

## EVALUATION OF PHYSICAL EDUCATION, SPORTS AND HEALTH LEARNING IN SPECIAL SCHOOLS IN SOPPENG REGENCY, SOUTH SULAWESI PROVINCE

Supriadi<sup>1</sup>✉, Hermawan Pamot Raharjo<sup>2</sup>, Donny Wira Yudha Kusuma<sup>3</sup>

<sup>1,2,3,4</sup>Universitas Negeri Semarang, Indonesia

### Article Info

#### History Articles

Received:

January 2025

Accepted:

February 2025

Published:

March 2025

#### Keywords:

*Learning Evaluation,  
Physical Education  
Sports Health, and  
Special Schools*

### Abstract

The background to this research is that the implementation of physical education, sports and health learning in Special Education Schools (SES) throughout Soppeng Regency is still not appropriate to the needs of children with special needs. The aim of this research is to evaluate the preparation, process and learning outcomes of physical education, sports and health in special education schools in Soppeng Regency. This research is a mix methods research and analyzes data using the Countenance Stake evaluation model. The population and sample in this study consisted of 6 school principals and 6 Physical Education (PE) teachers. Data collection techniques in this research used instruments, observation, documentation, interviews and questionnaires. The results of this research show: (1) the preparatory (antecedent) stage of physical education, sports and health learning in special schools in Soppeng district is in the quite good category, (2) the process (transaction) stage of physical education, sports and health learning in special schools in all districts Soppeng is in the quite good category, (3) the results (outcomes) of physical education, sports and health learning in special schools throughout Soppeng Regency are in the quite good category.

© 2024 Universitas Negeri Semarang

✉ Address correspondence:

Kampus UNNES Sekaran, Semarang, 50229

[uppy685@students.unnes.ac.id](mailto:uppy685@students.unnes.ac.id)

**p-ISSN 2252-648X**

**e-ISSN 2502-4477**

## INTRODUCTION

Education is an important part of human life because through education it can form good character, a high social spirit, and a good personality. Since the enactment of law number 20 of 2003 concerning the national education system, Indonesia has shown progress in various aspects of education. Increasing access to education is one significant achievement. The 9 year compulsory education program which was later increased to 12 years encourages students or children to further improve and develop their abilities through education.

On the other hand, various challenges still hinder improving the quality of education in Indonesia. One of the main problems is the gap in the quality of education between urban areas and rural areas or disadvantaged areas. The lack of equal distribution of quality teachers, lack of equal distribution of educational facilities such as infrastructure, and limited access to adequate learning resources are the causes of the gap in education quality in Indonesia. According to (Alifah, 2021), the quality of education in Indonesia varies greatly, depending on location and available resources. Many schools still lack infrastructure, such as classrooms, infrastructure, access to information technology, and many teachers do not have adequate qualifications. This affects the overall teaching and learning process.

Children with special needs are those who experience physical, intellectual, mental or sensory limitations for a long period of time, which results in difficulties in interacting with the environment and with other people without discrimination. Special schools are special

schools for students with special needs which aim to provide opportunities for students to obtain education (Jauhari et al., 2020). In implementations learning, several internal and external factors must be prepared so that learning can run smoothly and optimally. Human resources, including school principals, teachers, curriculum, facilities and infrastructure, are internal factors that greatly influence the students' learning process. Although SES provides a very important education for children with special needs, greater efforts are still needed to overcome existing shortcomings. The number of special schools is still limited, especially in the regions. This causes access to education for children with special needs to be limited (Surya Listya Yudhana & Andhyka Kusuma, 2021). Many SES still experience limitations in terms of infrastructure and facilities that support learning for students with special needs. Apart from that, there is a lack of improvement in the quality of teaching staff, so there is still a shortage of teaching staff who are truly trained to handle students with various needs, especially teachers who teach PE subjects, Suhartono (2020).

