

An Examination of Contents in “Media-Portfolio” which are incorporated into Physical Education

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Abstract

The purpose of this cooperative study is to develop a “Media-Portfolio” which is incorporated in physical education.

First, game observers used it in upper elementary school grades. Students collected video-clips while paying attention to "Tactical Decision-making" in ball games. As a result, data demonstrated improvement of cognitive learning and game performance. Therefore, this research of collecting the video-clips for “Media-Portfolio” had a significant meaning. Second, it was used in gymnastics lessons. As a result, it was important that the data collected was from both situation and context of “Now and Here”. For example, it is the perception or sense of the individual’s performance. Voice information is the most suitable to understand the individuals perception along with the atmosphere when playing. Third, collecting data had to support learning by sharing information between students, teachers and parent(s)/guardian(s). Then, it became clear that it was necessary to have the interactive standards to assess. In addition, such an assessment must be made used in grading. Therefore, the contents which supports grading are recommend for the teacher.

The critical contents of Media-Portfolio were clarified in this study. It is necessary to focus on developing the systems to ease collection of the assessment data.

Key Words: Media-Portfolio, Physical Education, Authentic Assessment

1 Introduction

Multimedia has advanced rapidly and has been incorporated positively in education

Nabeyama (2003) pointed out that students became more active by watching video clips which were taken of their movement. In a study by Suzuki (1999/2003), it became clear that video-material affected both the affective and psychomotor-skill domains very well. Emori (2003) reported that use of the “Media-Portfolio” was effective as a tool in teaching students to acquire new skills. This strategy was implemented in motor learning. That is, its function is centered

on psychomotor skills as it gives students feedback for the purpose of improving how to move more effectively and efficiently.

Hayes (2007) found that Video-Games as introductory activities were effective in physical education. Students were very interested in Video-Games. Their performance is assessed by good or bad. They are active not to pay attention comparing others’ skill. That is, its function is centered on both affective and cognitive domains. Therefore, students have to learn while motor learning unites cognitive learning. However, occasionally it is insufficient for assessment supporting interactive learning which is a transformation. Next, Suzuki & Saichi (2007) incorporated “Media-Portfolio” which promoted both feedback and feed forward while enhancing the acquisition of skill and increasing cognitive learning in physical education. The following viewpoints were

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found concerning the practice of “Media-Portfolio” assessment (Suzuki&Saichi, 2007).

- 1) “Media Portfolio” becomes the assessment that values the process of leaning and instruction.
- 2) “Media-Portfolio” is the assessment that captures "a scene" and "a context" of learning and instructing.
- 3) “Media-Portfolio” is the assessment that the present is linked to both past and future.
- 4) “Media-Portfolio” is able to generate the world of playing physical activities produced by a communication, Individual creativity is the outcome.
- 5) “Media-portfolio” gives parent(s)/gurdian(s) opportunity to participate in classes.

Therefore Suzuki&Saichi documented the importance to utilize “Media-Portfolio” in physical education classes. Also, it may be accepted that unification of learning and instruction is promoted by sharing information with students, teachers and parent(s)/guardian(s).

That “Media-Portfolio” by making multimedia data will be used in future studies. Therefore, the purpose of this study examines and clarifies the contents of “Media-Portfolio” as a strategy is incorporated in physical education.

2Examination Contents

2-1 Video-Clips

A learning assessment has three functions.

- 1) Promoting a student's self-assessment and self-understanding.
- 2) Checking the success or failure of a teacher's instruction, and improving the next instruction according to the result.
- 3) Supporting to grade students...etc.

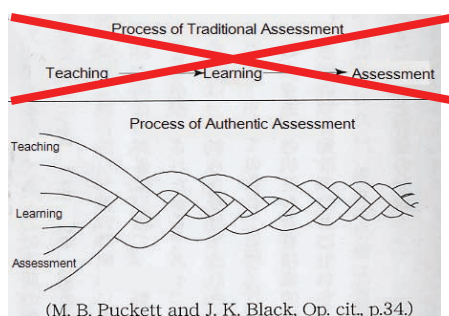


Fig1. Seamless of learning, teaching and assessing

These functions must appear in PE classes as if learning, teaching and assessing is like

Seamless (Puckett&Black, 1994). Therefore, it is necessary to consider conditions required for physical education in order to realize it. The characteristic of the learning outcome of physical education must be recognized.

First, it is not static but dynamic. It is because moving is critical in physical education. Second, it should be expressed as the mode rather than the code. The story of learning is more important than the result of learning in physical education. Third, it is relies on the positiveness to movement, wellness and sociality, more than the high level of an athletic ability. It is because the learning outcome of physical education must be made useful to what makes people's lives rich.

Rink (2003) mentioned that the VCR/DVD recorder/player and computer can be used to motivate students and give students a perspective on the "whole". Rink (2003) was used to point out to use visual materials well; the teacher should preview these materials, use them for a specific purpose, and set up the equipment for their use in advance. That is, although the introduction to the physical education of video-clips has a big effect, it may influence negatively to this study.

