education has a great impact towards learners. This is

mainly because, due to the problems faced by both the educators and the learners, proper learning would not take place.

Co-curricular Activities

Co-curriculum insinuates to the activities and learning experiences that occurs in school together with the academic curriculum. Academic fulfillment may be a key component of school life, and it is complemented by a wide and enhancing co-curriculum to provide a rounded education. Co-curricular activities are fundamental because, despite the fact that they are not part of the core educational programs, they serve a critical role in permitting youthful boys and young ladies to define their lives, concurring to (Khargharia, 2020). The school activities must be deliberately organized to allow an appropriate balance of student collaboration in academics as well as an opportunity for all-round development (Siddiky, 2019). Co-curricular activities are amazingly imperative and should not be neglected (Sami & Irfan, 2020).

There are various positive perspectives on students that can be seen from their inclusion in co-curricular activities. Acquah & Anti-Partey (2014), claimed that this informal viewpoint of education has an incredible bargain to contribute to making extraordinary citizens. They claimed that such activities enable students to communicate enough, prepare them for monetary independence, create sound minds in healthy bodies, prepare them for family life and direct their use of relaxation time. They added that such activities too offer assistance students create a set of moral and ethical values, create social competency, discover exceptional interest and capacities and create innovative expression.

Disadvantages of Abandonment of Sports Co – curricular Activities

The closure of education institutions around the world due to COVID-19 has influenced the sports education sector, which is comprised of a wide range of stakeholders, counting national ministries and local authorities, public and private education institutions, sports organizations and athletes, NGOs and the business community, teachers, researchers and coaches, parents and, the young – learners. Along with this, numerous schools have abandoned sports co – curricular activities as a result of Covid – 19 school closure. Numerous students are therefore not able to effectively take part in their regular sports co – curricular activities. Under such conditions, many tend to be less physically dynamic, have longer screen time, irregular sleep patterns as well as worse diets, resulting in weight gain and loss of physical fitness. Besides, absence of work outs and physical movements can lead to mental health effects, which can compound stress or anxiety that many will encounter in the face of segregation from ordinary social life. Possible loss of family or companions from the virus and impact of the contamination on one's financial prosperity and access to nutrition will aggravate impacts.

Challenges of Online Sports Co – curricular Activities

The COVID-19 widespread has constrained many colleges and students to move to virtual learning, Sport is a major contributor to economic and social development. Its role is well recognized by Governments, which reflects on "the contribution sports make to the strengthening of ladies and adolescents, individuals and communities, as well as to health, education and social consolidation objectives." The digital age is an area with colossal opportunities. However, there are numerous challenges confronted by both the instructors and learners due to the switch to online learning particularly when it comes to sports co –

curricular exercises (Manoharan et al., 2022). First and foremost, many of the sports co – curricular activities require coach in order to deliver the lesson and train the students. Although it can be done via online classes, the coaches, instructors and students still confront challenges to carry out errands through online platforms (Tan et al., 2021). Besides, in the classroom, instructors can monitor the students and alter their pace to suit anybody who requires additional attention and guidance. In an online learning environment, it is more challenging to do so. Since it is harder to examine body language virtually, learners may remain silent or "put on a courageous face" and then leave the class feeling discouraged, baffled, and having learned nothing (Mohtar & Md Yunus, 2022). Other than that, sports exercises require a wide area. Utilizing online learning platforms is unquestionably a tremendous obstruction to carry out sports activities taking into contemplations of students from low-income family.

To conclude, all of the over-recorded past considers that co - curricular activities bring many benefits to the learners. Consequently, all the educators out there are trying their best not to abandon the sports co – curricular activities due to the switch to online learning. Many steps have been taken in order to teach the sports co – curricular activities via online platforms. Therefore, this study is expected to explore the effectiveness of conducting co - curricular activities through online learning platforms to both learners and teachers.

