

# Curriculum Development at PT. KAI Training Center Ir. H. Djuanda Bandung

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## ABSTRACT

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Investing in Human Resources (HR) is crucial for a company's success despite technological advancements. High-quality human resources are essential, serving as the driving force within an organization. The Manager Curriculum collaborates to design a competency-based curriculum tailored to the company's needs, emphasizing attitude, skills, and knowledge. The syllabus outlines long-term learning plans. Learning methods include discussions, case studies, and exercises to engage participants effectively. Teaching materials, in the form of handouts, are prepared and approved to facilitate systematic learning. Overall, nurturing human resources is vital for an organization's growth and competitiveness.

*Keywords:* Human Resources (HR) Investment, Technological Advancements, High-Quality Human Resources, Competency-Based Curriculum

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## 1. INTRODUCTION

Human Resources (HR) is a crucial investment for the development of a company [1]. Despite the rapid advancement of sophisticated technology posing a threat to the role of humans, an organization or company cannot function effectively without paying attention to the development of its human resources [2]. A company will not achieve its goals successfully without quality human resources. Recognizing the importance of human resources, organizations must focus on the needs of their employees, as they are the driving force, thinkers, and planners in all work activities within an organization or company. This factor drives both service and manufacturing companies to compete in developing their human resources due to the increasing and evolving competencies among companies by focusing on the competencies of their respective human resources [3].

Therefore, if a company expects to remain competitive and have an advantage in the market, it must have a well-conceptualized program and the right training steps in human resource development. Training is one approach that companies use to enhance employee performance. According to [4], training is a process to shape and equip employees by adding skills, abilities, knowledge, and behavior. This means that training will shape the behavior of employees according to the company's expectations and equip them with various knowledge, skills, and expertise in their respective fields. Training allows employees to perform their current jobs in line with standards. One factor influencing the success of training is the training program. With a sufficient and appropriate training program for employee needs, employees will better understand and master their professions. Additionally, through training programs, it is expected to have an impact on the personal development of each training participant, leading to an improvement in their qualifications and, ultimately, advancement to larger positions and responsibilities [5].

Considering the above, PT Kereta Api Indonesia (Persero) recognizes that human resource management is a crucial factor in the company's activities. Therefore, despite being a state-owned enterprise (BUMN) focused on transportation services in the railway sector, PT KAI does not close itself to continuous innovation in developing the quality of its services, not only for customer

satisfaction but also to survive in competition with other transportation services. This is evident in PT KAI's history, proving its significant role in the transportation sector in helping to boost economic growth and national development.

The implementation of education and training in an institution is inseparable from the curriculum as a limit and reference [6]. The curriculum plays a crucial role as a guide in the implementation of learning activities in a specific institution. As explained by [7], the curriculum is a set of plans and arrangements concerning goals, content, and teaching materials, as well as methods that can be used as instructions/guidelines in organizing learning activities to achieve specific educational goals. [8] explains the content of the curriculum as subjects that must be taken and its main goal is to obtain a certificate. In the context of education and training, the curriculum is used as a guide for implementing a program containing a set of learning plans to develop the competence of training participants.

The importance of the curriculum as a guide for the implementation of learning activities requires Pusdiklat Ir. H. Djuanda PT KAI to be able to develop a mature curriculum. Therefore, aspects related to the development of the training curriculum need to be considered, especially the components of the curriculum itself. Because the curriculum, as a system, is a cohesive unit with interconnections between its components, these components provide an overview of how the education and training program will be implemented.

## 2. METHODS

This research uses descriptive research methods Secondary Data Analysis (SDA) approach. SDA is a method with utilizes secondary data as the main data source. As secondary data as the source. A study of several related literature and journals became the reference material for this article. The purpose of writing using descriptive research methods with the case study approach is to make a systematic explanation, flexible, and accurate regarding facts and properties or populations of data with relatively narrow areas or subjects.

## 3. RESULTS AND DISCUSSION

### 3.1 *History of Indonesian Railways*

The history of railways in Indonesia began with the laying of the first track of the Semarang-Vorstenlanden (Solo-Yogyakarta) railway in the village of Kemijen by the Governor General of the Dutch East Indies, Mr. L.A.J Baron Sloet van de Beele, on June 17, 1864. The construction was carried out by the private company Naamlouze Venootschap Nederlansch Indische Spoorweg Maatschappij (NV. NISM) using a 1435 mm gauge. Meanwhile, the Dutch East Indies government built a state railway through Staatssporwegen (SS) on April 8, 1875. The first SS route covered Surabaya-Pasuruan-Malang. The success of NISM and SS led private investors to build railways such as Semarang Joana Stoomtram Maatschappij (SJS), Semarang Cheribon Stoomtram Maatschappij (SCS), Serajoedal Stoomtram Maatschappij (SDS), Oost Java Stoomtram Maatschappij (OJS), Pasoeroean Stoomtram Maatschappij (Ps.SM), Kediri Stoomtram Maatschappij (KSM), Probolinggo Stoomtram Maatschappij (Pb.SM), Modjokerto Stoomtram Maatschappij (MSM), Malang Stoomtram Maatschappij (MS), Madoera Stoomtram Maatschappij (Mad.SM), Deli Spoorweg Maatschappij (DSM). In addition to Java, railway construction was carried out in Aceh (1876), North Sumatra (1889), West Sumatra (1891), South Sumatra (1914), and Sulawesi (1922). Meanwhile, in Kalimantan, Bali, and Lombok, only studies on the possibility of laying railway tracks were conducted, without reaching the construction stage. Until the end of 1928, the total length of railways and trams in

Indonesia reached 7,464 km, with government-owned tracks covering 4,089 km and private tracks covering 3,375 km.

