Development of Skill Assessment Instrument Service Volly 6th Grade in Physical Education

by Anung Priambodo

Submission date: 13-Nov-2020 11:48AM (UTC+0700)
Submission ID: 1444665830
File name: ent_Instrument_Service_Volly_6th_Grade_in_Physical_Education.pdf (483.11K)
Word count: 3152
Character count: 17573

BirLE-Journal
Budapest International Research and Critics in Linguistics and Education
p.ISSN: 2655-2647
e.ISSN: 2655-1470
Budapest Institute

Development of Skill Assessment Instrument Service Volly 6th Grade in Physical Education

Moh. Noer[1], Ali Maksum[2], Anung Priambodo[3]
[1,2,3] *Magister of Physical education, Universitas Negeri Surabaya, Indonesia*
Moh.17070805029@mhs.unesa.ac.id

Abstract: *This research aims to develop instruments for assessing lower and upper service engineering skills in volleyball games for 6th-grade students in elementary schools. This research uses research and development methods, with the following development steps: (1) information gathering in the field, (2) analyze the information collected, (3) developing initial products, (4) expert validation and revision, (5) small-scale trials and revisions, (6) large-scale trials and revisions, (7) manufacturing of final products. The subject of this research is 6th-grade students of elementary students. Data analysis for the validity test was carried out with CVR (content validity ratio) and reliability using Alpha Cronbach. This research resulted in a handbook of instrument assessment tools for service techniques of lower and upper service in volleyball games for 6th-grade elementary school students, which contained instructions for use, student assignments sheets, assessment guidelines, assessment rubrics, and scoring tables, which have high validity. (1) And under service reliability initial attitude: r = 0.975, implementation: r = 0.961, follow-up motion: r = 0, 955. Upper Service for initial attitude: r = 0.961, implementation: r = 0.974, follow-up motion: r = 0.989.*
Keywords: *The instrument of lower service skills assessment; volleyball service.*

I. Introduction

The civilization of a nation can be seen from the level of human education. An educated nation will bring prosperity to all walks of life. The education sector is an important field in developing a country, a developed country can be assured of having a quality education system, this is because the education sector is closely related to human resource development.

The achievement of educational goals alone is inseparable from how a country can organize an educational measurement instrument so that the educational achievement can be known for its results. Various assessment instruments in education are carried out in a country.

Indonesia is a country whose educational assessment instruments are structured from the lowest education units to higher education. Educational assessment instruments in Indonesia in the form of student learning outcomes assessment conducted by the education unit and carried out by the government through the education department and related ministries.

Physical education as with other subjects also conducts evaluation activities. One of the problems related to physical education teacher competencies is the ability of teachers to carry out learning evaluations. Learning evaluation activities become important all subjects are no exception physical education because with the evaluation the teacher can know the extent of the success of the learning he did. However, the reality on the ground is that we often encounter learning evaluations conducted by physical education teachers that are still not by the principles of good evaluation, there are still teachers who give evaluation scores only because they know students only without based on clear evaluation/assessment instruments.

Difficulties in assessing skills cannot be separated from the competence of the physical education teacher itself. The inability of teachers to develop a valid instrument becomes an unsolved problem. Also, limited infrastructure is an obstacle in implementing an ideal

Budapest International Research and Critics in Linguistics and Education (BirLE) Journal
Volume 2, No 4, November 2019, Page: 634-641
e-ISSN: 2655-1470 (Online), p-ISSN: 2655-2647 (Print)
www.bircu-journal.com/index.php/birle
emails: birle.journal@gmail.com
birle.journal.qa@gmail.com

physical education assessment. The high cost or difficulty of obtaining learning support facilities becomes a complex problem in physical education.

Speaking about practice tests, which one of the aims is to find out the students' skills, of course, they will not be separated from the assessment instruments carried out, including physical education subjects. Problems that are often encountered in the field, the weakness of assessment instruments to carry out practical tests becomes an interesting problem to be explored. We still often meet in the field of physical education subject practice tests only as a formality of the process that must be carried out without regard to quality.

Assessment in education in Indonesia includes 4 competencies, namely spiritual, social, knowledge and skills competencies. Physical education is a subject that is one of the dominant indicators of success in the realm of skills. Therefore, practice exams become very important to be carried out.

Large ball game skills are one of the realms of learning in physical education lessons, where one of the learning media can use volleyball games. Volleyball is a big ball game where one of the playing techniques is service. Services that are taught to 6th-grade students can be divided into two, namely lower service and upper service.

