

Course Quality Assurance During Emergency Remote Teaching and Learning

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Abstract

This article describes course quality assurance during the period of Remote Teaching and Learning in session 2020-2021. Emergency remote teaching (ERT) is the situation in which students and teachers are forced to teach and learn digitally and at a distance from each other. Normal course quality assurance is interrupted and emergency measures are put in place in order to support students and continue their learning with well-articulated instructions and reportage. Accountability is a crucial element in this type of course in that teachers must prepare all teaching and instruction before the courses begin and are not given the luxury of additional teaching instruction as the course develops. The workload on teachers is therefore intensified and compacted into a hectic time-frame and only minor changes can be implemented during the rollout of the course, and ancillary instruction made as the course progresses. Student support through individual email correspondence is the main way to communicate and motivate, with the Manaba learning management system as the main platform for submissions and instructions. This article will explain and explore the logistical limitations of such a course and the benefits and drawbacks of learning in such a manner.

The Concept of Emergency Remote Teaching

Emergency remote teaching (ERT) is a situation in which students and teachers are forced to teach and learn digitally and at a distance from each other, and is distinct from regular online and distance education, in that regular course quality assurance is interrupted due to both physical and digital barriers which make supporting students tremendously difficult.

“Emergency remote teaching (ERT) is meant to be a temporary shift from the normal modes of teaching. It happens when teaching becomes remote (or distant). This takes what would have otherwise been face-to-face or hybrid teaching and transforms it to become digital education.”
(Emergency Remote Teaching, 2021)

While students are expected to continue their learning with well-articulated instructions from teachers, ERT is meant to be a temporary response to a situation -currently that situation is the global pandemic

spread of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), that causes “coronavirus disease” [also known as “COVID19”] (Naming the coronavirus disease (COVID-19) and the virus that causes it, 2020)- where it is understood that resources may be lacking, students choices are reduced and faculty support is reduced. During the 2020-2021 session, here at this university, these commonly now understood limitations were vastly reduced, and the situation for students was cushioned by the prompt action of the staff and their creativity in constructing the program. Under normal conditions sports and exercise programs at this university had previously offered one sport per semester per cohort of students for each 15 week semester, however, this program was already under development and in the immediately preceding year (2019-2020) the students options were doubled by splitting the semester into halves and a move to two consecutive seven week blocks of classes in two different sports or exercise classes led by the same teacher. The adaptation of this program was to vitalize students and to offer more choice and opportunity to all of the students. This had already been well-received and meant that most students could experience more than previously available, and also meant that the focus of teachers and students was increased due to the finite amount of time spent on any one sport.

In alignment with the recommendations by the Japan Sports Agency there was a range of sports and types of exercise that were key to implementing the new university ERT 2020 exercise program (see appendix 1 安全に運動・スポーツをするポイントは?). An alignment that also integrated several factors including, heatstroke, hydration and other health indicators and risks. With particular focus on prevention of the spread of the novel coronavirus (SARS-CoV-2) all course participants at this time were directed to take any and all precautions possible to protect themselves and others (see appendix 2).

Background

The general spirit and ethos of the sports and education department at this university is to promote an appreciation and certain affinity with the ideology of a ‘healthy body and a healthy mind’. As nouns the difference between ethos and spirit is that ethos is the character or fundamental values of a person, people, culture, or movement, while spirit is the undying essence of a human; the soul. Students are encouraged to begin, improve and maintain their physical activity from the beginning of their university life as freshmen students, through until graduation, and ideally life beyond that. One main tenet for the teaching staff is to develop this affinity with exercise and for the students to reap the benefits of regular physical exercise, as well as the mental well-being benefits that this type of lifestyle brings along. Regardless of the technical ability of each student, courses are focused on improving each and every participant whilst still having fun, enjoying, and growing this healthy positive experience and atmosphere.

Many of the sports are chosen to suit the needs of the students and to improve the student experience. Knowing that students have a wide range of interests and backgrounds allows instructors and course managers to introduce new elements and new sports - including recreation games- not commonly taught at many Japanese schools, again increasing the popularity and consequently their overall satisfaction with the sports and exercise program. One specific example of this is the ‘Light Sports’ course offered which includes a myriad of games and activities focused on fun and pure enjoyment. These ‘light sports’

range from ultimate frisbee to soccer, putter golf to yoga, walking to recreational games (camp games, team-building games, playground games, etc.) and more. The program of these games is very flexible and allows for the accommodation of poor weather conditions and readjustment of the scheduled activities. This is vital in capturing the excitement of the day and the elusive fun factor that makes this program so enjoyable.

