

## Evaluation of Aeromodelling Sports Achievement Development at the 2019 National Sports Games Training center of Central Java Province

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### Abstract

The development of Aeromodelling Achievements in Central Java through the All-Indonesian Aeromodelling Federation (FASI) in Central Java is not optimal, as evidenced by the achievements in 2016 PON and 2018 National Championships which are still inferior to other provinces. Based on this, it is necessary to evaluate the development of Aeromodelling achievements in Central Java. The purpose of this study was to evaluate the development of Aeromodelling Achievement in the province of Central Java, especially during the 2019 PON Training center period. The evaluations carried out included Context (Background and Objectives), Input (Recruitment of Trainers and Athletes, Facilities and Infrastructure), Process (Exercise Program, Transportation, Coordination, Funding, Consumption) and Product (Achievements). The instruments used in this research are observation, interview and documentation. The result of this research is that the context aspect has a good vision, mission and goals. The input aspect shows the recruitment of coaches and athletes in accordance with the provisions, the condition of facilities and infrastructure needs to be improved again. Process aspect shows the training program is clear, transportation is very lacking, coordination, funding, and consumption need to be improved. Product aspect shows a pretty good performance. The conclusion of the research from the four evaluation factors at the Central Java Aeromodelling Training center is good enough, but some improvements and improvements need to be made in order to compete for optimal performance.

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## INTRODUCTION

Suherman in Candra (2017: 219) explains that achievement sports are carried out through a planned, tiered and sustainable coaching and development process through competitions with the support of science and technology (IPTEK).

The development of achievement sports, especially the Aeromodelling sport in Central Java Province, needs special attention. Central Java as one of the provinces with the largest population in Indonesia in achieving achievements at the National Sports Games (PON) and National Championships (Kejurnas) is still inferior to other provinces. Seen from the medal gains at PON and National Championships, Central Java Province is still inferior to East Java Province.

Aeromodelling comes from two words: "Aero" for air and "Model" for model. Aeromodelling is an activity that uses small (model) aircraft for recreational, educational, and sporting purposes (FASI article, 2006). According to Zuhdi (2021), aircraft modeling was initially small or often referred to as flight models. Used for the purpose of designing and manufacturing actual aircraft. Second, the design of large aircraft is reduced to a smaller scale called model aircraft.

According to Pordirga Aeromodelling PB FASI (2009: 4) Aeromodelling designs, manufactures, and flies heavier (heavier-than-air) model airplanes that have a constant lift from the wing surface, use engines, and cannot support people. Aeromodelling is an aerospace sport that is part of the Aerospace Sports Association (PORDIRGA) under the auspices of the Indonesian Aerospace Sports Federation (FASI) (Putra, 2019).

Sports coaching is the basis or key in achievement sports, the existence of PON for the Aeromodelling sport makes each region prepare its athletes to achieve achievements at the 4-yearly national sports event. Etymologically, coaching comes from the word "bina" which means one of them is getting up or trying to get something. Traditionally, coaching has been viewed as a sequential activity to improve skills

and competitive performance through training (Nelson, 2014). According to Berg (2012), coaching is a training process that can develop self-confidence, self-efficacy, and contribute to actions that create results. Coaching is about helping others to succeed.

Sports coaching must be carried out as early as possible in order to create competent, professional athletes and of course also achievers. As mentioned by Pakaya (2012), nursery or coaching from an early age must be carried out consistently, continuously, fundamentally, systematically, efficiently and in an integrated manner.

Sports coaching has several components including. 1) Organizations, Sports clubs are one of the most important actors in the sports sector. The level of quality output produced by sports clubs will increase along with satisfaction with activities carried out by stakeholders of sports clubs producing sports services from the process in sports clubs. Regarding all processes carried out in sports clubs; effective implementation of quality and quality management practices, such as training processes, infrastructure activities, team work processes will provide value to sports clubs (Demir, 2018: 02). 2) Funding, Law of the Republic of Indonesia Number 3 of 2005 Chapter XII concerning Sports Funding Article 69 says that sports funding is a shared responsibility between the government, local governments, and the community. the government and local governments are required to allocate the sports budget through the regional revenue and expenditure budget. 3) Facilities and Infrastructure, According to Soepartono (in Ribbiyon, 2018: 40), sports facilities are something that can be used and utilized in the implementation of sports activities or physical education. Meanwhile, infrastructure is everything that supports the implementation of a process (business or development). Infrastructure in sports is defined as anything that facilitates tasks and has a relatively permanent nature. 4) Athlete, according to Marta (in Priagung, 2012: 35) says the notion of an athlete is a subject or someone who has the profession and pursues a particular sport and