In physical education, it is possible to decrease the time for students to play through an activity. If this happens, “Media Portfolio” will be used for assessment only. It is necessary to show clearly how the objective should be obtained which is mentioned in video-clips. Suzuki&Saichi (2007) pointed out that it should be a combination of data not only video-clips but comment data etc. That is, using only video-clips may be carried out only for correction and an improvement of a "motion" from the beginning to the end. This may lead students to pay attention to the results of a movement too much. Therefore, in order to make one focus on learning, not only video-clips but other multimedia information becomes indispensable so that a situation and the context can be shown to students in the real world. This became clear from the practice research focusing on collecting video-clips in 2008. Student’s original information is indispensable. Video-clips are useful by

combining with this information with other information. Therefore, it is useless what was taken by video. The video as multimedia information is recommended.

In a study by Imamura (2007), it became clear that students can increase “off-the ball-movement” accompanying with how to move supporting “on-ball-skill” by devising performance assessment and carrying out ball games observation. This is the assessment which took notice of observation of seeing. It was considered that “Media-Portfolio” could also acquire the same effect. And it was introduced into basketball type in fifth grader in December 2007.

Although an observer takes a video of a game, he/she cannot photo the whole court. Then, video-clips are taken moving a camera. This is suite to take a decision-making scene appropriately. The observer itself will make decisions. This was able to enhance playing performance taking advantage of the observation.

Traditional assessment was not able to be assessed authentically in order to assess a dynamic motion by a static sign. On the other hand, “Media-Portfolio” collects dynamic movement data as dynamic, and is available to assess them authentically. From such an above, it became clear as assessment information that video clips are important.

In addition, it is important not to take a video of everything but also to consider how and when to take a video is important.

Just by having being a viewpoint to photo, this assessment is useful for learning. That is, learning, teaching and assessing must be seamless (Pucket&Black,1994) .

2-2 Voice-Information

As a result of using “Media-Portfolio” by gymnastics, it became clear to be helpful leads to assess themselves or others by the sense and feeling when they learned. After Umezawa(2007) who implemented it in gymnastics unit finished the practice, he asserted the importance of voice information. Moreover, the importance of voice information is suggested also by research of Suzuki&Saichi (2007). A voice information includes in both

atmosphere and feeling correctly. The voice information which can also tell the atmosphere at that time is more effective than the text information. Then, it became clear that the voice information is important.

And it should input to “Media-Portfolio” as assessment information as soon as the event occurred. That is, in the physical education which makes playing activities mainly, although it is difficult to record as text, multimedia enables it for the overlap of video information and voice information.

This connects to student's perception. For example, in the lesson of the ball games, player's decision-making is performed each time. And, even if it has taken the same situation, the view of observing changes. This is produced with change of decision-making capability. Therefore, it is difficult to judge only from video-clips. Since it is such, it is clear that voice information is also required in accordance with video clips.

2-3 Standards

Furthermore, in order for students, teachers and parent(s)/guardian(s) to share data and to support learn, it is necessary to carry out an interaction absolutely.

In Umezawa practice (2005), it has distributed with DVD also including the others' image (All distributing DVD are same.). By that, the parent(s)/guardian(s) generated the standards, looking at a movement of the others' video clips. That is, it tends to find how their child is superior or inferior comparing with other children. This is relative evaluation and has avoided what is assessed authentically.

Pangrazi (2007, p.33) pointed out the following.

"Parents see other children participating and practicing sports skills in an organized setting." That is, the standards are asked to support the student's learning. Such above thing, Pangrazi (2007, p.33) mentioned "Physical educators can help parents find programs that minimize pressure and focus on skill development." Therefore, in order for students, teachers and parent(s)/guardian(s) to share data, the common

viewpoints have to be preparing. Then, it became clear that the assessing mutually based on collected data is required.

In addition, such assessment must be made useful of grading. So, the device of contents to which support of grading is urged is required for the teacher's "Media-Portfolio".

As mentioned above, the pillar of the contents of "Media-Portfolio" was able to be clarified in this study. It is necessary to aim at constructing the systems which can collect this assessment information easily and be harnessed from now on.

3 Conclusion

Conventionally, the computer was used in creating "Media-Portfolio" directly and DVD was distributed as "Media-Portfolio". However, this requires a lot of time and efforts. In addition, it is difficult to generate an interaction. Because it trends to pass DVD to students and parent(s)/guardian(s) in end of unit.

The web-site is more effective because it can be accessed from school and home whenever. "Media-Portfolio" should be reconstructed in web-site. It must be safety. It must be easy. It must be economic.

Therefore, "SEE" must be filled in order to see "Media-Portfolio".

Based on such an examination, contents were also considered, as shown in a figure.



Fig2. Tentative Media-Portfolio Web-Site

Fig3. Video-Clips

4 Future Direction

In this study, it became clear that video clips, voice information, and standards must be put together at the "Media-Portfolio".

Furthermore, it became clear that the web-site should be implemented to manage the "Media-Portfolio". The media portfolio software for computers is going to be improved depending on the principle of "SEE" from now.

The "Media-Portfolio" is incorporated in physical education lessons, and supposes that the influence which it has on learning is investigated in future.

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