Monitoring System Of Teachers On Education And Training Activities (TRAINING And EDUCATION) In The Halls Of Public Works (PU) Bandung

Mustika Hartika Nursari[1],

[1] Teknik Informatika – Universitas Komputer Indonesia
Jl. Dipatiukur 112-114 Bandung

Email : mustikahartikannursari_10109103@yahoo.com[1],

ABSTRAK

Center for Education and Training (Training) of Public Works (PU) is a government organization that serves as the implementation of Education and Training (Training) to improve the competence of employees of Public Works (PU). Center for Education and Training (Training) of Public Works Bandung in Java street number 8-10 Bandung, implement education and training (Training) with participants, primarily from West Java were recommended by their respective superiors place he worked.

The problems that exist in the activity Education And Training (Training) it is difficult to see the progress and quality of Education and Training (Training) visits of teaching factor for all activities done manually.

Seeing the proficiency level of the problem it is necessary in the wake of Teachers At Event Monitoring System And Training (Training) at Bandung Institute of Public Works. Results of the study were made already simplify system monitoring teachers.

Keywords: System, Monitoring, Training, Public Works, Teacher

1. PENDAHULUAN

The fastest growing technology affects all aspects of human life. Technological change man in completing the work include looking for, take decisions, make judgments and estimates for planning and control. Planning system allows storage of data konversional replaced in the form of data that can be stored in digital form thus increasing the efficiency of the search data and maintenance data. Center for Education and Training (Training) of Public Works (PU) is a government organization that serves as an education and training to improve the competence of employees of Public Works (PU). Center for Education and Training (Training) of Public Works located at street number 8-10 Java, Bandung, implement education and training to eligible employees who have been recommended by their respective superiors place he worked. Participants who follow the activities of Education and Training (Training) in the Central Public Works generally comes from West Java.

In their duties as providers of education and training (Training) of Public Works (PU), to enhance the competence of participants in accordance with the vision and mission as well as maintaining the quality of the education and training system needed Monitoring Lecturer in education and training (Training) of the faculty employees who follow Education And Training (Training) at the Institute of Public Works (PU). Monitoring is a process of oversight of an activity to obtain data or from a variety of sources. Evaluation of the data processing activities of monitoring to determine the outcome of an activity. Evaluation of the teachers is very necessary to get on the competence of teachers who determine the success of the program in accordance with the vision and mission of education and training centers (Training) of Public Works (PU). Teachers deliver material or modules in the mastery of the material makes the participants are unable to absorb the material presented by the teacher. The evaluation of the module is very necessary material or how the quality of their materials or modules. Material or poor-quality modules will result in participants who are less absorbing material, so that the value of the participant under graduation standards.

In meeting the requirements relating to data processing in PU training hall there are several obstacles including teacher evaluation data processing is still done manually. Field evaluation of teacher training centers are still using questionnaires PU board in evaluating the performance of teachers training, so they need some time to process the results of the questionnaire. This resulted in delays in teacher evaluation report creation. To overcome these problems required a system that can handle data processing, evaluation of teacher training so that more efisien.Berdasarkan exposure to these problems, the authors conducted research on

Monitoring System Lecturer at teachers in training activities at the hall PU Bandung.

1.1 Monitoring system

The monitoring system is a process for collecting data or from various resources. Typically the data collected is the data realtime. Broadly speaking stages in a monitoring system is divided into three major processes as shown in Figure 2.3 below:

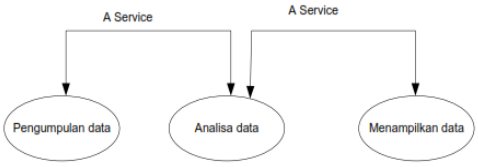


Figure 2.1 In Process Monitoring System

The action, which occurred between the processes in a monitoring system is a form of service, which is a process that continually runs at specified time intervals. The processes that occur in a monitoring system starting from the collection of data such as data on network traffic, hardware information, and others that later were analyzed in the data analysis process and ultimately the data is displayed. In some applications the monitoring system, access completely restricted from any local host terminal. The question is whether it can be monitored from a distance, where all the data is collected from a computer terminal that is in a different location with the instrument, for example by using a LAN (Local Area Network) or the Internet. [2]

1.2 *Entity Relationship Diagram (ERD)*

ERD is a network model that uses the arrangement of data stored in the abstract system. This differs from the ERD DFD which is a model of network functions to be implemented by the system, while the ERD is a model that emphasizes data network structures and relationship data. ERD has elements that [6]:

1. Entity.

Entity is described with a bunch of a rectangular shape. Entity is something what is in the system, real or abstract where data is stored or where there is data. Entity named with a noun and can be grouped into four types of names, that people, objects, locations, events (there is a time element in it).