Problems that arise, physical education teachers are not able to carry out a good assessment of the learning process. Therefore, it is necessary to develop an instrument to assess learning outcomes. Focus of Research: First, this research focuses to find out the instrument model for the assessment of low service skills and top service for 6th-grade students in elementary school. Secondly, this research focuses on determining the arrangement of norms and valid and reliable values that will be obtained after making an assessment. Research Object: First, develop an instrument model for assessing lower and upper service skills for 6th-grade students in elementary school. Secondly, determine the arrangement of norms and valid and reliable values that will be obtained after making an assessment.

II. Research Method

Development in research means developing a research product to solve a problem that occurs. The development in this research seeks to solve problems in the world of education, namely the weak implementation of skills tests in physical education. The implementation of skills exams in various schools is still limited, so it is necessary to improve the process of assessing. This is inseparable from the many things that cause all this to happen, teacher competence and the availability of facilities and infrastructure are the main factors in implementing the process.

The purpose of this study was to create a product development instrument for assessing lower service skills and top service in volleyball games for grade 6 students in primary school. Where this type of research is development research is a research approach that has the main goal to solve problems with product development.

The research and development approach in this study uses an educational research and development model. According to Borg and Gall (1983: 772), "Educational research and development (R&D) is a process used to develop and validate educational production".

According to Borg and Gall research and development has 10 stages that must be carried out: (1) research and information collecting, (2) planning, (3)developing preliminary

Budapest International Research and Critics in Linguistics and Education (BirLE) Journal
Volume 2, No 4, November 2019, Page: 634-641
e-ISSN: 2655-1470 (Online), p-ISSN: 2655-2647 (Print)
www.bircu-journal.com/index.php/birle
emails: birle.journal@gmail.com
birle.journal.qa@gmail.com

forms of product, (4) preliminary field testing, (5) main product revision, (6) main field testing, (7) operational product revision, (8) operational field testing, (9) final product revision, (10) dissemination and implementation.

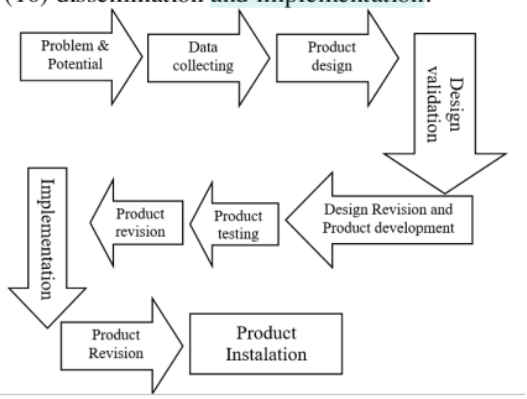

Figure 1. *Design and development steps (Borg & Gall, 1983)*

In simple terms, this development research is divided into 3 parts: (1) a preliminary study (pre-survey), this section is a research and collecting data activity that has two main activities, namely literature study (literature review and previous research) and field studies. The results of this activity are the implementation of the practical test implementation used by the teacher in physical education learning. (2) the development of the model, the next part is the development of the model, in this section it is an amalgamation of the planning and development of the preliminary form of product in its activities, namely, setting goals, determining the qualifications of the parties involved in research and development, namely the teacher and student. (3) model validation, the last part of this study is simply the model validation done using experimental design (Creswell, 1994: 130-134).

The subjects in this study were 6th-grade elementary school students consisting of 2 study groups with each group of 28 students in the Creative Elementary School Sidoarjo, East Java, Indonesia area. Subjects were taken randomly by paying attention to the sex of the students concerned. Before determining the sample, obtaining permission to the school institution as well as permission to the parents of students used as research subjects. This research starts from pre-survey activities, limited trials, wider trials and model validity.

Instruments and data collection in this study began with the development of research instruments which include the development of test instruments and the development of assessment scales. Next is the instrument validation to ensure that the instrument to be used meets the requirements.

III. Discussion

In the process of making appraisal instruments, a needs analysis is needed to find out whether the instruments to be compiled by researchers are needed. The results of a preliminary study of 10 physical education teachers were conducted by giving a questionnaire about the importance of service in volleyball as follows:

Question 1 : Do you rate service skills in volleyball? (a) Yes, (b) No.

Budapest International Research and Critics in Linguistics and Education (BirLE) Journal
Volume 2, No 4, November 2019, Page: 634-641
e-ISSN: 2655-1470 (Online), p-ISSN: 2655-2647 (Print)
www.bircu-journal.com/index.php/birle
emails: birle.journal@gmail.com
birle.journal.qa@gmail.com

Question 2 : Does your assessment include technical and attitude aspects? (a) already, (b) not yet.
Question 3 : Have you ever done an assessment using an instrument? (a) never, (b) not yet.
Question 4 : Do you need instruments for conducting technical assessments? (a)necessary, (b)no

From the results of the preliminary study, it was found that 10 teachers stated the need for instruments in evaluating volleyball service skills. Furthermore, based on literature review, needs analysis and relevant research, an initial draft of the technical service assessment instrument for lower and upper service is compiled in volleyball games containing: (1) identifying aspects of the process being assessed, (2) arrangement of the grid based on indicators, (3) guidelines for assessment and observation, (4) preparing assignment sheets and instructions for student implementation, observation, and scoring.