excels in a particular sport. Athletes are also individuals who have talents and patterns of development behavior in a sport (Wibowo, 2017:11). Finding specific individuals and encouraging them to pursue their talents to the full is a challenge. Athletes must be implemented in order to be successful in developing their abilities to a higher level. 5) The coach, Manager or coach must be the person who forms the system of values and norms, he must be a model of thoughts, actions and emotions for all members of the organization to accept, understand, learn, in their joint efforts to fulfill their needs in achieving the mission that has been set (Hanu, 2016: 419). 6) Training Program, the training program is a tool to direct training for a certain period of time with very specific goals or a planned training guide towards the best performance in a competition, the expected peak performance is to increase achievement (Lubis, 2013:1).

Based on the results of preliminary observations made by researchers on the development of Aeromodelling achievement in Central Java, the conditions and situation of developing Aeromodelling achievement in Central Java are still experiencing several obstacles and problems. It is evident from the still not optimal achievements achieved by Aeromodelling athletes in Central Java.

The success or failure of an achievement development is determined by several factors, both internal and external. Internal factors are athletes, coaches, facilities and infrastructure. Meanwhile, external factors are the support of the Federation and the Government. The success of an Achievement Coaching can be measured using an evaluation process. Evaluation is an activity that is generally used to assess or see the level of success of a program or activity. According to Darodjat and Wahyudhiana (2015) evaluation is an activity to compare an achievement that has been obtained with what should have been obtained or achieved according to the plan, the criteria that have been formulated. In relation to program implementation, the criteria in question are the criteria for successful implementation, the

process and results are evaluated for decision making, and the evaluation can indicate the success of the program. We decide to continue, suspend, upgrade, develop, approve, or reject the program. Evaluators are often assigned to guide clients in delineating theories of program change, developing responsive methods for assessing outcomes, and providing evidence for assessing program value (Peterson, C., 2019).

Evaluation is very useful to find out whether a coaching program is going well or needs to be changed because the coaching is not in accordance with the objectives to be achieved. Therefore, the researcher conducted an evaluation using the CIPP (Context, Input, Process, and Product) evaluation method for the development of Aeromodelling achievements at the PON Training center of Central Java Province in 2019.

The aims of this research are 1) Analyzing the context of developing the Central Java Provincial Pengprov Aeromodelling achievement which includes the background of the program, program objectives. 2) Analyzing the input for fostering the Aeromodelling achievement of the Central Java Provincial Government which includes human resources, infrastructure and the process of implementing the development. 3) Analyzing the process of fostering the Aeromodelling achievement of the Central Java Provincial Government which includes the process of implementing training programs, the process of recruiting coaches and athletes, consumption, coordination, welfare and support for coaching. 4) Analyzing the Central Java Provincial Pengprov Aeromodelling achievement development product which includes the results of the coaching.

## METHODS

This research is a qualitative research, this research uses a survey method with the aim of evaluating the development of Aeromodelling achievements at the PON Training center in Central Java province in 2019. The location of this research is at the Central Java PON

Aeromodelling Training center in Bloro Regency, Central Java.

The evaluation model used is the CIPP evaluation model, the CIPP evaluation model is a model developed by Daniel L. Stufflebeam. CIPP stands for context, input, process and product. The four elements are mutually sustainable and bound to obtain a recommendation or concrete result in meeting the needs of the problem to be evaluated, Fikri (2018). According to Azis (2018), Context refers to the background, history, purpose. Inputs refer to the material and human resources needed to function effectively. Process refers to the application of different practices. Product refers to the quality of the athlete's training and its usefulness to the individual and society.

Data collection techniques used in this study were observation, interviews, and documentation. According to Klassen (2012:266), the procedures for collecting survey data include efforts to limit surveys, efforts to collect information data through observations and interviews, both structured and unstructured, documentation, drawings, and protocols for recording/recording information, including design efforts. Sources of research data are administrators, coaches, athletes.

Data analysis in qualitative research, namely data reduction, data presentation, and drawing conclusions / verification.