In 1942, the Dutch East Indies government surrendered unconditionally to Japan. Since then, the Indonesian railways were taken over by Japan and renamed Rikuyu Sokyuku (Railway Department). During the Japanese occupation, railway operations were prioritized for war purposes. One notable development during the Japanese era was the construction of the Saketi-Bayah and Muaro-Pekanbaru lines for transporting coal to power their war machines. However, Japan also dismantled 473 km of tracks, which were transported to Burma for railway construction there.

After Indonesia declared independence on August 17, 1945, the takeover of railway stations and headquarters previously controlled by Japan occurred a few days later. The climax was the takeover of the Bandung Central Railway Office on September 28, 1945 (now commemorated as Indonesian Railway Day). This marked the establishment of the Djawatan Kereta Api Indonesia Republik Indonesia (DKARI). When the Netherlands returned to Indonesia in 1946, they reestablished the railways in Indonesia under the name Staatssporwegen/Verenigde Spoorwegbedrijf (SS/VS), a combination of SS and all private railway companies (except DSM).

Based on the peace agreement of the Round Table Conference (RTC) in December 1949, the transfer of assets owned by the Dutch East Indies government was carried out. The transfer took the form of merging DKARI and SS/VS into Djawatan Kereta Api (DKA) in 1950. On May 25 of that year, DKA changed to become the State Railway Company (PNKA). In the same year, the emblem of Wahana Daya Pertiwi was introduced, reflecting the transformation of Indonesian Railways as a leading transportation facility to achieve the nation's prosperity. Subsequently, the government changed the structure of PNKA to become the Railway Department Company (PJKA) in 1971. In order to improve transportation services, PJKA transformed into the State Railway Company (Perumka) in 1991. Perumka later became a Limited Liability Company, PT. Kereta Api Indonesia (Persero) in 1998.

Currently, PT Kereta Api Indonesia (Persero) has seven subsidiaries/business groups, namely KAI Services (2003), KAI Bandara (2006), KAI Commuter (2008), KAI Wisata (2009), KAI Logistik (2009), KAI Properti (2009), PT Pilar Sinergi BUMN Indonesia (2015).

#### ***Vision and Mission of KAI***

Vision To become the best transportation ecosystem solution for Indonesia.

#### **Mission**

1. To provide a safe, efficient, digitally-based, and rapidly evolving transportation system to meet customer needs.
2. To develop integrated mass transportation solutions through investments in human resources, infrastructure, and technology.
3. To advance national development through partnerships with stakeholders, including initiating and implementing crucial transportation-related infrastructure development.

#### ***3.2 Training and Education Center (Pusdiklat)***

The Human Resources (HR) development at KAI is consistently driven to produce excellent and competent employees, ensuring each individual contributes optimally to enhance the company's performance. One of KAI's steps in HR development is through a structured and competency-based education and training program (Diklat), ranging from basic competency development to professional advancement.

The development of HR competencies at KAI, through the implementation of training programs, is managed by the Training and Education Center (Pusdiklat) under the supervision of the Directorate of HR and General Affairs. Pusdiklat KAI independently organizes Diklat programs and collaborates with reputable formal and informal educational institutions, both domestically and internationally.

Leveraging technological advancements in the digital era, Pusdiklat KAI has adopted a combination of face-to-face and online learning with synchronous and asynchronous learning methods, utilizing the EDUKAI learning platform as an innovative mobile learning system. Pusdiklat KAI also collaborates with EDUKAI, Udemy, and LinkedIn Learning to broaden the learning experiences of KAI employees.

Pusdiklat KAI operates six education and training facilities distributed within KAI's working areas. In these locations, KAI employees, including front-line personnel such as engineers and conductors, undergo education and training before embarking on their professional responsibilities in the field.