Research Methodology
Research Design

This research is a quantitative research. This research is aimed to investigate the effectiveness of the implementation of sports co-curricular activities through online platforms. Thus, a survey research design is applied to gain data from the selected Senior Two students and educators. This research exploits questionnaires as the instrument, which is adapted from (Wangai, 2012). For this study, as it is carried out during Movement Control Order (MCO), the questionnaire is created in a Google Form and sent to the participants via WhatsApp. Descriptive statistics are produced from the data gathered to attain data on the effectiveness of implementing sports co - curricular activities through online learning platforms.

Research Participants

The research participants are Senior Two (Form Five) students and sports teachers from a suburban secondary school in Klang, Selangor. The participants are selected through purposive sampling. This purposive sampling is utilized because the participants were more accessible to the researcher and shared the similar characteristics of age and interest in partaking in co - curricular activities. The students are chosen from a population size of 110 while the teachers are chosen from a population size of 10. To choose the sample size to signify the given population, the table by Krejcie and Morgan (1970) was referred to. Referring to the table, to represent 110 learners, a sample of at least 86 students is required, while to represent 10 teachers, a sample of at least 10 instructors is required. Nevertheless, only 80 learners are chosen due to their accessibility and 10 teachers are chosen as the research participants.

Research Instruments

This research is carried out by administering survey questionnaires to selected Senior Two students and sports teachers. Two different sets of survey questionnaires are prepared

to be answered by the respondents. The survey was adjusted from the stock created (Wangai, 2012). The first set of survey questionnaire is to be answered by the students. The questionnaire consists of four sections namely Section A, Section B, Section C, and Section D. Section A consists of 2 questions relating to their background information whereas Section B consists of 12 questions about the co - curricular activities in school. Section C consists of 9 questions referring to learning sports through online learning platforms while Section D consists of 4 questions about the effectiveness of online sports co – curricular activities.

On the other hand, the second set of survey questionnaire is to be answered by teachers. The questionnaire is divided into four sections namely Section A, Section B, Section C, and Section D. Section A entails 4 questions relating to their background information while Section B contains 13 questions about the co - curricular activities in school. Section C involves of 9 questions about learning sports through online learning platforms while Section D comprises of 4 questions on the effectiveness of online sports co – curricular activities.

Respondents are required to pick the right answer based on the selections given. Both the survey questionnaires are a combination of closed - ended questions and open-ended questions. Questions with 2 - point Likert Scale ("Yes" , "No"), 3 - point Likert Scale ("Yes", "Not sure", "No"), 4 - point Likert Scale ("Strongly disagree", "Disagree", "Agree", "Strongly agree") and 5 - point Likert Scale ("No extent", "Little extent", "Moderate extent", "Great extent" and "Very great extent") are used to keep the choices short and simple for the respondents.

Data Collection
Data was collected to explore the effectiveness of the implementation of sports co-curricular activities through online learning platforms for teachers and students.

Data Analysis
The data is analyzed using descriptive statistics. The results are descriptively presented and described in frequency tables, pie charts and percentages. Finally, the outcome from the instrument was explored.

Findings & Discussion
Research Question 1: To investigate the effectiveness of the implementation of sports co-curricular activities through online learning platforms for teachers and students.

Effectiveness		1 F (%)	2 F (%)	3 F (%)	4 F (%)
1.	It saves time.	0 (0.0)	28 (35.0)	40 (50.0)	12 (15.0)
2.	It is more effective than the traditional method.	16 (20.0)	15 (18.7)	49 (61.3)	0 (0.0)
3.	It provides rich resources.	9 (11.3)	29 (36.3)	41 (51.2)	1 (1.20)
4.	It eases the learning process.	10 (12.5)	32 (40.0)	36 (45.0)	2 (2.50)

SD: Strongly Disagree D: Disagree   A: Agree   SA: Strongly Agree

Table 1: Frequency and Percentage on The Effectiveness of Co – Curricular Activities through Online Platform for Students