**RESULT AND DISCUSSION**

Based on the results of research with observations, interviews and documentation of the data that has been collected and carried out in the study, it is explained through the aspects that are in the evaluation stage of the implementation of Central Java Aeromodelling achievement development, namely:

**Context**

Context evaluation which consists of the background of the coaching program planning, and the objectives of the coaching program at Aeromodelling Central Java are clear and well organized. Aeromodelling Central Java has a

clear and good background (vision and mission) in the implementation of athlete development. That is the background for the implementation of the PON Aeromodelling Training center with the implementation of coaching based on the decision of the All-Indonesian Aeromodelling Federation (FASI) of Central Java as a program to achieve maximum performance. The Aeromodelling Development Program in Central Java has been well structured according to what the trainers have arranged and agreed to by FASI Central Java. The purpose of developing Aeromodelling in Central Java is clear, namely coaching athletes among students to be able to achieve maximum achievements both nationally and internationally. the implementation of the Central Java Aeromodelling athlete development program has been going well and is structured according to the background, program planning development, and the objectives of the coaching program that has been made.

**Input**

The input evaluation contains the recruitment of coaches, the recruitment of athletes as well as facilities and infrastructure. The recruitment of trainers for the PON Aeromodelling Training center in Central Java is good, in the process the recruitment of trainers is considered based on: having an Aeromodelling trainer certificate, having experience and achievements in the world of Aeromodelling, and being able to design training programs. The trainer recruitment process was based on a feasibility test conducted by FASI, three trainers were selected, namely:

**Table 1.** List of Trainers Names PON Aeromodelling Training center, Central Java Province.

No	Name	Origin
1	Gunawan Junaidi	Jepara
2	Nur Cahyadi	Semarang
3	Satrio	Tegal

The coach is a very important factor in the process of coaching achievement. because

the role of the coach is very important, if the athlete or team he is fostering fails then, it is the role of a coach who is considered very responsible for the failure and in that case it is not uncommon for the coach to be required to resign because of that failure (Adzalika, 2018: 91).

The recruitment of athletes for the PON Aeromodelling Training center in Central Java is good, athletes are selected through direct monitoring by the coach at the Aeromodelling championships attended by athletes. Furthermore, athletes carry out several selection processes such as skills tests, physical tests, psychological tests. Through these tests the coach can identify the actual condition of the athlete. Athletes who are selected and prepared for the implementation of sports achievement development at the Aeromodelling Pengprov Central Java must have requirements based on predetermined programs, namely: having an ideal physique, physically and mentally healthy, having talent or expertise in sports, having a minimum charter at the provincial level and supporting media. The selection process is carried out in a strict and structured manner so that coaches can get athletes who match the coach's needs. Through a monitoring process and a series of tests, the athletes selected for the Central Java PON Aeromodelling Training center are:

**Table 2.** List of Athletes at the PON Aeromodelling Training center in Central Java Province.

No	Name	Origin
1	Iyan Cahya	Sleman
2	Umen	Semarang
3	Iwan Fitrawan	Salatiga
4	Ana Rimbahayu	Solo

The facilities and infrastructure at the PON Aeromodelling Training center in Central Java are generally in good condition. Facilities and infrastructure are factors that support the successful implementation of sports achievement coaching. According to Harsuki (2003:379), sports facilities and infrastructure are a

"container" for carrying out a sports activity, thus in welcoming the future, Sports Indonesia must prepare "cargo" in sufficient quantities as needed so that everyone has the same opportunity to participate in sports. exercise and achieve good fitness, good health and sporting achievement. In addition, good and standard facilities and infrastructure will improve the economy of a region or country. For now, the supporting facilities and infrastructure for the Central Java Aeromodelling development program are still said to be not good because considering that the facilities and infrastructure in Aeromodelling are also classified as uneconomical. Utilization and investment of facilities and infrastructure is important given the high cost of providing Aeromodelling facilities and infrastructure.

**Process**

Process evaluation contains training programs, transportation, coordination, funding and consumption. The training program implemented in the development of Central Java Aeromodelling athletes has been running according to what researchers have read and interviews with coaches in each sport already have an exercise program and have scheduled their training. The training program that has been prepared is then applied to the athletes to prepare themselves for the championships that have been scheduled, both regional, national and international championships. Central Java Aeromodelling athletes did not experience any difficulties in following the training program provided by the trainer. The training program is made on a micro and macro basis, the training program is also made based on a timeframe agenda, namely, daily, weekly and monthly. It includes physical, technical and mental training. And the coaching team also held a tryout to find out the progress of the athletes' training results.