1. Pusdiklat Ir. H. Djuanda Bandung Located at Jalan Laswi No. 23 Bandung, Pusdiklat Ir. H. Djuanda serves as the central hub for KAI's training and education. In addition to technical railway training, it also conducts non-railways training such as leadership, safety, legal, and more. With facilities like laboratories, a sports center, dormitories, an auditorium, a library, a place of worship, and a spacious and serene area, Pusdiklat Ir. H. Djuanda is an ideal and comfortable place for employees to develop through education and training.
2. Signaling, Telecommunication and Electricity Training Center, Also known as Balai Pelatihan Sintelis (BP-STL), this center is located at the same site as Pusdiklat Ir. H. Djuanda Bandung. Specializing in signal & telecommunication, information technology, and overhead electrification (LAA), the training center provides complete facilities for practical purposes, including signaling telecommunication & electricity simulators, an auditorium, a studio for distance learning, various laboratories, signal demonstration tools, and a workshop. The center also includes accommodation for training participants.
3. Railways Engineering Training Center Sofyan Hadi, Located at Jalan Pusdiklat Raya Medan Satria Bekasi, this training center specializes in railway training in the fields of track and bridge engineering, railway operation, overhead electrification, and electrically powered railway infrastructure. Managed by 13 structural personnel and supported by 8 functional experts, it provides comprehensive facilities such as classrooms with laboratories, accommodation for trainees and instructors, and more.
4. Operational and Marketing Training Center Agus Suroto, Situated at Jalan Ir. H. Djuanda No. 215 Bandung, this center focuses on education and training in the operational and marketing aspects of railways, including skills for Train Operations Officers (O.50), train journey coordinators, train journey controllers, support for infrastructure operations, IT for operations, conductors, customer care, basic housekeeping, supervisory housekeeping, and asset management. Participants come from all KAI working areas related to railway operations, marketing, and passenger or freight transportation. Supported by facilities like accommodation, laboratories, libraries, dining rooms, dormitories, and sports fields, the training ensures a comfortable environment for participants to shape KAI individuals with character, competence, and readiness to work in their respective fields.
5. Tractive Vehicle Engineering Training Center Darman Prasetyo, Known as Balai Pelatihan Teknik Traksi Darman Prasetyo (BPTT), this center, located at Jalan Dr. Wahidin No. 1-2 Yogyakarta and established since 1964, provides education and training in the field of vehicle and infrastructure operations. Managed by 18 structural personnel and 7 expert trainers, BPTT Darman Prasetyo offers various facilities, including classrooms, laboratories, fields, an auditorium, accommodation for trainees and instructors, and more. The main lobby of this training center also features an iconic locomotive diorama.

6. Sriwijaya Training Center Ascep Sunarto, inaugurated on September 28, 2015, Sriwijaya Training Center Ascep Sunarto or Balai Pelatihan Sriwijaya offers railway training, including training for non-electrically powered railway personnel, railway infrastructure maintenance personnel, railway equipment inspection personnel, infrastructure inspection personnel, and train journey leaders. To support the learning process, the training center is equipped with three comfortable classes: Service, Integrity, and Innovation, supported by 11 competent trainers. Located at Jalan Pasar 16 ilir, No. 264 Palembang, this training center has facilities such as a CC 202 205 locomotive simulator with equipment resembling the actual setup.

To maintain and improve the quality of education and training services, Pusdiklat Ir. H. Djuanda ensures that the curriculum and syllabus used are continuously updated to follow developments. All instructors and structural personnel also participate in various training and certifications to support the training organization. Besides holding ISO 9001:2005 certification, Pusdiklat Ir. H. Djuanda has also received accreditation from the Ministry of Transportation as an official permit from the government for Pusdiklat KAI to organize railway education and training for KAI's Human Resources (SDM). KAI provides equal opportunities for all employees who meet the requirements to participate in education and training programs, both mandatory for specific technical railway tasks requiring skill certification and for the improvement of other hard and soft skills. Human Resources are the key determinants of a company's development as a driving force in achieving success.

### 3.3 Organizational Structure

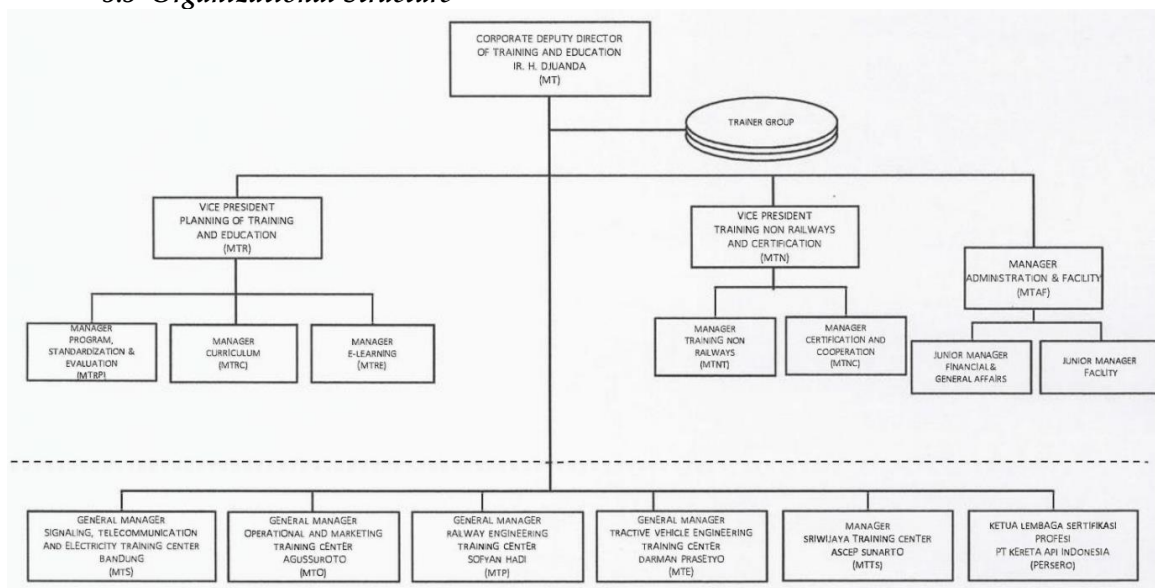


Figure 1. Organizational Structure PT Kereta Api Indonesia (Persero).

**CDD of Training and Education Development Ir.H.Juanda (MT)** is responsible for planning programs, controlling and evaluating the implementation and results of education and training, maintaining facilities, developing standardization, quality, and certification/testing of Human Resources (SDM) according to company needs, and mentoring the Training Center.

