Resiliency and creativity in teaching physical education: Their relationship with teachers' virtual classroom management skills in the new normal



ISSN: 2243-7703 Online ISSN: 2243-7711

OPEN ACCESS

Estuye, Oliver L.

Nueva Ecija High School -Senior High school, School Division of Nueva Ecija, Philippines (oliver.estuye@deped.gov.ph)

Received: 20 February 2022 Available Online: 15 April 2022 **Revised**: 25 March 2022 **DOI**: 10.5861/ijrse.2022.808

Accepted: 1 April 2022

Abstract

The COVID 19 pandemic led to the closure of many schools that has affected nearly 1.6 billion learners, more than 90% of the world's total enrolled student population and over 63 million teachers in the world. This descriptive-comparative-correlational research was crafted with the aim to determine the link between the Physical Education teachers' resiliency and creativity in teaching and their virtual classroom management skills. Using random sampling selection, the respondents included 40 PE educators in the four congressional districts of the Schools Division of Nueva Ecija. Descriptive statistics through computation of means showed very high levels of respondents' resiliency, creativity and classroom management skills. Using analysis of variance (F-test) at 0.05 level of significance, the study showed no significant differences in their level of resiliency, creativity and classroom management skills when grouped according to their age, sex, number of years in teaching, highest educational attainment, and plantilla position, while use of Pearson-r revealed that there are significant relationships between and among the respondents' levels of resiliency, creativity and classroom management skills, which means these variables would affect each other. The study then strongly recommends for enhancement of the PE teachers' resiliency and creativity to alongside improve their skills in the use of digital platforms in managing classroom which are essential in the new normal.

Keywords: creativity, new normal, physical education, resiliency, virtual classroom management skills

Resiliency and creativity in teaching physical education: Their relationship with teachers' virtual classroom management skills in the new normal

1. Introduction

The COVID 19 pandemic led to the closures of many schools and has affected the nearly 1.6 billion learners, more than 90% of the world's total enrolled student population and over 63 million teachers in the world (Edward, 2020). However, DepEd Secretary, Leonor Magtolis- Briones said that Philippine education must continue because the department cannot afford to keep schools closed for such a long time but the health and safety of learners and teachers will not be compromised. Hence, the non-face-to-face conduct of classes brought problems of communication on digital devices for the learners to absorb new information and keep track of the learning process. The teachers' role becomes vital and critical ensuring that the learners stay engaged and do not lose their motivation. Regardless of the set-up, teachers all are entering the teaching profession at a time when the very notion of what school looks like has been flipped on its head.

In these times of crisis, the Department of Education encourages the building of a more resilient and creative teacher workforce where all teachers should be equipped with digital and pedagogical skills to teach remotely, online, and through blended learning. Meanwhile, the government and the schools' stakeholders guarantee the availability of digital infrastructure and connectivity everywhere, including in rural and remote areas. Physical Education has been one of the most challenging subjects to teach during the pandemic. But teachers are working incredibly hard and believe that they can manage to teach the subject while they are scrambling for creative ways to keep students physically active with no gymnasiums, sports fields or playgrounds — at a time when experts say students' physical and mental health is utmost at stake. As articulated in the DepEd Memorandum OUCI-2020-307 suggesting measures to foster "academic ease" during the covid-19 pandemic that students' choices help develop autonomy, increase engagement, and increase motivation. This means that PE teachers must make physical activities meaningful such that students choose activities that are meaningful to them and will help them achieve their goals. This simply imply that teachers need to be resilient and creative in the decisions they make to help provide flexible learning environments, that is providing them with physical activities they need as if they are in the classroom. This was reiterated in the study conducted by Roe, Balas, and Dalland (2021) that most active students were those who showed the greatest engagement and effort in schoolwork in general.

Teaching and learning are greatly challenged during this unprecedented situation. Teachers have been impacted by the crisis professionally and personally. As countries plan to reopen schools, the role of teachers, their knowledge of their learners' needs, and teaching expertise are critical to developing effective strategies. Teachers the need to develop new strategies to mobilize instruction from the classroom setting to a virtual classroom, using diverse electronic platforms such as Zoom, Microsoft TEAMS, Google Classroom and other platforms (del Castillo, 2021; Barron et al., 2021). Also, teachers are transitioning through a particularly uncertain time in terms of their professional lives and work. The rapid move to online modes of delivery in order to keep students engaged in learning has led to significantly intensified workloads for staff as they work to not only move teaching content and materials into the online space, but also become sufficiently adept in navigating the requisite software (Allen, Rowan, & Singh, 2020).