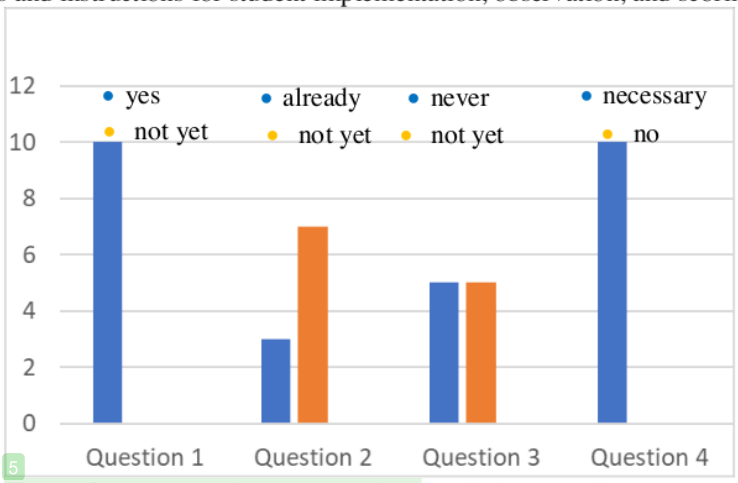

Figure 2. Diagram of the results of the preliminary study

The draft that was compiled then tested its validity to five experts with the results as in the following table;

Table 1. Expert Validation Results

Expert	Score	Information
1	4	Good
2	4	Good
3	3	Good
4	4	Good
5	3	Good

From the results of the assessment conducted by the experts, then the content validity calculation is performed using the formula CVR = (2 Mp / M) - 1, with the statement that MP is the number of experts who give good grades or with an assessment of 3-4, M is the number

of experts. The results of the validation carried out by experts give good marks to the draft assessment instruments developed.

After the assessment instruments were approved by the experts, the next step was to conduct a small-scale trial of 3 male students and 3 female students in grade 6 at SD Insan Rabbani. From the results of a small scale trial using the Cronbach Alpha statistical test, the results are as follows:

Table 2. Instrument Reliability Test Results and Intraclass Correlation Coefficient (ICC) Under-Service Techniques and Volleyball Game Services.

Indicator	Under service		Upper service	
	reliability	ICC	reliability	ICC
Beginning	r = 0,957	r = 0,882	r = 0,962	r = 0,895
Implementation	r = 0,938	r = 0,833	r = 0,938	r = 0,833
Follow through	r = 0,938	r = 0,895	r = 0,938	r = 0,833

Based on table 2, we can conclude that the bottom service and top service techniques. By using the Interclass correlation coefficient (ICC), the value of the inter-brother reliability coefficient is high. Therefore, based on a small scale reliability test, it can then be used for large scale trials.

Implementation of large-scale trials using test-retest to test the validity of the assessment instruments obtained as in the following table:

Table 3. Results of Instrument Validity

Under service	Upper service
0, 915	0, 921

From this table, it can be concluded that the results of the validity of the instrument valuation instruments under service and top service have high validity results. So that the development of lower service volleyball and upper service volleyball technical skills assessment instruments have high scores. It can be concluded that the result of statistical calculation of the instrument of service assessment of lower service and upper service has a high coefficient value, so that it can be used as a standard assessment service technique of lower and upper service in volleyball game grade 6 in elementary school.

Data from the five raters were analyzed for their complete reliability. The results of inter-brother reliability of the instrument of performance evaluation of lower and upper service are broad as in the following table:

Table 4. Results of Large-scale Trials

Indicator	Under service		Upper service	
	reliability	ICC	Reliability	ICC
Beginning	r = 0,975	r = 0,886	r = 0,961	r = 0,831
Implementation	r = 0,961	r = 0,830	r = 0,974	r = 0,881
Follow through	r = 0,955	r = 0,808	r = 0,989	r = 0,945

Budapest International Research and Critics in Linguistics and Education (BirLE) Journal
Volume 2, No 4, November 2019, Page: 634-641
e-ISSN: 2655-1470 (Online), p-ISSN: 2655-2647 (Print)
www.bircu-journal.com/index.php/birle
emails: birle.journal@gmail.com
birle.journal.qa@gmail.com

Based on table 4, it can be concluded that the results of a large-scale instrument trial of the lower service and upper service techniques produce high validity and reliability values so that the assessment instruments can be used for volleyball learning assessment in elementary schools. Product development results can be seen in the following table.