**Vice President Planning of Training and Education (MTR)** has the main task and responsibility to plan and arrange training needs, design guidelines and standardizations for training implementation, including evaluation tools, student and trainer evaluation reports, evaluate training implementation, coordinate the development and evaluation of curricula or materials, and syllabi as needed for training, plan training programs including training budgets, design and

develop training programs, materials, and methods as needed through E-Learning, coordinate the management of the education and training information system, and manage the library of PT Kereta Api Indonesia (Persero).

**Vice President Training Non Railways and Certification (MTN)** has the main task and responsibility to plan and implement non-railway training programs, evaluate and report all non-railway training activities, plan and implement collaborations with external and professional education institutions, plan and coordinate the certification or testing of railway HR.

**Manager Training Non Railways (MTNT)** is responsible for preparing calendars and schedules for teaching and learning activities, compiling lists of trainer needs, preparing trainers and training support tools, creating training RAB, creating training activity reports, managing household affairs for students and dormitories, and maintaining classrooms and laboratories.

**Manager Certification and Cooperation (MTNC)** is responsible for issuing graduation certificates according to graduation standards, planning and implementing railway HR certification as needed and coordinating with relevant parties, planning education and training with external and professional education institutions, managing administrative processes, collaborating with external and professional education institutions, and organizing collaborative training.

**Manager Program, Standardization, and Evaluation (MTRP)** is responsible for creating programs and training education plans as needed, elaborating on programs and training according to the field of training implementation, compiling trainer needs, preparing timelines/schedules for training implementation according to training programs, recruiting and developing trainers, preparing Budget Plan (RAB) and RKA allocation, drafting the concept of the director's decree, standardizing the implementation and quality control of training, outlining requirements for prospective students according to training programs, evaluating training implementation guidelines, developing evaluation methods and tools for students, trainers, training organizers, and programs, monitoring and evaluating training implementation, evaluation reports, and recommendations for improving implementation, and controlling the effectiveness of training implementation.

**Manager Curriculum (MTRC)** is responsible for developing and developing training curricula/materials and syllabi in collaboration with the Training Center, outlining the outline of the learning process, curriculum elaboration, and training planning documents at the Training Center

### 3.4 Learning Development System and Program

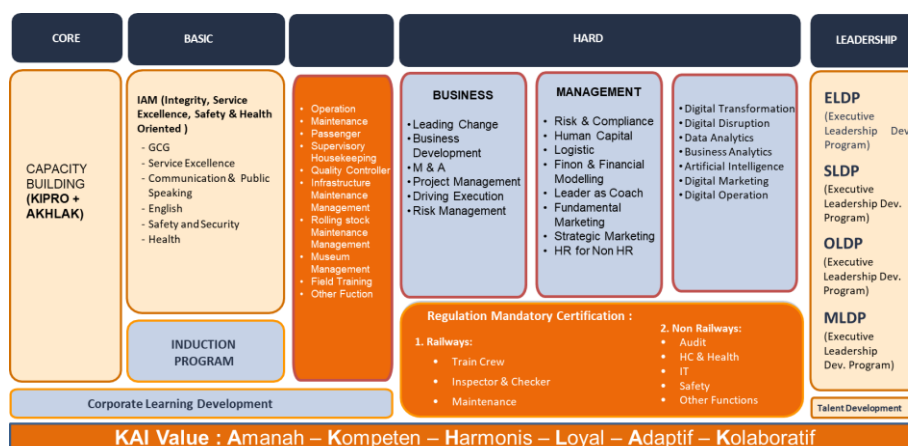


Figure 2. Learning Development System and Program

The curriculum development process at Pusdiklat KAI is overseen by the Curriculum Manager Team (MTRC), responsible for all aspects related to training curriculum at Pusdiklat KAI.

The outputs include curriculum, syllabus, lesson plans (RPP), teaching materials, and exam questions.