2. Relationship.

Relationship depicted with a lozenge. Relationship is a natural relationship that occurs between entities. In general liaison Relationship named with verb base, making it easier fatherly relation do the reading (can be active or passive sentences). picture of the relationships that occur is a rhombus shape associated with two rectangular shapes.

3. Relationship Degree.

Relationship Degree or degree of relationship is the number of entities participating in the relationship. The degree of relationship frequently used in the ERD are:

a. Unary Relationship.

Unary Relationship is a model relationship that occurs between entities that originate from the same entity set. Unary Relationship is also often referred to as a recursive relationship or reflective relationship.

b. Binary Relationship.

Binary Relationship is a relationship model between instances of an entity type (two entity originating from the same entity).

c. Ternary Relationship.

Ternary Relationship is a relationship between instances of the three types of entities unilaterally.

4. Attributes.

Attribute is something that explains what exactly does the entity or relationship, so it is often said to be the attribute is an element of each entity and relationship.

5. The cardinality (Cardinality).

Cardinality (Cardinality) relationship indicates the maximum number of tuples that can relate to the entity in the other entity. From a number of possibilities for the many relationships between these entities, the cardinality of the relation refers to the maximum correlation occurs from one entity to another entity and vice versa. There are three kinds of relations, namely the cardinality.

a. One to One.

b. One to Many or Many to One.

Many to Many.

1.2.4 Analysis of Case Teaching in Activity Monitoring Training

Analysis monitoring cases teachers will be assessed with the provisions aspect. all aspects on the value of having a range of values from 0 to 100. The aspect that is assessed, among others:

1. Control Material
2. Timeliness
3. Systematic Presentation
4. Use Methods And Tools
5. Sympathy Power, Style And Attitude
6. Use of Language and Volume.
7. Giving Motivation
8. Achievement Instructional
9. Opportunity FAQ
10. Satisfaction of Teachers Answers

Analysis of the teaching monitoring system case will be assessed by the provisions aspect or parameter. All aspects or paremeter have each indicator. In this system, the first is to determine indicators that the reference to source data from monitoring required in the evaluation of needs. The indicator can be seen in Table 3.1.

Tabel 3.1 Monitoring Indicators Teachers

Parameter	Indicator	Data Source	Purpose

Instructional Goals	Material submitted must correspond to the learning objectives	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
Use of Language and Volume	The use of language that is easily understandable participants.	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
material mastery	Participants understand the material presented	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
	Active participants in the learning process	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
Penggunaan Metode Dan Alat Bantu	WI memakai metode pembelajaran yang bervariasi	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
	Pemakaian media pembelajaran yang menarik		
Giving Motivation	Ice Breaking effective usage.	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
Use of Language and Volume	Mastering Communication Techniques interesting	Summary report tabulation of teacher evaluation	Assessing the performance of teachers

Nine indicators above will be used to determine the performance level of teaching every day Judgment against all aspects on the use of formula Value father Wuritomo Nugroho, ST., MT in the aspect of material pengasaan = number of respondents value: the number of respondents

1.2.5 Analisis Kasus Monitoring Materi atau Modul pada Kegiatan Diklat

Materials or modules may be in Monitoring Lecturer at the provision of some aspects. Aspects of the module or material considered include:
1. Linkage material with the task.
2. The level of material benefits.
3. Quality of the material.
4. The level of difficulty of the material.
5. Media support (illustration, transportation, image, etc.).
6. When the presentation.

Monitoring system case analysis Lecturer at teachers will be assessed by the provisions aspect or parameter. All aspects or paremeter have each indicator. In this system, the first is to determine indicators that the reference to source data from monitoring required in the evaluation of needs. The indicator can be seen in Table 3.3.

Tabel 3.2 Indikator Monitoring Pengajar

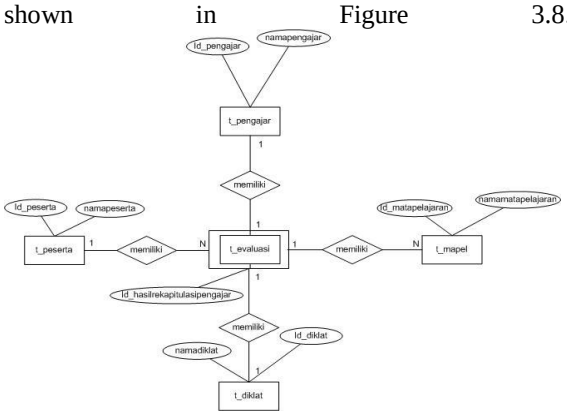
Parameter	Indicator	Data Source	Purpose
The linkage materials with the task.	Material submitted must correspond to the learning objectives	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
The level of material benefits.	The use of language that is easily understandable participants.	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
Quality of materials	Participants understand the material presented	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
The level of difficulty of the material	Active participants in the learning process	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
Media support (illustration, transportation, image, etc.).	WI wears a variety of learning methods	Summary report tabulation of teacher evaluation	Assessing the performance of teachers
	Interesting learning media usage		
time presentation	Ice Breaking effective	Summary report	Assessing the