In less than two months, the work of teaching has been transformed, moving from the physical school campus that has existed for hundreds of years to the virtual world that is still in its relative infancy. These conditions associated with COVID-19 have impacted teachers' lives both personally and professionally. Teachers who are accustomed to in-classroom instruction must adapt their curriculum to an online platform, and feelings of inadequacy and disempowerment can arise when trying to provide support to students in this challenging space. Conducting class virtually from home can augment feelings of isolation, especially for educators who are

used to daily interactions with students and colleagues. Burnout and traumatic stress connected with COVID-19 can have implications on teachers' capacities to teach effectively and provide emotional support for students. Despite the adversity and trauma that teachers are enduring as a result of COVID-19, the work of teaching must continue (UNESCO, 2020).

Teachers are used to being in contact with dozens if not hundreds of students a day. Now, teachers across the nation - and the world - are separated from their students as well as their colleagues. Not only are teachers now working alone at home, but they are working on tasks about which they may or may not feel competent. Teachers who are experts in in-classroom instruction are learning that different skill sets and methods are required for delivering instruction online. The Department of Education is having the teachers in the districts unpack and prioritize which kind of standards fit in the context and the needs of the students based on the needs' assessments. Likewise, they are equipped and trained on which kind of pedagogies and curriculum should be in place because this kind of learning is actually uncharted waters. If there is an analogy, the pandemic is like a storm and some of the teachers are in a yacht, maybe some of are in a boat, or maybe some are clinging tightly on the logs. Some of are just swimming around. So, it is a matter how teachers and institutions working together on how this storm is courageously faced (Foz, 2020).

Likewise, teacher-student connections matter. Like a physical classroom environment, the teacher is the most important factor in an online classroom. Even if the lesson does not seem to be going well, the students remember how teachers made them feel easy. Students have to process feelings like hunger and fear before they can open up to learn intellectually. Yes, feelings are not a substitute for learning, but by creating a culture of care and working through a cultural proficiency framework, learning will occur. Whether the teachers are sending a video post card through to the students, simply recording a 60-second Zoom announcement about the upcoming assignment, or providing a synchronous video chat for informal conversations or structured communication through free protocols, it remains crucial to stay human and connected while delivering content. The teacher should consider having students conduct their own brief Zoom meetings, following a set way to work smarter, not harder.

Jones (2020) cited that a study involving 489 P.E. teachers in California, found other obstacles in teaching blended approach. Students often turn off their cameras, so teachers can't see if students are exercising so teachers are worried about liability if students injure themselves while exercising at home. Despite these hurdles, P.E. teachers are trying to keep students active and physically healthy during the pandemic. As starters, they have designed workouts that can be done safely indoors, using common household objects that can be fashioned into exercise equipment. The virtual classroom and distance education have created new teaching pedagogy. According to Akpan et.al 2016, the students' acknowledged that the availability and use of virtual classroom influenced their academic performance. Moreover, Although the virtual classroom available was adequate, it was not often utilized for instruction. Finally, they recommended that the virtual classroom should be utilized for maximum learning. Online classroom management professional

development as part of new teacher induction is a practical option (Milliken 2019). Virtual classroom use was viewed favorably, its value was influenced by task, communication tools, multimedia usability and technical/logistical factors—some of which were beyond student control (Falloon 2012).

Benchmarking on these concepts, this study was guided with the paradigm.

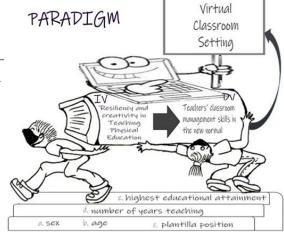


Figure 1. Research Paradigm

1.1 Research Objectives

This study focused on assessing the resiliency and creativity in teaching Physical Education and their relationship with teachers' virtual classroom management skills in the new normal. Specifically, this aimed to answer the following questions:

- What is the profile of the Senior High School PE teachers in terms of Sex, Age, Plantilla position, Number of years in teaching, and Highest Educational Attainment.
- What is the respondents' level of resiliency and creativity in teaching physical education?
- What is the respondents' level of classroom management skills in the new normal?
- Is there a significant difference on the respondents' resiliency and creativity in teaching physical education; and classroom management skills when grouped according to their profiles?
- Is there a significant relationship among the teachers' resiliency and creativity in teaching physical education, and teacher's classroom management skills in the new normal?