Transportation at the PON Aeromodelling Training center in Central Java in general is still very lacking because the number of vehicles is still inadequate. In addition, in the training process, coaches and athletes still use private vehicles. This is of

course a note because of the importance of transportation for the mobilization of athletes during training and competitions, transportation that is not supportive can interfere with the athlete's condition both physically and mentally.

Coordination at the PON Aeromodelling Training center in Central Java is quite good, it can be seen from the training that there are representatives from the FASI and KONI management as a form of supervision of the development of Aeromodelling sports achievements. The management of sports coaching that runs always coordinates with related parties such as with central institutions and other institutions as well as clubs, coaches, and athletes has gone quite well, it's just that there needs to be improvements to coordination in carrying out joint commitments. Coordination is an internal information system that is a must in the running of an organization that aims to ensure the availability of clear and effective information and to ensure the smooth running of a program in order to avoid miscommunication problems.

Funding is one of the factors that support the results of coaching, because it is difficult to carry out coaching to achieve maximum performance without funds. Based on the findings of researchers in the field, the funds obtained for the development of Aeromodelling athletes in Central Java came from the APBD and other sources. The budget is a plan for the program described in financial form in the form of an estimate of income and expenditure for a period of one year. According to Harsuki (2003:139), the National Olympic Committee (KONI) always develops two budgets, namely a one-year budget for short-term plans and a four-year budget to support long-term plans.

Funding for Central Java Aeromodelling PON Training Center Judging from the findings of researchers in the field, it was explained that the funds obtained from the Central Java Aeromodelling Pengprov and the funds provided included participating in national championships. Based on the problems that researchers found in the field, it can be said that

funding is still lacking in coaching athletes from the Central Java Aeromodelling Pengprov.

Consumption, Provision of appropriate consumption can be seen from the quantity and quality that can produce optimal physical conditions and provide enough energy for athletes during their activities. Sports food provides nutrition to meet the metabolic and energy needs of the sports person. The nutritional components of sports food can be divided into basic nutrition and functional factors. Basic nutrition refers to the nutrients or metabolites required by the human body. Functional factors are bioactive ingredients that have potential effects in improving the functions of the human body, such as protection of articular cartilage and improving muscle quality (Cui, 2022).

Based on the results of research on the implementation of athlete development at the Aeromodelling Pengprov Central Java regarding consumption intake, it was found that feeding was given to athletes on time 3 (three) times a day, namely in the morning, afternoon, and evening fiber which was provided directly in the athlete's dormitory. However, the food given to Central Java Aeromodelling athletes was not in accordance with the nutritional intake needed by an athlete and there was no provision of vitamins/supplements to support the athlete's appearance.

### **Product**

Product evaluation contains an assessment of the achievements achieved. Achievement is an absolute target for every achievement development, especially for the Training Center program for the largest national sports event. Achievement is a product of a coaching that is planned systematically and well executed. Based on available data, Central Java's Aeromodelling achievements, especially at the last PON 2016 event, did not match the medal tally that had been set, which was 1st place.

Product in a management or management is the main classification in a management process. A further meaning is that all things that are planned and carried out systematically are

aimed at producing the desired product. However, philosophically, the meaning of an outcome cannot be separated from systematic planning and organized implementation.

## CONCLUSION

Achievement Development at the Central Java PON Aeromodelling Training Center according to the results of research and discussion of the four evaluation aspects, namely context evaluation which refers to the background and vision and mission can be concluded as good. This is in accordance with the alignment of the organizational background and the organized vision and mission of the central management. Inputs that refer to the recruitment of coaches, athletes and infrastructure can be concluded as good. This refers to the use of a good recruitment system and also through strict supervision and testing. The process which refers to the implementation of training programs, funding, consumption, welfare, coordination and transportation can be concluded as quite good but there are some improvements that need to be made. The product which refers to the results collected by the researcher can be concluded as good. The achievements in PON 2016 with the results of ranking 2 in the final standings and the achievements in the championships after are an indication of a fairly good achievement but not yet optimal because it has not reached the target, namely 1st place.

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