### Standard Operating Procedure (SOP) for Curriculum and Syllabus Development:

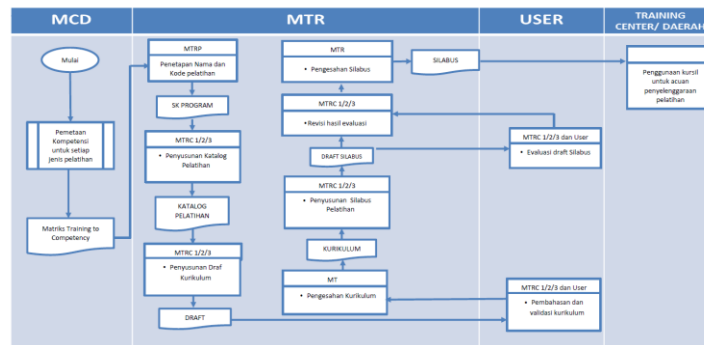


Figure 3. SOP

- MTRC categorizes curriculum development materials based on specific fields, including managerial, operational, infrastructure, facilities, and non-railways.
- Creation of training catalogs for each field, such as managerial, operational, infrastructure, facilities, and non-railways.
- MTRC drafts the curriculum based on competencies from the Assessment Resources Development (MCD) unit and coordinates with users. The curriculum form includes participants, objectives, training duration, training subjects, training hours (JP), and instructors.
- Coordination with users for discussion, validation of the curriculum, and elaboration of expected competencies. The curriculum form covers training names, objectives, duration, training subjects, training hours, instructors, and required learning materials with their respective durations.
- Curriculum approval by Corporate Deputy Director Training and Education (MT) Ir.H Djuanda or Vice President Planning of Training and Education (MTR).
- MTRC drafts the syllabus for training based on competencies from the Assessment Resources Development (MCD) unit, using a syllabus form that includes training names, subjects, participants, standard competency time allocation, basic competencies, indicators, main materials, training methods, media, learning resources, evaluation techniques, and time allocation.
- Submission of the draft syllabus to users for correction.
- Reception of draft corrections/evaluations from users.
- Before syllabus approval by MTR, it is first reviewed by MTRC or MTR.
- Syllabus approval by Vice President Planning of Training and Education (MTR) or Curriculum Manager.
- Delivery of curriculum and syllabus to training centers or regions for use as a reference in conducting training programs.

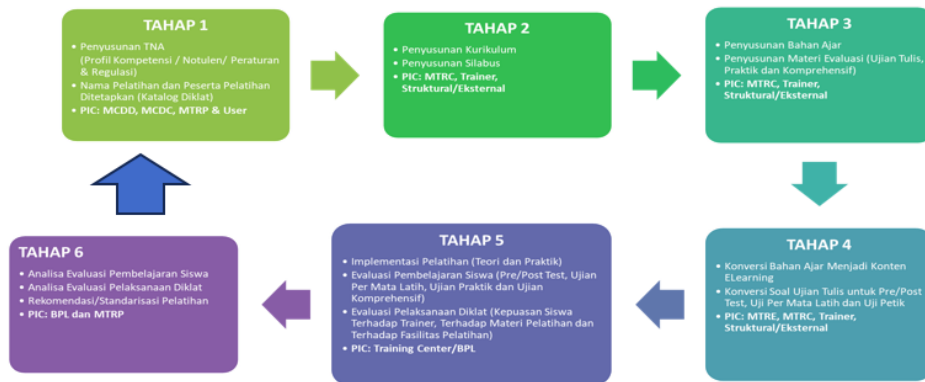


Figure 4. Delivery of curriculum

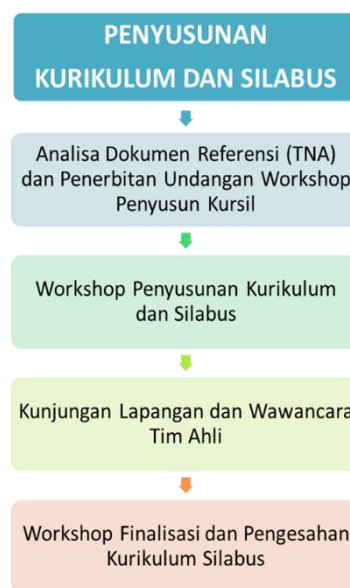



Figure 5. Step Curriculum Development

1. Reference Document Analysis (TNA) and Issuance of Curriculum Development Workshop Invitations
  - a) Analyzing TNA (Catalog, User Meeting Minutes, etc.) in accordance with Relevant Regulations (PM, SOP, Competency Profile, etc.)
  - b) Coordinating with relevant parties (BPL, Related Trainers, Structural or External) for the issuance of Invitations to the Curriculum and Syllabus Development Workshop
  - c) Issuing Workshop Invitations, preparing Workshop Consumables, and Accommodations
2. Curriculum and Syllabus Development Workshop
  - a) Conducting the Curriculum Development Workshop with relevant parties
  - b) Drafting the Curriculum until the Number of Teaching Hours is determined
  - c) Drafting the Syllabus until the determined Indicator Points that students must master (Indicators that are both theoretical and practical)
3. Field Visits and Expert Team Interviews
  - a) Conducting Field Visits and Interviews



- b) Confirming Syllabus Indicators through interviews with local Instructors, and simulating the learning methods directly in the field
  - c) Ensuring documentation is available in Photo and Video formats for reference in preparing teaching materials and completeness of related Curriculum materials
4. Finalization Workshop and Curriculum Syllabus Approval
- a) Comparing the required TNA/Competencies with the prepared Curriculum to eliminate any gaps
  - b) Designating Instructors (Units/Positions) as the basis for Invitations to prepare Teaching Materials and Issuing Instructor Invitations by the BPL team when conducting training
  - c) After the Curriculum is finalized, circulating the Signing of Curriculum and Syllabus documents.