2. Research Methodology

This study made use of the descriptive method of research. This method of research according to Calderon and Gonzales (2012) involves analysis of an extremely range of phenomena that results in a comprehensive presentation and interpretation of statistical tabulations of data yielded by survey. Furthermore, this method involves the description, recording, analysis, and interpretations of existing conditions. Hence, this method was chosen because it was the most appropriate method in describing the resiliency and creativity of PE teachers in Senior High School.

The main respondents of this study were the Physical Education teachers in Senior High School during the second semester, 2021-2022. The sampling method to be used in identifying the teacher-respondents was random sampling procedure involving 40 PE educators in the Schools Division of Nueva Ecija. The respondents were asked to sign a waiver stating that they voluntarily chose to be included in this study. On the other hand, the researcher ensures the integrity of the data to be gathered from the respondents. Researcher-developed questionnaires were used in collecting data. Part I dealt with the profile of the main respondents, the PE teachers. Part II dealt with a survey on the resiliency and creativity of the teachers in the conduct of blended learning. Part III involved the Virtual Classroom Management Skills. These underwent series of validation and test of reliability with the Cronbach alpha level as: 0.896 for Resiliency; 0.863 for Creativity; and 0.955 for Virtual Classroom Management Skills The items in the questionnaires made use of the 4-point Scale for the responses with the equivalents and verbal interpretations as follows:

	Rate	Range	Interpretations
4		3.25-4.00	Always
3		2.50-3.24	Often
2		1.75-2.49	Seldom
1		1.00-1.74	Almost not Done

The respondents were asked to sign a waiver stating that they voluntarily chose to be included in the study. On the other hand, the researcher ensures the integrity of the data to be gathered from the respondents. The data were collated and be subjected to statistical tests. To describe the profile of the school and of the individual respondents, the frequency count and percentage were used. To describe the resiliency and creativity of the PE teachers, the weighted mean was computed. Analysis of Variance (ANOVA) or F-test was employed to elicit the significant difference of the respondents' level of resiliency, creativity, and classroom management skills when grouped according their profiles. To establish significant relationship between and among respondents' level of resiliency, creativity, and classroom management skills, the Pearson Product Moment Correlation was employed.

3. Results and discussions

The following tables show the significant findings of the study. They are logically arranged based on the statement of the specific problems.

 Table 1

 Distribution of respondents' profile along age

Age	f	%
21-30	10	25
31-40	11	28
41-50	12	30
51-60 Total	7	18
Total	40	100

As manifested in table 1, majority of the respondents belong to ages 41-50 years old with the frequency of 12 or 30 percentage share. Among the said respondents, 11 or 28% are of ages 31-4-30 years old; 10 or 25% are of ages 21-20; 7 or 18% are ages 51-60 years old. The results denote that most of teachers in Nueva Ecija High School are within the middle age group.

 Table 2

 Distribution of respondents' profile along sex

, ,		
Sex	f	%
Male	13	33
Female	27	68
Total	40	100

This table shows the Respondents' profile distribution along sex which flaunts that the majority of the them are female 27 or 68% compared to males, 13 or 33%- indicating that most of the teachers teaching Physical Education are females.

 Table 3

 Distribution of respondents' profile along number of years in teaching

Numbers of years teaching	f	%
below-5 years	15	38
6-10 years	8	20
10-14 years	5	13
15-19 years	1	3
20 above	11	28
Total	40	100

In terms of length of service, most of the employees belong to 5 years below with the frequency of 15 or percentage of 38 and the least belong to 15-19 years bracket with the frequency of 3 or percentage of 3. Other employees belong to 20 years above (11 or 28%), 6-10 years (8 or 20%), and 10-14 years (5 or 13%). These results imply that the teachers of Physical Education in schools' division of Nueva Ecija are in their early years of teaching.

 Table 4

 Distribution of respondents' profile along highest educational attainment

Highest Educational Attainment	f	%	
Baccalaureate Degree	8	20	
With MA Units	21	53	
With MA Degree	6	15	
With Doctoral Units	3	8	
With Doctoral Degree	2	5	
Total	40	100	

When viewed according to highest educational attainment, most of the employees in schools division of Nueva Ecija are with MA units, 21 or 53% of the respondents. Meanwhile, there are 8 or 20% who are Baccalaureate Degree holders, 6 or 15% are with MA Degrees, 3 or 8% with Doctoral units and 2 or 5% are with Doctoral Degree. Majority of the teachers in schools division Nueva Ecija High School pursue graduate studies as part of professional development, as DepEd Secretary, Leonor Magtolis- Briones said that Philippine education must continue.