Effectiveness		1 F (%)	2 F (%)	3 F (%)	4 F (%)
1.	It saves time.	0 (0.0)	3 (30.0)	7 (70.0)	0 (0.0)
2.	It is more effective than the traditional method.	1 (10.0)	2 (20.0)	7 (70.0)	0 (0.0)
3.	It provides rich resources.	0 (0.0)	4 (40.0)	5 (50.0)	1 (10.0)
4.	It eases the teaching process.	0 (0.0)	2 (20.0)	7 (70.0)	1 (10.0)

SD: Strongly Disagree D: Disagree   A: Agree   SA: Strongly Agree

Table 2: Frequency and Percentage on the Effectiveness of Co – Curricular Activities through Online Platform for Teachers

According to results in Table 1, most students feel that it is effective to have online sports co – curricular activities. Students feel that the execution of online sports co – curricular activities saves time, provides rich resources and eases the learning process. Moreover, 49 students or 61.3% of them feel that the online method is more effective than the traditional method. This could be due to the students' lifestyle whereby the students are living in a high technology era which enables them to adapt into a new learning environment. Even though

most students feel that the online activities ease the learning, yet 32 students or 40% of them disagrees to the statement. The high number in disagree column can be due to less connectivity of the internet or frequent disconnection of internet that led to dissatisfaction among the students.

According to results in Table 2, most teachers feel that it is effective to have online co – curricular activities. Teachers too feel that the implementation of online co – curricular activities saves time, provides rich resources and it eases the teaching process. However, 7 teachers or 70.0% of them feel that the traditional method is still more effective than the online learning. This might be due to the new environment of learning that the teachers are still unable to adapt to. Most of the activities have been prepared using the traditional method and the sudden change into online teaching might cause difficulty for the teachers to plan ahead. Even though 50.0% of the teachers agree that the implementation of online activities provides rich resource, yet 40.0% or 4 teachers do not agree with this statement. Some activities especially sports activities need hands – on resource in order to complete the task.

From both the tables above, it can be concluded that the implementation of co – curricular activities through online platform are effective for teachers and students as it saves more time than usual, it provides rich resources, and it eases teaching and learning processes.

Conclusion

Present research tends to focus on the effectiveness of the execution of online sports online sports co - curricular activities to both learners and educators. As a result, an effective way to carry out sports co – curricular activities in times of Covid – 19 is through online learning platforms. It is not only valuable to the teachers and learners in times of Covid – 19, but also to be carried out once the face – to – face session resumes as a preparation to meet the requirement of Education 4.0. As the saying by Craig R Barrett goes, "with the help of technology, teachers will be the leaders in the transformation of education around the world. An issue that was not addressed in this study was on the applicable approach to be inculcated which could help educators to overcome the challenges faced and as well as the impacts brought by this pandemic in carrying out online sports co - curricular activities. It is hoped that the study can contribute to more informative findings so that a process of continuous improvement can be proposed and performed from time to time. There is, therefore, a definite need for future researchers to explore possible approaches to overcome the obstacles faced in conducting online sports co – curricular activities. "Technology will not replace great teachers, but technology in the hands of great teachers can be transformational" by George Couros.

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Appendix
Survey Questionnaire
Demographic Details
1.   Gender:
- Male   ☐
- Female   ☐

2.   How long have you been in this school?
- Since form 1   ☐
- Joined in form 2   ☐
- Joined in form 3   ☐
- Joined in form 4   ☐

3.   Is the program of co-curricular activities conducted in your s4. chool?
- Yes   ☐
- No   ☐

4.   Implementation of online sports co – curricular activities saves time.
Strongly disagree   ☐
Disagree   ☐
Agree   ☐
Strongly disagree   ☐

The Effectiveness of Online Sports Co – Curricular Activities.
1.   Implementation of online sports co – curricular activities is more effective than traditional method.
Strongly disagree   ☐
Disagree   ☐
Agree   ☐
Strongly disagree   ☐

2.   Implementation of online sports co – curricular activities provides rich resources.
Strongly disagree   ☐
Disagree   ☐
Agree   ☐
Strongly disagree   ☐

3.   Implementation of online sports co – curricular activities eases the learning process.
Strongly disagree   ☐
Disagree   ☐
Agree   ☐
Strongly disagree   ☐