Teaching these types of light sports and games requires clear instruction from instructors and requires students to be responsive to the instruction given during short periods of time throughout the in-person lessons. This kind of lesson is almost impossible to carry out online for the same reasons that make it interesting and exciting when face to face. Due to the nature of this type of teaching and learning it is not possible to carry out online or at a distance. A majority of these games involve teamwork and collaboration that builds towards camaraderie and authentic friendships between students.

The selection of activities used in the 2020 program are best matched with the needs of the students and also fit within the parameters now restricting the process of teaching and learning. The method of learning exercises and carrying them out individually promotes student independence and autonomy. Making lessons as student-centred as possible and teachers guiding from the side or from a distance can empower many students and lead to motivation without criticism or critical monitoring of style of effort.

These pedagogical ideas correspond in many ways with the pedagogy of the Montessori Method of Education in several ways including its 4th and 5th principles:

“Principle 4: The Prepared Environment

The Montessori method suggests that children learn best in an environment that has been prepared to enable them to do things for themselves. Always child-centred, the learning environment should promote freedom for children to explore materials of their choice. Teachers should prepare the learning environment by making materials and experiences available to children in an orderly and independent way.

Principle 5: Auto education

Auto education, or self-education, is the concept that children are capable of educating themselves. This is one of the most important beliefs in the Montessori method. Montessori teachers provide the environment, the inspiration, the guidance and the encouragement for children to educate themselves.” (Lopez, n.d.)

The concept of “Auto education” in the Montessori method is “based upon teaching through didactic material” (Khurshid & Aurangzeb, 2012) where the material is instructive and engages the mind of the student to move towards auto education and self correction. While the students at this university are at a very different age level the concept bears true in learning at both levels. Even though students at university are encouraged to learn and develop at their own pace, many universities do not include sports in their educational programs other than as an extracurricular activity, or as a varsity activity. In Japan it is not

uncommon for Japanese universities to include sports programs into their curriculums and assign credit points to courses that add to students accumulated point tallies before graduation. In fact, at this university, it is a graduation requirement mandated on all students. This requirement means that the university must also accommodate all students and they do. A range of handicapped sports are also available, and in certain conditions, are other provisions can be made.

As sport and exercise classes are meant to be primarily engaging and to be enjoyed, there are almost no required textbooks, homeworks, or final examinations. Students are expected to attend classes in good spirit, and to make individual improvements as the course progresses and their skills develop. This parity allows all students to enjoy the exercise in a relaxed way and also promotes collegiality and congeniality.

Quality Assurance

In order to standardize the exercise diary experience for all students and to reduce confusion, each course was run in the same fashion using the same platform (Manaba) and the same email correspondence method (Gmail). The same file type was to be used by all students and instructors, and feedback was to be in the same way as per the instructions given. This meant that teachers and students could be confident in the system knowing that if students did confer with each other or another teacher that all participants would be able to understand the process and give appropriate guidance when necessary. This type of standardization is critical in the quality assurance of courses by removing any individual variations and confusion. This allows the information technology specialists available to also troubleshoot issues that students or staff may have by focusing on just two systems.

Assurance on the quality of the course can be given to learners and other third parties if they were to audit the process. This would also facilitate measurement of the success of the course and the elements contained within it. Files collected over the course of the semester, and indeed the following semester could then also be used in comparative studies if required and consistency would be ensured across the board.

Materials contained in the course could also be adjusted centrally if there were a need to do so and with the advent of shared files in an easily acceptable format small changes could be made without the need for a multitude of repetition or repeated tasks. The flipside to this would be, if the main system were to have any downtime, then multiple participants would be affected. This was actually not the case for the duration of either semester as the main systems had almost no downtime other than standard and scheduled mainframe updates.