 Table 5

 Distribution of respondents' profile along plantilla position

Plantilla Position	f	%
Teacher 1	13	33
Teacher 2	6	15
Teacher 3	14	35
Master Teacher 1	5	13
Master Teacher 2	2	5
Total	40	100

In terms of Plantilla Position, the table above shows that the majority are Teacher 3 with the frequency of 14 or 25% of the respondents. Teacher 1 has 13 or 33% percentage share. Some of the respondents are Teacher 2 (6 or 15%), Master Teacher 1(5 or 13%) and Master Teacher 2 (2 or 5%).

3.1 Respondents' resiliency and creativity in teaching physical education

Table 6Analysis on the respondents' level of resiliency in teaching physical education

Scale	Frequency	Percentage	Level
3.25 - 4.00	26	65	Very High
2.50 - 3.24	14	35	High
Total	40	100	
Mean	3.49		Very High

As gleaned in table 6, the overall perceived level of resiliency of the respondents in teaching physical education slated the mean of 3.49 with the qualitative description of very high. This means that the physical education teachers of the Schools Division of Nueva Ecija display a very high resiliency in teaching their concepts in PE, which means, they easily adapt to changes in the pedagogical approaches in the educational system, especially during this new normal as they adapt digital platforms in teaching. Specifically, majority of the respondents have rated their resiliency level as 'very high' with the range of 3.25 - 4.00, marking the frequency share of 26 or 65%. Others showed the range rate of 2.50 - 3.24 (high) with the frequency of 14 or 35 percentage share.

Table 7 *Analysis on the respondents' level of creativity in teaching physical education*

Scale	Frequency	Percentage	Level
3.25 - 4.00	22	55	Very High
2.50 - 3.24	18	45	High
Total	40	100	
Mean	3.49		Very High

Similarly, on the respondents' level of the perceived of creativity in teaching physical education also showed a mean rate of 3.49 with a qualitative description of very high. This also means that the respondents are considerably creative in teaching their lessons, especially during this time of pandemic. In details, 22 or 55 percent of the respondents have rated their creativity as very high (3.25 - 4.00); and the remaining 18 of 45 percent of the respondents have claimed high level of creativity at the scale of 2.50 - 3.24.

This implies that the teachers in Physical education are able to display and has the ability to overcome adversity and to adapt to challenging situations, like the COVID 19 pandemic resiliency despite the challenges. As Allen, Rowan, & Singh, 2020 stated, the rapid move to online modes of delivery in order to keep students engaged in learning has led to significantly intensified workloads for staff as they work to not only move teaching content and materials into the online space, but also become sufficiently adept in navigating the requisite software. With the results, it can be discerned that the Physical education teachers are adaptive and creative in ensuring the quality of learning remains even with the absence of face-to-face interactions- from preparation of lesson plans to conducting the classes and the handing out of assignments.

3.2 Respondents' classroom management skills

 Table 8

 Analysis on the respondents' classroom management skills

Classroom Management Skills	Mean	Level	
Classroom Design	3.63	Very High	
Class Rule	3.61	Very High	
Scheduling	3.51	Very High	
Organization	3.43	Very High	
Instructional Technique	3.40	Very High	
Communication	3.68	Very High	
Overall Mean	3.54	Very High	

In terms of the respondents' classroom management skills, the overall mean was computed as 3. 54 or descriptive interpreted as very high. This denotes that the respondents have very high management skills of their class even during this time of pandemic along with the following factors: classroom design (3.63 – very high); class rule (3.61 – very high); scheduling (3. 51 – very high); organization (3.43 – very high); instructional technique (3.40 – very high); and communication (3.68 – very high). The results imply that the teachers in Physical Education prioritize teacher-student connections as similar to a physical classroom environment, the teacher is the most important factor in an online classroom. Such that, virtual classroom use is being viewed favorably, its value was influenced by task, communication tools, multimedia usability and technical/logistical factors—some of which were beyond student control (Falloon 2012).