Learning for students with special needs really requires separate strategies and techniques adapted to the needs of each student. Learning for students with special needs needs to be prepared by teachers at school by looking at the students' conditions so that they can interact with the surrounding environment (Rani et al., 2020). This learning is structured through an assessment of students' self-abilities which is based on a competency-based curriculum. But it is not surprising that many children with special needs feel that they are not accepted, valued, or part of

their physical education (Maher & Haegele, 2022). Physical education, sports and health for students with special needs is called Adaptive Physical Education. Adaptive physical education is aimed at providing the necessary conditions for the integral development of children with special needs, (Sydoruk et al., 2021). The level of physical preparation of such children is an integral part of adaptiveness.

Learning for children with special needs (students with special needs) requires a separate strategy according to their individual needs. When preparing learning programs for each field of study, the class teacher should have personal data for each student. Personal data is related to specific characteristics, abilities and weaknesses, competencies possessed, and level of development. The specific characteristics of students with special needs are generally related to the level of functional development (Ningrum, 2022). To find out clearly about the characteristics of each student, a teacher must first carry out a screening or assessment so that he knows clearly about the personal competence of the student concerned (Sunanto, 2016). The aim is that when programming learning, we have thought about the forms of learning strategies that are considered suitable for dealing with children with special needs in inclusive classes. Assessment here is an activity process to determine the abilities and weaknesses of each student in terms of cognitive development and social development, through sensitive observation. This activity usually requires the use of special instruments that are standard or made by the class teacher himself, (Rusilowati, 2013).

According to (Firmansyah, 2009), physical education is a vehicle that is able to educate humans to approach the perfection of life which

can naturally make a real contribution to everyday life. Physical education learning has a goal of balancing the educational aspects, both in terms of psychomotor, cognitive, and affective (Raharjo et al., 2023). Physical education learning has been implemented since elementary school to stimulate natural growth, motor skills, knowledge and emotional development so that physical education learning is able to improve students' abilities in developing their psychomotor and cognitive abilities (Isnaini, 2021). The aim of physical education is none other than to increase individual capacity both physically, psychologically and emotionally (Fefrian et al., 2020). Children with special needs are children who experience such abnormalities both physically, mentally and socially or in a combination of these three aspects, so that to achieve optimal potential they require special education to meet their educational needs (Kustawan & Meimulyani, 2019). However, to achieve this, improvements are still needed both in terms of teaching staff and facilities that support PE learning. According to (Kurniawati, 2023), many teachers in SES do not have special training in physical education, which can result in a lack of understanding of how to adapt physical activity to students with various needs. Apart from that, the facilities at SES are still inadequate to support PE learning. This includes a lack of appropriate sports equipment and sufficient space for physical activity, thereby reducing the effectiveness of learning, (Irsyada & Qoriah, 2022).

There are 6 special education schools (SES) in Soppeng Regency, each of which consists of students from various needs. Even though the number of students at each level is not large, learning is still carried out like a normal school in general. Based on general information, several obstacles and problems were found in the

learning process, such as in learning physical education, sports and health. Most of the SES in Soppeng Regency were found to be not specific to one limitation or special needs. The strength of the PE teacher is mastering the substance of the field of physical education and sports but is weak in strategies, methods and learning media, as well as understanding the characteristics of students. This is also confirmed by research (Sukriadi & Arif, 2020) which explains that the SES Physical Education learning process requires a curriculum, staff educators, and special infrastructure that has been adapted to the type of child's disability, while in the field several obstacles have been encountered: (a) lack of infrastructure that supports the physical education learning process, (b) the implementation of adaptive physical education still combines students from various types of disabilities; (c) some teachers still do not know what material should be provided to children according to students' needs; (d) The teacher's background is not from Physical Education, of course this will result in the implementation of Physical Education learning being less appropriate to the needs of children with special needs. The results of research (Yuniartik et al., 2017), which was carried out at SDLB Yogyakarta City, can be explained that the majority of teachers who teach Physical Education subjects still have difficulty in preparing and adjusting the implementation of learning and evaluating students. In terms of preparation, there are several obstacles, such as making a learning implementation plan only as a requirement for complete administration, not as a strategy to achieve the goals created by the teacher before an action, program and learning activity is implemented. research by (Fatikhah, 2022) which explains that SES Physical

Education teachers do not match the expertise they have because SES students need educators who are experts in that field. Another obstacle to the implementation of Physical Education learning is that sometimes special school for disabled children and special middle school classes are combined, even though the curriculum is different.