Preparation

Students were provided with a wealth of health information including but not limited to the following; diet and caloric expenditure, teleworking and regular exercise, lifestyle guidance during coronavirus pandemic, monitoring hydration and body temperature control, cautionary mask wearing & social distancing, individual cleanliness good etiquette, walking guidance and apparel, muscle training, step training, stretch training, tennis rules and knowledge, heatstroke prevention, no-cost home exercising

routines, slow jogging interval training, sedentary lifestyle challenges, mental health risks and risk reduction, and calisthenics.

Exercise materials

Exercise materials were composed of a collection of shared links that provided some exercise menus that students could refer to and practice. The exercise menu provided for the link was not completely fixed allowing it to be updated from time to time. Students were advised to check often to find a menu that suits their health, physical fitness, life goals, living environment, etc., and then to engage in those activities (see appendices 3 to 5).

It was prohibited to download the exercise materials created for online lessons and use or publish them for any purpose other than personal use as a student for learning purposes without the permission of the instructor in charge. This remains to be the case to protect the privacy of the student and the originally created materials of the university.

The Process

After the initial guidance and instructional materials were shared with students the instruction process began for the reportage of the Sports and Exercise Diary that was to be maintained by all students as they carefully recorded their activity over the duration of the course. Students are expected in good faith to carry out their activities and log them honestly and “with dignity” which remains the university slogan. While there were a range of courses available to students the following explanation will showcase one such class and the procedure (process) which students were expected to follow in order to successfully complete the course and develop a strong healthy body in line with the most fundamental aims of the Sports and Exercise program at the university.

Step 1. Exercise Diary Template Download

Students Download and save an exercise diary template -MS Excel file- from the "Report" section in Manaba -Manaba is the university's chosen Learning Management Software (LMS) system used to support students and manage files between teachers and students- files of which can only be downloaded during the exercise diary creation period (access period). To understand the exercise diary creation period (access period), students had to check the syllabus file attached.

Students then exercised for 90 minutes or more per week, and entered the content and duration of the exercise. The fields to fill in were shown in an example. *See appendix 6.* Students were carefully warned that if they were to fill out the file but not save it and/or submit it, they would lose their records, so they were urged to be sure to regularly save their data.

Step 2. Submission of Exercise Diary

The exercise diary was to be submitted from the "report" section every week by the submission deadline which was very generously given additional days so as to allow maximum flexibility with students while

also reducing any stress or anxiety they may feel with timelines during this sensitive time of the pandemic. This strategy was a very well thought out piece of planning with quality course management in mind.

After the submission deadline, students were not able to submit their file in an effort to motivate students to be cognitive of their own time management and to afford them the responsibility of maintaining their record and submissions in a manner that promotes individual learning and control. They were again requested, to please check the syllabus file attached to the introduction materials for the deadline of submission.

At this point students were then afforded additional support and guidance if they did not know how to submit the file, with additional instructional materials labelled "2020 Multimedia Center Workshop Text" in manaba's Multimedia Center Workshop. It was possible for them to submit a screenshot of their diary into the system if they had difficulties with using the computer or with some other internet access issue at the time.

Step 3. Confirmation by Instructors

After the instructor confirmed the submitted exercise diary, there was a positive encouraging comment entered in the "report" section of the LMS. Course managers actively encouraged the course instructors to encourage students through their comments while also being encouraged to do our best. Teachers are at this point afforded the opportunity to tailor the comments given to students and hopefully maintain or even boost their confidence, and motivation to continue and strive for that ideal healthy lifestyle and well being.

Students recording their exercise diary required very little ICT skills other than the need to navigate around the LMS and manage files in a fairly rudimentary fashion. The entries that were required were: date of exercise, weather conditions, activity performed, the time spent on that activity, and the overall time for that week. The Microsoft Excel file -exercise diary- that was the chosen spreadsheet was simply completed and uploaded in the Manaba LMS and could be replaced by another file if the student encountered some formatting or data management problem in carrying out the operation of uploading.