3.3 Difference in level of resiliency, creativity and classroom management skills

 Table 9

 Analysis of difference in respondents' level of resiliency when grouped according to profile variables

Profile Variables	f-value	p-value	Remark
Age	2.409	0.083	Not Significant
Sex	0.011	0.916	Not Significant
Number of Years Teaching	1.661	0.182	Not Significant
Highest Educational Attainment	1.446	0.240	Not Significant
Plantilla Position	2.445	0.065	Not Significant

Table 9 shows the data on the difference in the respondents' level of resiliency in teaching physical education when grouped according to their profile variables. As manifested in the said table, no significant differences were computed on the respondents' perceptions of their resiliency in all of the profile groupings to include the following: age with f-value of 2.409; sex showing f-value of 0.011; number of years in teaching bearing the f-value of 1.661; highest educational attainment with the f-value of 1.446; and plantilla position slated the f-value of 2.445. The findings are justified with the p-values in all areas of evaluation, which are greater than 0.05 level of significance, thus, the null hypothesis is rejected in this aspect. The findings also denote that regardless of the respondents' profile groupings, they have the same level of resiliency in teaching physical education. This resiliency among the teachers show that those with a good level of resilience have the ability to get back on their feet quicker, and with less stress than someone whose resilience is less developed. In

the field of education, teachers need resilience to be able to teach effectively since they do more than just teach

Table 10Analysis of in respondents' level of creativity when grouped according to profile variables

Profile Variables	f-value	p-value	Remark
Age	1.617	0.202	Not Significant
Sex	0.704	0.407	Not Significant
Number of Years Teaching	1.581	0.201	Not Significant
Highest Educational Attainment	0.623	0.649	Not Significant
Plantilla Position	0.445	0.775	Not Significant

As to the computation of significant difference on the respondents' level of creativity in teaching physical education when classified according to their profile groupings, table 10 also showed no significant differences. This means that the same level of creativity in teaching physical education is shown by the respondents regardless of their profile variables along: age (f-value of 1.617); sex (f-value of 0.704); number of years in teaching (f-value of 1.581); highest educational attainment (f-value of 0.623); and plantilla position (f-value of 0.445). The findings are intensified with the computed p-values, which are greater that 0.05 level of significance. Thus, the null hypothesis is rejected in this aspect of evaluation. The findings signify that regardless of the respondents' profile groupings, they have the same level of creativity in teaching physical education. This is accordance to Baron et. al., 2022 that teachers need to develop new strategies to mobilize instruction from the classroom setting to a virtual classroom, using diverse electronic platforms such as Zoom, Microsoft TEAMS, Google Classroom and other platforms.

 Table 11

 Analysis of respondents' level of classroom management skill when group according to profile variables

Profile Variables	F-Value	P-Value	Remark
Age	2.203	0.105	Not Significant
Sex	0.860	0.360	Not Significant
Number of Years Teaching	0.815	0.524	Not Significant
Highest Educational Attainment	1.744	0.163	Not Significant
Plantilla Position	0.946	0.449	Not Significant

In terms of the evaluation on the significant difference on the respondents' level of classroom management skill when grouped according to their profiles, it showed in table 11 that there were no significant findings. This in intensified with the computed p-values, which are higher than 0.05 level of significance. Thus, the null hypothesis is rejected in this aspect. This denotes that regardless of the respondents' classifications along age; sex; number of years in teaching; highest educational attainment; and plantilla position, they have the same level of classroom management skill. The findings suggest that regardless of the respondents' profile groupings, they have the same level of classroom management skills in teaching physical education. This coincides with the idea of UNESCO 2020 that despite the adversity and trauma that teachers are enduring as a result of COVID-19, the work of teaching must continue, and despite these hurdles, P.E. teachers are trying to keep students active and physically healthy during the pandemic (Jones 2020).

3.4 Relationships among the respondents' level of resiliency, creativity and classroom management skills

 Table 12

 Analysis on the relationship on the respondents' level of resiliency, creativity and classroom management skills

Variables being Correlated	R-value	P-value	Remark
Resiliency and Creativity	0.683	0.000	Significant
Creativity and Classroom Management Skills	0.824	0.000	Significant
Resiliency and Classroom Management Skills	0.880	0.000	Significant

Meanwhile, table 12 shows the evaluation on the significant relationships between and among the respondents' level of resiliency, creativity and classroom management skills. It showed that all areas of

evaluation have significant relationships. Between resiliency and creativity, it showed the r-value of 0.683 and a p-value of 0.000; along creativity and classroom management skills it gave the r-value of 0.824 and a p-value of 0.000; and for resiliency and classroom management skills, it showed the r-value of 0.880 and a p-value of 0.000.