### 3.5 Curriculum at KAI Training Center Curriculum and Syllabus Format

		<b>KURIKULUM</b>					No. Dok : FR.14.MT.2018
		TRAINING AND EDUCATION IR. H. DJUANDA					Revisi : Tahun Akademik : Halaman : 1 dari 1
[nama.pelatihan]							
PESERTA	: [jabatan.peserta]						
TUJUAN	: [tujuan.pelatihan]						
JUMLAH JP	: [jumlah.jp]						
NO	MATA LATIH	JAM PELATIHAN (JP)					PENGAJAR
		T	L	P	U	Σ	
<b>A SOFT SKILL</b>							
1						0	
	JUMLAH I	0	0	0	0	0	
<b>B HARD SKILL</b>							
<b>I CORE</b>							
1						0	
2						0	
3						0	
4						0	
5						0	
6						0	
7						0	
	JUMLAH II	0	0	0	0	0	
<b>II NON CORE</b>							
1						0	
	JUMLAH III	0	0	0	0	0	
	<b>TOTAL (JUMLAH I + II + III)</b>	0	0	0	0	0	

T : Teori, L : Laboratorium, P : Praktik, U : Ujian

Figure 6. Curriculum at KAI Training Center


		<b>SILABUS</b>						No. Dok : FR.15.MT.2018
		TRAINING AND EDUCATION IR. H. DJUANDA						Revisi : Tahun Akademik : Halaman : dari
NAMA PELATIHAN	:							
MATA LATIH	:							
PESERTA	:							
ALOKASI WAKTU	:							
STANDAR KOMPETENSI	:							
NO	KOMPETENSI DASAR	INDIKATOR	POKOK MATERI	METODE PELATIHAN	MEDIA	SUMBER BELAJAR	TEKNIK EVALUASI	ALOKASI WAKTU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1								
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4								
5								

Figure 7. Syllabus Format at KAI Training Center

### **Curriculum and Syllabus References**

- a. The Manager Curriculum collaborates with the training center and user to design the curriculum and syllabus, approved by the user/Director and subsequently determined by the Corporate Deputy Director Training and Education, Ir. H. Djuanda.
- b. The curriculum and syllabus are developed according to the company's business demands and competency development needs, encompassing attitude, skill, and knowledge.
- c. The competency-based curriculum is designed to be goal-oriented, relevant, flexible, continuous, efficient, and effective.
- d. The curriculum is specifically designed to meet the needs of the company's vision, mission, corporate strategy, and the demands of railway service users.
- e. The general basis for curriculum preparation includes: a) Identifying education and training needs related to business concerns b) Formulating required competencies c) Formulating specific and general objectives for education and training d) Designing the education and training curriculum e) Allocating time f) Allocating space, learning environments g) Preparing teaching materials/resources h) Determining relevant learning methods/strategies i) Implementing the education and training curriculum j) Evaluating the education and training curriculum.
- f. The syllabus is created by the Manager Curriculum.
- g. The syllabus contains long-term learning plans for a specific subject group oriented towards competency standards and basic competencies, including: a) Basic competencies to be achieved b) Indicators supporting basic competencies c) Main topics to be presented d) Learning methods or activities e) Tools and learning media used f) Evaluation techniques used g) Reference sources used h) Time allocation used
- h. The curriculum and syllabus forms are determined as attached in annexes 5 and 6, an integral part of the board's decision.

### ***Learning Methods***

Learning in the classroom is conducted using one or a combination of several methods, such as: a) Delivery of material b) Discussion c) Q&A d) Case studies e) Group or individual assignments f) Demonstration (interactive multimedia, laboratory) g) Exercises Methods used in the delivery of educational and training material by trainers/instructors/external trainers must consider: a) Effectiveness in delivering material to participants b) Easy and quick understanding by participants c) Stimulating and motivating participants to stay focused and enthusiastic about participating in educational and training activities.

### ***Teaching Materials***

- a. Teaching materials in the form of handouts provide information, tools, and texts needed by trainers/instructors/external trainers for planning and studying the systematic implementation of learning, systematically displaying the competencies that students will master.
- b. Handouts include the basic framework and structure of the curriculum for each subject.
- c. Handouts are prepared by trainers/instructors/external trainers.
- d. Handouts are reviewed by the Manager Curriculum and Vice President Planning and Education, then approved by Corporate Deputy Director Training and Education, Ir. H. Djuanda.
- e. The presentation of teaching materials by trainers/instructors/external trainers to students is done through a presentation in PowerPoint format.

### Guidelines for Developing Teaching Materials (HANDOUT)

Teaching materials in the form of handouts contain the following:

1. **Substance Guidelines:** The substance of the handout is prepared based on the curriculum, syllabus, and Lesson Plans (RPP).
2. **Format Guidelines:** Parts that must be included:
  - a. **Initial Section:**
    1. Cover page
    2. Author and publisher page
    3. Preface
      - Key thoughts/issues in the handout
      - Target audience or readers of the handout
      - Approach to writing the handout (differences from others)
      - Additional information or supplements and, if necessary, other learning media
    4. Table of contents
    5. List of figures/tables/appendices
  - b. **Content Section:** The content section consists of chapters, sub-chapters derived from the syllabus, and Lesson Plans (RPP), including:
    6. Lesson title/topic
    7. Formulation of competencies to be acquired
    8. Content/material:
      - CHAPTER I INTRODUCTION  
1.1 Background 1.2 Objectives 1.3 Targets
      - CHAPTER II CONTENT Comprising sub-topics derived from the syllabus, including: a) Title of sub-topic b) Content of the sub-topic c) Discussion material
      - CHAPTER III CONCLUSION Conclusion and recommendations
  - c. **Conclusion Section:**
9. Bibliography
10. Index

Figure 8. Guidelines for Developing Teaching Materials (Handout)

<b>LEMBAR PENGESAHAN MATERI AJAR (DIKTAT)</b>	
Materi Ajar (Diktat) yang berjudul "CONTOH"	
Dibuat oleh:	
Trainer,	
( _____ Nama _____ )	
NIPP. _____	
Diperiksa oleh:	
VP Planning of Training and Education,	Manager Curriculum,
( _____ Nama _____ )	( _____ Nama _____ )
NIPP. _____	NIPP. _____
Disetujui oleh :	
CORPORATE DEPUTY DIRECTOR TRAINING AND EDUCATION IR. H. DJUANDA,	
( _____ Nama _____ )	
NIPP. _____	

Figure 9. Endorsement sheet for training materials

### *Assessment Criteria*

Participant assessment for Education and Training is conducted using both test and non-test assessment techniques.