This happened from time-to-time for a number of reasons including and not limited to: WiFi access problems, individual computer problems, LMS downtime, student ICT knowledge gaps, or regular computer crashes and download/upload errors. Syllabus for online classes in the first half of 2020 Sports and Exercise (A)-(F)

[Introduction]

All first year students during the spring semester were off campus following COVID guidelines in order to protect students and staff. The sports and exercise subjects were then explained as such: High school has a subject called health and physical education (physical education practice and health lectures). Kinjo Gakuin University offers physical education classes to all students in what is called "Sports and Exercise" (commonly known as S & E). The "Health Lecture" class for sports and exercise (commonly known as S & E) lecture is a compulsory graduation course offered in the first year, and S & E lectures are for two years. They are compulsory for graduation of each course of study, whichever is chosen by

the student upon enrolment. In addition, both subjects are required for teaching professionals (Childcare Worker Qualification) If students have not earned credits to complete these courses they cannot graduate, or, obtain a teacher's license, so they are clearly advised not to miss or disqualify themselves from course participation.

Private Variations

There seemed to be a difference in the communication environment at each student's home in that some students had strong internet bandwidth and easy access to a large amount of data, while on the other hand some students had limited access to the internet. Some were sharing devices with family members, some students living alone and with no internet connection in their apartment, so the expectation to use many data-heavy instructional videos is not a reasonable expectation for all students. Equally, the expectation to hold -synchronous- video conferencing style lessons entailed a number of possible barriers for the aforementioned reasons and had the potential to create additional stress for students that was not welcome during this sensitive time. So the decision to go with asynchronous reportage and diary feedback in order to accommodate each student's different domestic situation turned out to be an effective decision.

A steady rhythm to follow allowed students that relaxing atmosphere to carry out their exercise activities in their own time and at their own pace as long as the amount of exercise totalled 90 minutes or more, and that they recorded it in their exercise diary, and submitted it within the allotted time-frame.

The timeframe of the exercise diary completion was 10 days from the date of the scheduled class allowing students the full week to complete the exercise plus a few days in order to get online and upload their file. The examples given to students were for both short and longer durations of exercise. (a) 30 minutes a day x 3 days = 90 minutes, (b) 10 minutes a day x 4 days + 30 minutes x 2 days = 100 minutes. (c) you can do whatever you want, such as 15 minutes a day x 6 days = 90 minutes. Students could choose from the provided selection of exercise materials shared in the Manaba LMS, and were encouraged to practice with reference to these materials (video files, pamphlets, instructional guides, etc.). They were encouraged to freely recompose the content of the exercises themselves and to do them with reasonable strength in their chosen place, either indoors with good ventilation or outdoors. The exercise materials were to be updated from time to time, so students were asked to check back often.

Conclusion

Accountability -

Through the entire process of course registration, downloading materials, following instruction, checking for updates, uploading evidentiary materials, and comment checking, students are accountable for all these actions themselves. There is a certain expectation that students are familiar with computers and are capable of navigating around operating systems and managing their learning in the digital environment. There is the expectation that students own, or at very least have access to, devices in order to function in this environment. Those who are proficient already have a much easier experience and those that are less proficient need extra support and can have a less rewarding, or more stressful experience. This stress

can detract from the learning experience but also forms part of the struggles that students must overcome in order to succeed. Accountability is then a crucial element in this type of course in that teachers must prepare all teaching and instruction before the courses begin and are not given the luxury of additional teaching instruction as the course develops. This is the pressure of quality assurance in that materials must be checked and confidence in the success of such materials is very high, to a reasonable degree. Each teacher and more importantly the course managers are responsible for making sure that courses run smoothly and that technical problems are promptly resolved. Students also need to maintain their side of the arrangement and perform tasks in a timely manner. It is very easy from the log status of each user in the online environment to measure that amount of time spent on tasks. Each task is time dated and recorded meaning that work cannot be done at any non-prescribed time without being traceable.

The workload on teachers is therefore intensified and compacted into a hectic time frame and only minor changes can be implemented during the rollout of the course and ancillary instruction as the course progresses. Student support and individual attention via correspondence is the only way to communicate instruction, feedback, and motivation. It could be argued that this avenue of correspondence allows teachers to have interactions with students that are more carefully thought out because responses do not need to be immediate. The expected turnaround of correspondence is one day, allowing each communicator time to rethink or refine their questions and responses before sending them. These are the logistical limitations of such a course and the possible benefits and drawbacks of learning in such a manner.