The findings denote that the research variables are directly correlated with each other. Meaning, the higher level of respondents' creativity in teaching physical education, the higher they show resiliency in teaching, hence, the higher level they manifest in classroom management in the new normal. Given the results, teachers in Physical education from Nueva Ecija High School consider student engagement as an important predictor of student achievement- as supported by Handelsman et al. (2005). In addition, teachers grasp the idea that the primary antecedents of academic achievement include (a) the learning environment that is, in turn, influenced by autonomy, relatedness, and competence (National Research Council 2003), and (b) the demands of the work situation, the range of decision-making freedom to face those demands, and the amount of support provided. That the virtual classroom and distance education have created new teaching pedagogy. In fact, according to Akpan et al. (2016), the students' acknowledged that the availability and use of virtual classroom influenced their academic performance.

4. Conclusions and Recommendations

Based on the discussions of the results, the following were concluded, Majority of the respondents are below 40 years old; female; below 10 years in service; and with plantilla position of Teacher I-III. The respondents' level of resiliency and creativity in teaching physical education in the new normal education are both of 'very high level.' This means that PE teachers of Nueva Ecija have maintained their creativity, hence, have adapted to the needs of education in times of pandemic – especially on the use of digital platforms in teaching physical education. Similarly, the respondents' level of classroom management skills (virtual) is at 'very high level.' This also denotes that the PE teachers of Nueva Ecija are able to manage successfully their virtual class.

No significant differences were noticed in the respondents' level of resiliency, creativity and classroom management skills when grouped according to their profiles. This means that regardless of their profile classifications, the respondents have the same levels of resiliency and creativity in teaching physical education; and how to manage their classroom in digital platforms. The respondents' level of resiliency, creativity and classroom management skills are significantly interrelated with each other. This means that there is a direct relationship among these variables. The higher the respondents' level of resiliency, the higher their creativity in teaching physical education; and the higher they manage their virtual classroom in the new normal education.

Basing form these salient findings, the following suggestions were slated: Continuous education may be considered by the PE teachers of Nueva Ecija as to increased their teaching competence in the new normal and for possible promotion purposes. This may include finishing graduate school program and/or attending webinar-trainings for PE pedagogical approaches. The Schools Division of Nueva Ecija may also consider provision of technical assistance among the PE educators on the use of digital platforms on how to teach their subjects and how to handle their classes in the new normal.

5. References

- Allen, J., Rowan, L., & Singh, P. (2020). Teaching and teacher education in the time of COVID-19. *Asia-Pacific Journal of Teacher Education*, 48(3), 233-236.
- Barron, M., Cobo, C., Najar, A., Ciarrusta, I. (2021). The changing role of teachers and technologies amidst the COVID 19 pandemic: Key findings from a cross-country study. Retrieved from https://blogs.worldbank.org/education/changing-role-teachers-and-technologies-amidst-covid-19-pande

mic-key-findings-cross

Calderon, J. F., & Gonzales, E. C. (2012). Methods of research and thesis writing. National Bookstore.

- Del Castillo, F. (2021). COVID-19 impact on learners: challenges and responses. *Journal of Public Health*, 43(3), 539–540. https://doi.org/10.1093/pubmed/fdab126
- Department of Education Memorandum OUCI-2020-307
- Edward, D. (2020). *Teachers: Leading in crisis, reimagining the future*. Retrieved from https://www.unicef.org/press-releases/teachers-leading-crisis-reimagining-future
- Foz, N. (2020). Philippines: Teachers as learning frontlines during pandemic. The JTC Summit, Singapore.
- Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research*, *98*(3), 184-191.
- Jones, C. (2020). How P.E. teachers are trying to get students off the couch during the pandemic. *EdSource*.

 Retrieved from

 https://edsource.org/2020/how-p-e-teachers-are-trying-to-get-students-off-the-couch-during-the-pandemic/642765
- National Research Council. (2003). *Engaging schools: Fostering high school students' motivation to learn*. Washington, DC: The National Academic Press.
- Roe, A., Balas, M., & Dalland, C. (2020). The impact of COVID-19 and homeschooling on students' engagement with physical activity. *Front Sports Act Living*, 2(5).
- UNESCO. (2020). *Psychosocial support to teachers during COVID-19 crisis: Meeting report*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000374317