	usage.	tabulation of teacher evaluation	performance of teachers

Six indicators above will be used to determine the level of quality or content of the training module. The example in the case analysis Monitoring Lecturer at the matter is to use the formula: setiah selection value or points for each selection. Jumalah selection of participants multiplied by the value or points that choice and of the results of the value divided by 100%.

1.2.6 Analisis Data

Analysis of the data is the data that is used in the development process in Activity Monitoring System for Teacher Education and Training in the Central Public Works (PU) Bandung. Data modeling is used to form an Entity Relationship Diagram (ERD) as shown in Figure 3.8.



Gambar 3.1 ERD Sistem Monitoring Pengajar pada Kegiatan Diklat.

Permodelan Entity Relationship Diagram (ERD) memiliki atribut yang dijelaskan pada table 3.10.

Tabel 3. 3 Atribut Entitas Pada Entity Relationship Diagram (ERD)

No	Nama Entitas	Atribut
1	t_peserta	id_peserta, nip, nama_lengkap, gelar_akademis, tempat_lahir, tanggal_lahir, jenis_kelamin, propinsi, kota, unit_kerja, pendidikan, jurusan, formal, informal, sts, sts_daerah, jabatan, pangkat, bidang_kerja, masa_kerja, tahun_kerja, alamat_kantor, alamat_rumah, peserta_dari, telp_kantor, telp_rumah, telp_hp, email, agama, pantangan_makanan, hobbi, olah_raga, tinggi_badan, berat_badan, saran, foto
2	t_pengajar	id_pengajar, nip, nama_lengkap, gelar, jenis_kelamin, pengajar_dari, unit_kerja, golongan_ruang, tempat_lahir, tanggal_lahir, alamat_rumah, telp_rumah, kode_pos_rumah, jabatan, instansi, alamat_kantor, telp_kantor, kode_pos_kantor, kabupaten, propinsi, jenis_tugas, pendidikan_tertinggi, spesialisasi_pendidikan, tahun_kelulusan, tanda_tangan, foto, create_date
3	t_diklat	id_diklat, nm_diklat, kd_diklat, angkatan, hari, tanggal, waktu_jam, jum_peserta, sudah_evaluasi, status_aktif, create_date.
4	t_mapel	`id_mapel, id_diklat, kd_mapel, nm_mapel, create_date, status_aktif,
5	t_evaluasi	id_evaluasi, id_diklat, id_mapel, id_pengajar, penguasaan_materi, ketepatan_waktu, sistematika_penyajian, PMDAB, DSGDS, PBDVS, PMB, PTI, KTJ, KTJP, create_date.

2. Perancangan Antar Muka

2.1Perancangan Antarmuka Untuk Pengguna Sebagai Admin

The design for the user interface as admin is designing the interface for users as admins do pengelolahan process data related to the training hall pu.

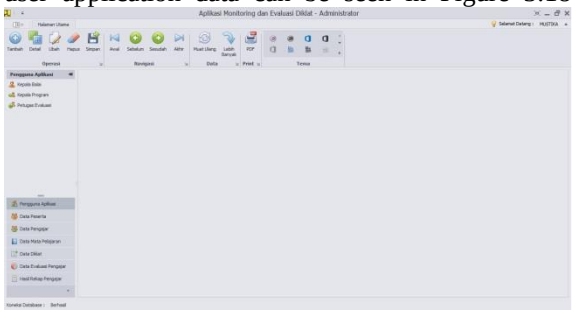
1. Login Page Admin Interface Design The design of the interface is the admin login page as a user interface design for the admin login by way of admin username and password as shown in Figure 3:17



Gambar 3.2 Perancangan Antarmuka Halaman Login Admin

2. Interface Design Application User Guide Page user interface design application is for an admin user interface design process pengelolahan

user application data can be seen in Figure 3:18



5. KESIMPULAN

Based on the results of the research that has been conducted in the Central Public Works it can be concluded:

1. Teachers Monitoring System makes it easier for the head of programs and services in passing judgment an increase in employment and job performance more objectively in the hall of Public Works (PU).
2. The monitoring system greatly simplifies the head teacher programs and services to determine the extent of training that is required by the hall of education and training (Training) of Public Works (PU) adapted to current developments

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