1. **Test Assessment:** a) Written test, consisting of pre-tests and post-tests, with the following assessment criteria:

**Success in the written test:**

- a) Ability to answer exam questions correctly and address questions according to specifications
- b) Ability to analyze cases using appropriate approaches and correct analytical techniques
- c) Ability to express opinions concisely, clearly, and without ambiguity

**Evaluation method for pre-tests and post-tests:**

- a) Minimum score: 75
- b) Maximum score: 100
- b) Non-written/oral tests, such as presentations and comprehensive assessments

2. **Non-test Assessment:** a) Observation b) Interviews c) Questionnaires d) Self-assessment, which includes the following aspects:

**Discipline aspect, consisting of:**

- a) Punctuality in attending classes
- b) Leaving class and dormitory with specified time limits
- c) Overnight departures from the dormitory within specified time limits
- d) Timely completion of assignments
- e) Neatness in dressing
- f) Neatness of the bedroom
- g) Responsibility for study duties, including the use of library books
- h) Use of educational and training facilities
- i) Punctuality in attending morning exercises, SKJ, PBB, morning and evening gatherings, discussions, deepening of material, and other events.

**Leadership aspect, consisting of:**

- a) Objectivity and decisiveness in decision-making
- b) Coordinating with peers
- c) Supporting mutual agreements/applicable rules
- d) Advocating for the true interests of the public
- e) Keeping promises and being accountable
- f) Easy to manage and give directions
- g) Setting a good example
- h) Acceptable to others, both in personality and behavior
- i) Willing to criticize and be criticized
- j) Daring to take personal responsibility for tasks/work and others performed

**Cooperation aspect, consisting of:**

- a) Completing tasks with others (discussion, consensus meetings)
- b) Respecting others
- c) As much as possible avoiding conflicts
- d) Not dictating or dominating the group/forum
- e) Prioritizing the interests of the public
- f) Politeness, friendliness, and humility while having a stance
- g) Trying to foster harmonious relationships between participants and trainers/instructors/external trainers
- h) Understanding the desires of others
- i) Having empathetic tendencies

- j) Emphasizing the interests of the group rather than personal interests
- Conduct assessment for students:**
- a) Conduct assessment for students includes behavior, obedience, and discipline.
  - b) Student conduct assessments are conducted by Bimsuh and known to the Manager of Training Non-Railways/ Manager of Implementation Training Center/ Junior Manager Internal Training/ Assistant Manager Reporting and Evaluation.
  - c) Evaluation assessments are carried out during the training period.
3. Students can take remedial classes up to 2 times. If after 2 remedial attempts they are still unsuccessful, the student will be considered not passing.
  4. Every pre-test and post-test must obtain validation from the Manager of Training Non-Railways and the Manager of Implementation Training Center.
  5. The assessment graduation guidelines are outlined in a specific assessment guidebook.
  6. Participants in education and training are considered successful if:
    - a) They have completed education and training
    - b) They have obtained a STTP/certificate with a minimum score of 75 in each subject.

### 3.6 Guidelines for Developing Question and Writing Pre-Test/Post Test Questions

- I. Development of question guidelines
  - a. Representative, meaning that it represents the content of the syllabus/curriculum or material taught accurately and proportionally.
  - b. Components must be detailed, clear, and easy to understand.
  - c. Questions should be made in accordance with the indicators and question formats specified.
- II. Writing pretest/post test questions
  - a. Material
    - a. Questions must be in accordance with the indicators, meaning that questions must ask about behaviors and materials to be measured according to the formulation of indicators in the guidelines.
    - b. Distractors must function properly.
    - c. Each question must have one correct answer, meaning that one question only has one key answer.
    - b. Construction
      - d. The main question must be formulated clearly and firmly; each question item only contains one problem/idea.
      - e. Formulation of the main question and answer choices must be necessary statements only.
      - f. The main question should not provide clues to the correct answer.
      - g. The main question should not contain statements that are doubly negative.
      - h. Answer choices must be homogeneous and logical in terms of content.
      - i. The length of the answer formulations must be relatively the same.
      - j. Answer choices should not contain statements such as "all of the above are incorrect" or "all of the above options are correct."
      - k. Pictures, graphs, tables, diagrams, discourses, and their types found in questions must be clear and functional.
      - l. The main question should not use expressions that have uncertain meanings, such as "preferably," "usually," "sometimes."
      - m. Question items should not depend on the answers to previous questions. Dependence on previous questions causes students who cannot answer the first question correctly to be able to answer subsequent questions correctly.
      - c. Language
        - n. Each question must use language in accordance with the rules of the Indonesian language. The rules of the Indonesian language in writing questions include:
          - 1) Sentence usage
          - 2) Subject elements

- 3) Predicate elements
  - 4) Subordinate clauses
  - 5) Word usage
  - 6) Choice of words
  - 7) Spelling
  - 8) Letter writing
  - 9) Use of punctuation marks
- o. The language used must be communicative so that the statements are easily understood by learners/participants.
- p. Answer choices should not repeat words/phrases that do not constitute a unified meaning.