Confidence in Quality

From the perspective of preventing infection and transfer of the novel coronavirus, all sport and exercise (S&E) classes in the first half of 2020 were remote (online). In order to protect lives and good health, students were asked to "focus on what you can do now" and continue studying at university anyway. Although the instructor was far away from students, they were available every weekday to support students' inquiries via the email correspondence and LMS comments sections. Now to survive this situation it was important to 'imagine what is happening in society and the world and to not stop creating and advancing toward the future'. Students were guided to patiently accumulate their imagination and creativity, in a strong hope that it will lead to deeper learning (personality development) and a positive outlook on life. Complete confidence in the quality of the program was established because of the tremendous result in submissions by students and the amount of data that was accumulated. The forward planning of the course managers ensured that the possibility for success by students was optimised. While novelty would of course play a part in the success of any new implementation the course completion was a strong success. With no need for any overhaul of materials or strict intervention during the course of the semester this again is a clear indicator that the course went very smoothly. It is most logical that a follow-up study would be prudent to confirm such information and to reaffirm these ideas. The most likely course of action to take would be via a questionnaire, or by interviews of a random selection of students across the department. Next steps

As we move forward into the current environment where students and families of students have expressed a strong desire to return to face-to-face lessons, or rather mask-to-mask lessons, the university

has made more changes to its temporary policies and a number of changes have evolved over the course of weeks and months. The exercise diary sample and explanations given were shown to be effective in that the majority of students successfully completed the course by following the instructions given. There were a variety of different combinations over the weeks and months of the courses, and with data stored in the LMS, the possibility for measurement and further investigation into actual exercise diary analysis could be entirely possible. If the consent of the students were to be given and if the department decided it was in their interest to analyze such data there is surely a wealth of knowledge to be gained in looking more closely at the trends in the students' exercise records. Although the period under consideration was during a global pandemic the preferences and trends of students choices is perhaps of interest and comparable to following periods.

As of July 2021 the numbers of COVID-19 patients has increased causing most universities around the country to go fully online but there remains to be a range of permutations and combinations of faculties and departments who can only truly function properly depending on what subject and in what way learning happens on those courses. Laboratory based classes, for example, require laboratory controlled time and for obvious safety reasons. One could also argue that physical health and well-being, exercise and sports needs to be done in person, but the confirmation of the details in this article shows that students can manage their own health and physical exercise when motivated to do so.

Teachers do remain fundamental in every teaching program and are an essential part of instruction and explanation as materials alone can be misinterpreted and misunderstood, hence the need for support centres and quality instructors. This is true in business education and in schools and universities around the world. In addition to this quality assurance and good working practice, we can be confident that in the event of any future situation that calls for emergency remote teaching that this course is an excellent example of how courses can work effectively, how instruction can be given in a timely manner, how students can be empowered in their own learning, and how course managers can produce quality courses that are robust and of high quality.

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Appendix 1 The key points for safe exercise and sports

安全に運動・スポーツをするポイントとは？

What are the key points for safe exercise and sports?

安全に運動・スポーツをするポイントとは？ Ver.2

体調をチェック

一つでも当てはまる場合には、運動やスポーツは行わないでください。

- 平熱を超える発熱
- 咳、のどの痛みなど風邪の症状
- だるさ、息苦しさ
- 嗅覚や味覚の異常
- 体が重く感じる、疲れやすい等

感染防止の3つの基本

- 十分な距離の確保
- マスクの着用
- 手洗い・手指消毒

家に帰ったらまず手や顔を洗う。できるだけすぐにシャワーを浴びて、着替える。

熱中症の予防 ! 暑くなる日は要注意!

こまめな水分・塩分の補給、休憩の確保、風通しの良い服装や着帽、屋内では空調の使用等を行いましょう。

マスクを着用したまま運動・スポーツをすると、水分補給を忘れたり、体温が下がりにくいことがありますので注意してください。また、マスクをしていつも通りの運動・スポーツをすると、運動強度が上がることがありますので、速度を落とすなど調整をしてください。息苦しさを感じた時はすぐに外すことや休憩を取る等、無理をしないでください。

運動・スポーツの種類ごとの留意点

×密閉 ×密集 ×密接 三つの密のうち、一つでも該当しないように注意しましょう。

- ウォーキング・ジョギング
 - ① 一人又は少人数で実施
 - ② すいた時間、場所を選ぶ
 - ③ 他の人との距離を確保
 - ④ すれ違う時は距離をとる
- 筋トレ・ヨガ
 - ① 自宅で動画を活用
 - ② こまめに換気