Referring to the above, the appropriate evaluation model in this research is the Countenance Stake evaluation model. The Stake Countenance Model consists of two matrices. The first matrix is called the description matrix and the second is the consideration matrix. The new consideration matrix can be worked out by the evaluator after the description matrix has been worked out, and distinguishes three phases in the evaluation of physical education learning in special schools, namely: (1) The preliminary stage (antecedents) in this research is learning preparation; (2) The process stage (transactions) is the implementation of learning activities; and (3) the results stage of this program, namely the student learning outcomes obtained from the learning assessment process. The description matrix relates to the intensity of physical education learning and the results of observations from learning at SES. The judgment matrix relates to standards or criteria and the evaluator's judgment. The Stake model evaluation provides a full description and consideration of physical education learning in SES carried out by teachers. In this model, Stake really emphasizes the role of evaluators in developing physical education learning objectives into specific and measurable goals. The Stake Model will be able to provide an in-depth and detailed picture of the implementation of learning. The Stake Model will provide an overview of the situation regarding the evaluation of physical education,

sports and health learning in special schools throughout the district. Soppeng focuses on: (1) Analyzing the physical education learning preparation process at SES (2) Analyzing the process of implementing physical education learning activities at SES and (3) Analyzing the form of physical education learning assessment at SES. So the results of the information obtained from the evaluation of the Countenance Stake model are feedback on the teaching and learning outcomes process that has been implemented and this feedback will become a benchmark for improving and enhancing the subsequent learning process.

Seeing the problems mentioned above, researchers intend to research physical education, sports and health learning in special schools throughout Soppeng Regency. This research places more emphasis on; learning preparation, learning process and learning outcomes. It is hoped that the results of this research can be used as recommendations for related parties for the implementation of physical education, sports and health learning in special schools throughout Soppeng Regency.

## **METHODS**

### **Types of research**

This research includes mixed methods research with a countenance stake approach which is a mixed method with a combination of basic data types and methodological procedures. Researchers collect data based on research questions which will contain both numerical and non-numerical along with associated methodology categorized in a qualitative or quantitative framework. According to Schreiber, for the results of mixed methods to be acceptable, the integration of the two methodologies used must be of high quality.

### **Population and Research**

The population and sample in this study were SES in Soppeng Regency, totaling 6 schools and the subjects of this research consisted of 6 school principals and 6 PE teachers from 6 SES in Soppeng Regency. According to Ibnu Hadjar (Hardani & et al., 2020) Research instruments are tools used to obtain quantitative information about variations in variable characteristics objectively. To support the success of research, instruments must be designed in such a way that they can produce data in accordance with expectations. The instruments in this research use instruments in the form of observations, documents, interviews and questionnaires. These instruments will be used to collect data regarding the evaluation of the implementation of corner learning in special schools throughout Soppeng Regency

## **RESULT AND DISCUSSION**

This research is a quantitative and qualitative research using the Countenance Evaluation Model (Antecedent, Transaction, Outcomes) approach to evaluate the implementation of PE SES learning in Soppeng Regency, South Sulawesi Province. The data in this research was taken by observation, interviews, documentation, and distributing instruments in the form of questionnaires to carry out assessments, so that the data obtained was quantitative data, as well as qualitative descriptive data analysis using percentages.

The measurement scale in this study uses a Likert scale, with a value range between 1 and 4, so that the ideal mean value is 2.5 and the ideal Standard Deviation is 0.5. From the mean value and ideal Standard Deviation, evaluation assessment criteria in research can be determined, and are displayed in the following table.