Table 5. The Student Service Skills Assignment Sheet Below

o.	Student work
	Students take positions in the service line in volleyball games If there is a signal that the student is serving for 60 seconds Each student serves down to the opponent's area by targeting the back of the field If you hear the second whistle the lower service activity is stopped

Table 6. Guidelines for Evaluating Under Service Techniques

Variable	Indicator	Description
Under service technique	Beginning	1. Stand upright facing the opponent's field 2. The left foot is in front of approximately 30 cm from the right foot 3. The ball is held with the left hand in front of the stomach 4. Focus on the opponent's field
	Implementation	1. Turn the right hand from under the ball forward until the hand touches the ball 2. Approach the ball at the bottom so the ball can cross the net
	Follow through	1. After hitting students go straight back to the field to defense

Table 7. Under Service Assessment Rubrics

No.	Name	beginner	Implementation	Follow through	Service total /60sec	In ball score
1						
2						
3						

Table 8. The Student Service Skills Assignment Sheet Below

No.	Student work
1	Students take positions in the service line in volleyball games
2	If there is a signal that the student is serving for 60 seconds
3	Each student serves up to the opposing area by targeting the back of the field
4	If you hear the second whistle the lower service activity is stopped

Table 9. Guidelines for Evaluating Upper Service Techniques

Variable	Indicator	Description
Upper service technique	Beginning	1. Stand upright facing the opponent's field 2. The left foot is in front of approximately 30 cm from the right foot 3. The ball is held with your left hand in front of your eyes 4. Focus on the opponent's field
	Implementation	1. Throw the ball up with your left hand 2. Hit the ball with your hand when the ball is above the head approximately 30 cm distance Approach the ball at the bottom so the ball can cross the net
	Follow through	1. After hitting students go straight back to the field to defense

Table 10. Upper Service Assessment Rubrics

No.	Name	beginner	Implementation	Follow through	Service total /60sec	In ball score
1						
2						
3						

The final product in this research and development is in the form of an instrument to assess the service skills of lower and upper service in volleyball games in grade 6 elementary school students in which there are instructions for use, student assignments sheets, assessment guidelines, assessment rubrics, and scoring tables.

IV. Conclusion

First, the results of this study are arranged components in the implementation of the assessment of lower and upper service techniques in volleyball games on the assessment of grade 6 skills of elementary schools. Second, the assessment components consist of initial attitude, implementation, and final attitude. Third, an instrument of assessment of service skills for upper and lower service is arranged on the 6th-grade students of valid and reliable elementary school. Fourth, effective and low service skills assessment instruments have been developed. Students, feel happy and more motivated to be more active in learning physical education. This happens because they feel the positive impact of the learning process, in particular, the existence of clear instruments in the assessment of learning.

References

Arikunto, Suharsimi. (2001). *The research procedure is a practical approach*. Yogyakarta: Rineka Cipta.

Borg,W & Gall, M.D. (1983). *Education research*. New York. Interstate book manufactures.

Harlen, W. (2007). *Assesing of learning*: Sage Publication.

Merdapi, Djemari et al (2005). Development of educational research instruments. Lecture Handbook, *not published*. Yogyakarta: PPS UNY.Miller,

David K (2002) *Measurement by the physical educator, why and how, fourth edition*. New York: Ny Mc. Graw Hil

Payne, D.A. (2003). *Applied education assesment, (2 nd ed)*. Canada: Wadsworth/ Thomson Learning

Development of Skill Assessment Instrument Service Volly 6th Grade in Physical Education

ORIGINALITY REPORT

27%	26%	9%	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.scilit.net Internet Source	9%
2	digilib.unimed.ac.id Internet Source	8%
3	bircu-journal.com Internet Source	3%
4	repository.usd.ac.id Internet Source	3%
5	moam.info Internet Source	1%
6	pdfs.semanticscholar.org Internet Source	1%
7	fr.scribd.com Internet Source	<1%
8	www.ijstr.org Internet Source	<1%
9	R Sulastri, R Johar, M Duskri, M Ikhsan, H	

	Meutia. "Developing mathematics training modules to enhance teachers' content knowledge", Journal of Physics: Conference Series, 2018 Publication	<1%
10	repository.uinsu.ac.id Internet Source	<1%
11	psy.gu.se Internet Source	<1%
12	M Reza, M Ibrahim, Y S Rahayu. "Development of Problem-Based Learning Oriented Teaching Learning Materials to Facilitate Students' Mastery of Concept and Critical Thinking Skill", Journal of Physics: Conference Series, 2018 Publication	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		

Development of Skill Assessment Instrument Service Volly 6th Grade in Physical Education

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8