なるべく距離をあける

運動不足(身体的不活動)は健康に害を及ぼします。安全な環境を確保して適度に運動・スポーツを行うよう心掛けてください。高齢者や基礎疾患などのある方は、かかりつけ医に相談してください。

スポーツ庁 JAPAN SPORTS AGENCY

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Appendix 2 - New Lifestyle Guidance during Coronavirus

新しい生活様式におけるスポーツの在り方 コロナ禍の健康二次被害

The ideal way of sports in a new lifestyle Corona's health secondary damage

新しい生活様式におけるスポーツの在り方 コロナ禍の健康二次被害

**感染症対策による活動制限・
運動不足の長期化による影響**

- ウイルス感染への不安
- ストレス蓄積
- 体重増加 生活習慣病の発症・悪化
- 体力の低下
- 腰痛・肩こり・疲労
- 体調不良

〈子供〉

- 発育・発達不足

〈高齢者〉

- 転倒による寝たきり
- フレイル ロコモ

運動の効果

- ➔ **自己免疫力の向上** 感染に対する抵抗力
- ➔ **ストレス解消** メンタルヘルスの改善
- ➔ **体重コントロール** 生活習慣病の予防・改善
- ➔ **体力の維持・向上** 筋力の維持・向上
- ➔ **血流の促進** 腰痛・肩こりの改善
冷え性・便秘の解消 良好な睡眠

〈子供〉

- ➔ **発育期の健全な成長**

〈高齢者〉

- ➔ **筋量・筋力の維持** 転倒防止
- ➔ **認知症予防**
- ➔ **食欲増進**

コロナ禍の運動の注意点

- **感染症予防** 三つの密を避ける 手洗いの徹底など
- **熱中症対策** 水分補給 適度な休憩 屋内での運動
- **適度な運動** 運動を再開するときは、いつもより軽めから 運動強度や運動量は徐々に増やす

Appendix 3 -Walking Guidance

ウォーキングのポイント

◎目線は前方へ！

下を見ていると背中が丸まります。
遠くの景色を楽しみましょう。

背中に入れよう！

身長を1センチくらい伸ばすつもりで

お腹に入れよう！

おへその下に力をいれて

胸は楽に振ろう！

肘は曲げて歩くと肩先がむくみにくい。
早歩きがしやすい！

つま先で地面を蹴ろう！

地面に親指の付け根で膝を蹴す感じ
で、ふくらはぎの筋肉を使う！

かかとから着地しよう！

すねの筋肉を使うと
つまづきにくくなる！

少し気を付けて歩き方を変わると、歩幅が大きくなり、
ただ歩いている「ウォーキング」というように変わっていきます。

<ウォーキングに適したシューズ>

- ・軽いもの
- ・つま先がゆったりしている
- ・靴裏滑らない
- ・かかとに厚みがあり、クッション性がある（厚底は×）
- ・ひも、またはマジックテープがついている
- ・かかとがピッタリしている
- ・柔らかく、足先1/3ぐらいの場所が楽に曲げられる

<正しいウォーキングシューズの履き方>

- ・靴ひもは毎回ほどき、履くたびにしっかり結びましょう。
- ・かかとをしっかりと合わせましょう（地面をかかとでトントン）
- ・つま先にゆとりがある状態で固定するように靴ひもを締めましょう。
- ・結んだひもは地面につかないようにしましょう。

<ウォーキングを行う際の注意事項>

- ・その日の体調を確認しながら、無理のないように行いましょう。
- ・周囲の確認をして、安全な時間や場所で行いましょう。
- ・ケガや事故をしないように安全に気を付けて行ってください。

※「授業に関係する情報漏洩に反する行為」を禁じます。

オンライン授業のために作成された運動教材をダウンロードして、著作権者として学習目的で個人的に使用する以外の用途で、担当教員の許可なく使用したり、公開することなどを禁じます。