**Table 1. PE Learning Evaluation Score Criteria**

No	Tilapia Range	Interpretation
1	3,25 - 4,00	Good
2	2,50 - 3,2	Quite Good
3	1,75 - 2,49	Deficient
4	1,00 - 1,74	Not Good

Evaluation data for PE SES learning in Soppeng district was taken from observations, interviews, documentation and distribution of questionnaires. The distribution of questionnaires was carried out to Principals and PE Teachers with a sample size of 6 Principals and 6 PE Teachers. The overall evaluation results, from data analysis using computer software, are known about PE SES learning in Soppeng Regency, based on the average for each data source, shown in the following table.

**Table 2. Average Value of PE Learning Based on Each Source**

No	Data source	N	Average Value	Value Category
1	Headmaster	6	3,28	Good
2	PE Teacher	6	3,20	Quite Good
3	Observation	6	2,65	Quite Good

Tabel shows that PE SES learning in Soppeng district is good according to the principal, quite good according to the PE teacher, and also quite good from the results of observations. Following are the average results of PE learning evaluations at each school.

#### Antecedent Component Research Results

The results of the preparation evaluation (antecedent) in PE learning at each SES and the data sources are shown in the following table:

**Table 3. Average Antecedent Value of PE Learning from Each School**

No	Data Source	SES	N	Average Value	Value Category
1	Headmaster	Mainnong	1	3,10	Quite Good
		Negeri 1 Soppeng	1	3,50	Good
		YPPAB Ganra	1	3,20	Quite Good
		YPPKS Takalala	1	3,45	Good
		As Adiyah Cabenge	1	3,30	Good
		Autis Siti Nurdaya	1	3,05	Quite Good
		Mainnong	1	3,20	Quite Good
2	PE Teacher	Negeri 1 Soppeng	1	3,40	Good
		YPPAB Ganra	1	3,20	Quite Good
		YPPKS Takalala	1	3,45	Good
		As Adiyah Cabenge	1	3,05	Quite Good
		Autis Siti Nurdaya	1	2,95	Quite Good
		Mainnong	1	2,85	Quite Good
		Negeri 1 Soppeng	1	3,10	Quite Good
3	Observation	YPPAB Ganra	1	2,40	Deficient
		YPPKS Takalala	1	2,90	Quite Good
		As Adiyah Cabenge	1	2,35	Deficient
		Autis Siti Nurdaya	1	2,30	Deficient
		Mainnong	1	2,85	Quite Good

The table above shows that in the Antecedent evaluation from the principal data source, 3 out of 6 schools (50%) are in the good category and 3 schools (50%) are in the quite good category, and none are in the poor or not good category. . Meanwhile, the Antecedent evaluation obtained from the PE teacher data source is that 2 schools (33%) are in the good category and 4 schools (67%) are in the quite good category, and none are in the poor or not good category. The source of the observation results shows that 3 schools (50%) are in the quite good category and also 3 schools (50%) are in the not so good category, and none are in the good or bad category.

The results of data collection from school principals, PE teachers, and observation results through filling out questionnaires at the PE learning preparation stage are in the quite good category, it can be seen that the objectives, design, availability of infrastructure, strategies and learning materials have been adapted to the curriculum and learning. has been modified according to the needs of students. Modifying equipment in the sports sector that is adapted to the needs and abilities of students will make it easier for students to carry out physical activities (Wahyu Juanna & Amirulah Rachman, 2019).

#### Transaction Component Research Results

The results of the process evaluation (Transaction) on PE learning at each SES and the data sources are displayed in the following table:

**Table 4. Average Value of PE Learning Transactions from Each School**

No	Data Source	SES	N	Average Value	Value Category
1	Headmaster	Mainnong	1	3,33	Good
		Negeri 1 Soppeng	1	3,42	Good
		YPPAB Ganra	1	2,92	Quite Good
		YPPKS Takalala	1	3,33	Good
		As Adiyah Cabenge	1	3,33	Good
		Autis Siti Nurdaya	1	3,00	Quite Good
		Mainnong	1	3,25	Good
2	PE Teacher	Negeri 1 Soppeng	1	3,33	Good
		YPPAB Ganra	1	3,00	Quite Good
		YPPKS Takalala	1	3,25	Good
		As Adiyah Cabenge	1	3,00	Quite Good
		Autis Siti Nurdaya	1	3,00	Quite Good
		Mainnong	1	2,67	Quite Good
		Negeri 1 Soppeng	1	2,92	Quite Good
3	Observation	YPPAB Ganra	1	2,67	Quite Good
		YPPKS Takalala	1	2,83	Quite Good
		As Adiyah Cabenge	1	2,58	Quite Good
		Autis Siti Nurdaya	1	2,42	Deficient
		Mainnong	1	2,67	Quite Good

The table above shows that in the Transaction evaluation from the Principal data source, 4 out of 6 schools (67%) are in the good category and 2 schools (33%) are in the quite good category, and none are in the poor or not good category. Meanwhile, the Transaction evaluation obtained from the PE teacher data source is that 3 schools (50%) are in the good category and also 3 schools (50%) are in the quite good category, and none are in the poor or not good category. Meanwhile, the observation results show that there are 5 schools (83%) in the fairly good category and 1 school (17%) in the not so good category, and there are no schools in the good or bad category.

The results of data collection from school principals, PE teachers, and the results of observations through filling out questionnaires at the stages of the PE learning process are in the quite good category, it can be seen that the models, methods, media and covering learning are in accordance with the needs of students. One of the determinants of the success of a learning process is through a learning model that suits the needs of students. Teachers demonstrate skills with verbal instructions about important movement cues (Chatzipanteli & Dean, 2020).

#### Research Results Component outcomes

The results of the evaluation results (Outcomes) on PE learning at each SES and data sources are displayed in the following table:

**Table 5. Average Value of PE Learning Outcomes from Each School**

No	Data Source	SES	N	Average Value	Value Category
1	Headmaster	Mainnong	1	3,50	Good
		Negeri 1 Soppeng	1	4,00	Good
		SLYPPAB Ganra	1	3,50	Good
		YPPAB Ganra	1	2,67	Quite Good

2	PE Teacher	SLB YPPKS Takalala	1	3,75	Good
		As Adiyah Cabenge	1	3,50	Good
		Autis Siti Nurdaya	1	3,00	Quite Good
		Mainnong	1	3,50	Good
		Negeri 1 Soppeng	1	3,75	Good
		YPPAB Ganra	1	3,50	Good
		YPPKS Takalala	1	3,50	Good
		As Adiyah Cabenge	1	3,00	Quite Good
		Autis Siti Nurdaya	1	3,00	Quite Good
		Mainnong	1	2,75	Quite Good
		Negeri 1 Soppeng	1	3,00	Quite Good
		YPPAB Ganra	1	2,25	Deficient
		YPPKS Takalala	1	3,00	Quite Good
		As Adiyah Cabenge	1	2,25	Deficient
		Autis Siti Nurdaya	1	2,00	Deficient

The table above shows that in the Outcomes evaluation from the Principal data source, 5 out of 6 schools (83%) are in the good category and 1 school (17%) is in the quite good category, and none are in the poor and not good categories. Meanwhile, the Outcomes evaluation obtained from the PE teacher data source is that 4 schools (67%) are in the good category and 2 schools (33%) are in the quite good category, and none are in the poor or not good category. The results of the observations showed that 3 schools (50%) were in the quite good category and also 3 schools (50%) were in the not so good category, and there were no schools in the good and not good categories.