金沢学院大学 S&E教育科日委員会

Appendix 4 - Energy Expenditure Walking Guide

身近な運動と消費エネルギー（女性） 参考資料

～80キロカロリー（1単位）の消費に必要な時間～

重別	体	45kg	50kg	55kg	60kg	65kg	70kg	75kg
歩行（ゆっくり）	60m/分	41分	37分	33分	31分	28分	26分	25分
歩行（ゆっくり）	70m/分	36分	32分	29分	27分	25分	23分	22分
歩行（普通）	80m/分	29分	26分	24分	22分	20分	19分	18分
歩行（普通）	90m/分	27分	24分	22分	20分	19分	17分	16分
歩行（早歩き）	100m/分	21分	19分	17分	16分	15分	14分	13分
ジョギング（ゆっくり）		13分	12分	11分	10分	9分	8分	8分
ジョギング（早い）		11分	10分	9分	8分	8分	7分	7分
なわとび（回旋）		23分	21分	19分	18分	16分	15分	14分
ラジオ体操		27分	24分	22分	20分	19分	17分	16分
テニス（軟式）		19分	17分	15分	14分	13分	12分	11分
テニス（硬式）		14分	13分	12分	11分	10分	9分	9分
バドミントン（ダブルス）		19分	17分	15分	14分	13分	12分	11分
バレーボール（6人制）		14分	13分	12分	11分	10分	9分	9分
卓球		15分	13分	12分	11分	10分	10分	9分
ハイキング		31分	28分	26分	24分	22分	20分	19分
ゴルフ（砂丘18コース）		26分	24分	21分	20分	18分	17分	16分
舗装道路サイクリング	10km/1時間	46分	42分	38分	35分	32分	30分	28分
	15km/1時間	31分	28分	26分	24分	22分	20分	19分
水泳（クロール）	100m/61.5秒	82秒	174秒	67秒	61秒	57秒	53秒	49秒
水泳（バタフライ）	100m/64.5秒	132秒	119秒	108秒	99秒	91秒	85秒	79秒
水泳（遠泳）	18.5m/分	15分	14分	13分	12分	11分	10分	9分
スキー（滑降）		17分	16分	14分	13分	12分	11分	10分

体育科学センター編「健康づくり運動カルテ」を改変

Appendix 5 - Additional shared guidance files

- 【スポーツ庁】withコロナ健康二次被害予防.pdf
- 2020熱中症予防リーフレット（環境省提供）.pdf
- おすすめ運動リンク集（名古屋大学山本裕二先生提供）.pdf
- スポーツ庁チコちゃんverMysportsメニューbook.pdf
- 安全に運動・スポーツをするポイントは（スポーツ庁提供）ver2.pdf
- 屋内でできる運動名古屋市広報2020年6月版.pdf
- 日本スポーツ協会（スポーツ活動中の熱中症予防ガイドブック）

Appendix 6 - Exercise Diary Sample

	A	B	C	D	E	F	G	
1	* 運動日記のファイルは、毎週1回、manabaのレポートに提出してください。							*
2	* 毎週添付されているファイルを使用して運動日記を作成してください。 (注意：日付の違う運動日記は使用しないでください。)							*
3	* 週当たり90分以上の個人でできる運動を実施してください。集団で行うスポーツ等は禁止します。							*
4	* その日の体調を確認しながら、無理のないように運動しましょう。							*
5	* 周囲の確認をして、安全な時間や場所で行いましょう。							*
6	* 運動中に体調の異変を感じたら、すぐにその運動を中止しましょう。							*
7								
8	<記入例>							
9		日付	天候	実施内容		実施時間(分)		
10	6/1 ~ 6/7	11日	晴	柔軟体操		5		
11				ジョギング		15		
12		13日	雨	ストレッチ		10		
13				筋トレ		5		
14		14日	雨	ラジオ体操第一		3		
15		15日	曇り	ウォーキング		20		
16		16日	晴	ラジオ体操第一と第二		8		
17		17日	雨	階段の上り下り		5		
18				ウォーキング		20		
19								
20								
21	合計90分以上になるように実施しよう→						91	
22	※灰色のセルに数値を入力すると、黄色のセルに週当たりの合計時間が自動的に計算されます。							
23								
24	<記入欄>							
25		日付	天候	実施内容		実施時間(分)		
26		06月01日	晴れ	ウォーキング・ジョギング		1時間半		
27		06月02日	晴れ	ウォーキング・ジョギング		1時間半		
28		06月03日	晴れ	ウォーキング・ジョギング		2時間		
29		06月04日	晴れ	ウォーキング・ジョギング		1時間		
30								
31								
32								