The results of data collection from school principals, PE teachers, and observation results through filling out questionnaires at the PE learning stage are in the quite good category. These results can be explained that in determining the aspects that are assessed according to the

conditions and objectives of the PE learning material, carrying out assessments in the realm of spiritual and social attitudes, assessing the process of the PE learning movement, as well as carrying out tests and evaluations with the material provided are quite good. Teachers carry out assessments from several aspects, both written and practical tests, so that this assessment activity is more accurate (Ardisal et al., 2019)

## CONCLUSION

The preparatory stage (antecedent) of PE learning in Soppeng district is quite good. This is due to the implementation of learning carried out by subject teachers who actively provide learning stimuli to students. Even though there are still some teachers who do not have a PE teacher background, plus there is a lack of infrastructure to support learning, teachers continue to try to maximize learning and adapt it to the curriculum and students' abilities.

The process stage (Transaction) of PE SES learning in Soppeng Regency is carried out by subject teachers through a process of several methods, models and learning media used that are adapted to the needs of students, so that the learning process runs quite well.

The Outcomes stage of PE SES learning in Soppeng Regency has been implemented quite well. This shows that there is a comprehensive assessment covering the domains of attitudes, knowledge and skills carried out by the teacher at the end of each lesson. This illustrates that throughout the series of learning activities and the results obtained, there is feedback on the learning process and results.



## REFERENCES

- Alifah, S. (2021). Peningkatan Kualitas Pendidikan Di Indonesia Untuk Mengejar Keteringgalan Dari Negara Lain. *CERMIN: Jurnal Penelitian*, 5(1), 113. [https://doi.org/10.36841/cermin\\_unars.v5i1.968](https://doi.org/10.36841/cermin_unars.v5i1.968)
- Ardisal, A., Sopandi, A. A., & Taufan, J. (2019). Pelaksanaan Pembelajaran Pendidikan Jasmani Adaptif Bagi Anak Cerebral Palsy. *Pendidikan Kebutuhan Khusus*, 3(2), 39–42.
- Fatikhah, M. Al. (2022). *Evaluasi Pelaksanaan Pembelajaran Pendidikan Jasmani Adaptif Saat Pandemi Covid-19 di SLB Kita Yogyakarta*.
- Fefrian, Y., Mardhika, R., RH, S., & Sumardi, S. (2020). Penjas Adaptif Bagi Guru Sekolah Luar Biasa (SLB) Siswa Budhi Surabaya. *SPEED Journal : Journal of Special Education*, 3(2), 101–106. <https://doi.org/10.31537/speed.v3i2.288>
- Firmansyah, H. (2009). Hubungan Motivasi Berprestasi Siswa Dengan Hasil Belajar Pendidikan Jasmani. *Jurnal Pendidikan Jasmani Indonesia*, 6(1), 30–33.
- Irsyada, H., & Qoriah, A. (2022). Implementasi Pembelajaran PJOK pada Masa Pandemi COVID-19 di SMP Negeri 1 Batang Tahun Ajaran 2020/2021. *Indonesian Journal for Physical Education and Sport*, 3(1), 303–310. <https://doi.org/10.15294/inapes.v3i1.48522>
- Isnaini, F. N. (2021). Pentingnya Pendidikan Jasmani dalam Meningkatkan Literasi dan Kemampuan Kognitif bagi Peserta Didik Sekolah Daar di Era Revolusi Industri 4.0. *Jurnal Syntax Transformation*, 10(2), 6. <http://www.theseus.fi/handle/10024/341553%0Ahttps://jptam.org/index.php/jptam/article/view/1958%0Ahttp://ejurnal.un dana.ac.id/index.php/glory/article/view/4816%0Ahttps://dspace.uui.ac.id/bitstream/handle/123456789/23790/17211077TaritaSyaviraAlicia.pdf?>
- Jauhari, M. N., Mambela, S., & Zakiah, Z. (2020). Dampak Pandemi Covid-19 Terhadap Pelaksanaan Pembelajaran Penjas Adaptif Di Sekolah Luar Biasa. *STAND: Journal Sports Teaching and Development*, 1(1), 63–70. <https://doi.org/10.36456/j-stand.v1i1.2594>
- Kurniawati, A. (2023). Pelatihan Penjas Adaptif Bagi Guru PJOK dan Guru SLB Serta Penggiat Olahraga Disabilitas. *JPM: Jurnal Pengabdian Masyarakat*, 2(1), 179. <https://doi.org/10.52434/jpm.v2i1.2494>
- Kustawan, D., & Meimulyani, Y. (2019). *mengenal pendidikan khusus dan layanan khusus serta implementasinya*. PT. Luxima Metro Media.
- Maher, A. J., & Haegele, J. A. (2022). Disabled children and young people in sport, physical activity and physical education. *Sport, Education and Society*, 27(2), 129–133. <https://doi.org/10.1080/13573322.2021.1967119>
- Ningrum, N. A. (2022). Strategi Pembelajaranpada AnakBerkebutuhan Khusus dalam Pendidikan Inklusi. *Indonesian Journal of Humanities and Social Sciences*, 3(3), 181–196.

- Raharjo, H. P., Kusuma, D. W. Y., Putra, R. B. A., & Irsyada, R. (2023). Physical education with the TPSR model: Building characters and basic manipulative movements in elementary school students. *Journal Sport Area*, 8(2), 239–250. [https://doi.org/10.25299/sportarea.2023.v018\(2\).11072](https://doi.org/10.25299/sportarea.2023.v018(2).11072)
- Rani, P., Chakraborty, M. K., Sah, R. P. R. P. R. P., Subhashi, A., Disna, R., UIP, P., Chaudhary, D. P., Kumar, A. A. A. A. A., Kumar, R. R., Singode, A., Mukri, G., Sah, R. P. R. P. R. P., Tiwana, U. S., Kumar, B., Madhav, P., Manigopa, C., Z, A. H., Anita, P., Rameshwar, P. S., ... Kumar, A. A. A. A. A. (2020). Implementasi Pembelajaran Inklusi Bagi Anak Berkebutuhan Khusus. *Ikatan Alumni PGSD UNARS*, 4(1), 1–15. <https://doi.org/10.1016/j.fcr.2017.06.020>
- Rusilowati, A. (2013). Psikologi Kognitif Sebagai Dasar Pengembangan Tes Kemampuan Dasar Membaca Bidang Sains. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 13(2), 286–303. <https://doi.org/10.21831/pep.v13i2.1414>
- Sukriadi, S., & Arif, M. (2020). Survei Pelaksanaan Pembelajaran Pendidikan Jasmani Adaptif Di Slb C Provinsi Dki Jakarta Tahun 2019. *Jurnal Ilmiah Sport Coaching and Education*, 4(1), 1–7. <https://doi.org/10.21009/jsce.04101>
- Sunanto, J. dan H. (2016). Desain Pembelajaran Anak Berkebutuhan Khusus dalam Kelas Inklusif. *Jassi Anakku*, 17(1), 47–55.
- Surya Listya Yudhana, A., & Andhyka Kusuma, W. (2021). Kelebihan dan Kekurangan Pembelajaran Jarak Jauh Atau E-Learning dan Learning Management System (LMS) Menggunakan Pendekatan Literature Review, dan User Persona. *Jurnal Syntax Admiration*, 2(9), 1617–1628. <https://doi.org/10.46799/jsa.v2i9.303>
- Sydoruk, I., Grygus, I., Podolianchuk, I., Ostrowska, M., Napierała, M., Hagner-Derengowska, M., Kałużny, K., Muszkieta, R., Zukow, W., Smoleńska, O., & Skalski, D. (2021). Adaptive physical education for children with the down syndrome. *Journal of Physical Education and Sport*, 21(October), 2790–2795. <https://doi.org/10.7752/jpes.2021.s5371>
- Yuniartik, H., Hidayah, T., & Nasuka. (2017). Evaluasi Pembelajaran Pendidikan Jasmani Olahraga dan Kesehatan di SLB C se-Kota Yogyakarta. *Journal of Physical Education and Sports*, 6(2), 148–156. <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/17389>