<b>PEDOMAN</b>						
<b>UJIAN TERTULIS DAN UJIAN LISAN (KOMPREHENSIF)</b>						
<b>A. Instrumen soal ujian tertulis</b>						
1. Pre – Test		:50 soal				
2. Post – Test		:50 Soal				
<b>B. Bobot soal ujian tertulis</b>						
NO	KOMPONEN	BOBOT				
1	Pengantar / Pengetahuan	30%				
2	Inti/ Pemahaman	40%				
3	Aplikasi / Pendukung	30%				
<b>C. Bobot soal Tes Lisan (Komprehensif)</b>						
NO	KOMPONEN	BOBOT				
1	Pengantar / Pengetahuan	40%				
2	Inti / Pemahaman	40%				
3	Aplikasi / Pendukung	20%				
<b>D. Instrumen penilaian Tes Lisan (Komprehensif)</b>						
NO	ASPEK YANG DINILAI	SKOR				KATEGORI
		P1	P2	P3	R	
1	Penampilan (sikap dan cara berbicara)					
2	Penguasaan Masalah					
3	Ketepatan dan kejelasan jawaban					
4	Kemampuan mempertahankan pendapat/ argumentasi					
5	Kemampuan analisis masalah					
6	Cara penyajian					
<b>Skor total</b>						

Figure 10. Written exam guidelines

- **P1, P2, P3** : Examiner 1, 2, and 3
- **R** : Average score from 3 examiners
- **Score Intervals :**
  - **Score Range**
  - 91-100: A
  - 81-90: B
  - 75-80: C

#### **Remedial and Make-Up Exam**

1. Participants who do not achieve a minimum score of 75 are required to undergo remedial activities. Remedial activities are conducted in several ways:
  - a. If a trainee has successfully obtained a score of 75 in the mid-term and final exams but the score for assignments/laboratory practicals is below 75, the remedial involves additional assignments.
  - b. If a trainee fails to achieve a score of 75 in the mid-term and final exams but has already

- scored 75 or above in assignments/laboratory practicals, the remedial involves a re-examination. c. If a trainee fails to achieve a score of 75 in both mid-term and final exams and scores below 75 in assignments/laboratory practicals, the remedial involves a re-examination and additional assignments/practicals.
2. Remedial is only provided to trainees who receive a final exam score below the passing criteria (score below 75).
  3. The maximum score for remedial results is 75.
  4. Make-up exams are offered to trainees who are unable to participate in the regular exams due to illness or other acceptable reasons. The make-up exam is conducted before the end of the training, and the score is equivalent to the regular written exam score.
  5. Trainees who fail the comprehensive exam are given an opportunity to take one re-exam on the topics considered not mastered.
  6. The timing of the comprehensive remedial exam can be conducted concurrently with the regular remedial exam or before its scheduled time.

#### ***Graduation Assessment***

1. Graduation determination can be based on the following components: a. Preliminary Exam (Pre-test) b. Final Exam (Post-test) c. Written Exam (Written test) d. Assignments e. Practical Work f. Field Work Practice g. Presentation and Comprehensive Exam
2. Graduation assessment can be adjusted to user needs as follows: a. Refreshing education and training, education, and training with a total JP (Training Hours)  $\leq 40$  must undergo pre-test and post-test. b. For education and training with a total JP  $\geq 40$ , there are three types of implementations: i. Pre-test and post-test ii. Pre-test per training module iii. Pre-test per training module and comprehensive exam
3. The graduation decision is determined by the evaluation team meeting, consisting of: a. For education and training conducted at the Ir. H. Djuanda training, the VP Training Non-Railways and Certification and the appointed representative, Manager Training Non-Railways, Manager Program, Standardization & Evaluation, Trainer/Instructor/External Trainer. b. For education and training conducted at the training center, the General Manager Training Center or the appointed representative, Manager Implementation Training Center, Trainer/Instructor/External Trainer.

#### **Then, these results are documented in:**

- a) Graduation decision by the Vice President Training Non-Railways and Certification or General Manager Training Center
- b) Graduation certificate.

#### **Evaluation**

- a. Evaluation is an activity to determine whether a program has been successful and efficient.
- b. Education and training evaluation are conducted from each training implementation to the impact on the organizers and consist of:
  - 1) Reaction, by the education and training organizers.
  - 2) Learning, the learning outcomes of training participants may include written tests, practical tests, individual/group assignments.
  - 3) Behavior, the behavior of education and training participants after undergoing training in their workplace.
  - 4) Impact of training on the organization.
- c. Evaluation activities can be carried out through questionnaires. Questionnaires aim to obtain relevant and accurate information from respondents, including education and training participants, trainers, and education and training organizers. This includes satisfaction questionnaires, conduct evaluations, and evaluations of competency improvement after completing education and training.

1) Participant Satisfaction Questionnaire

At the end of education and training, each student is required to fill out a satisfaction questionnaire presented by the Manager of Training Non-Railways and the Manager of Implementation Training Center. The questionnaire covers the program content, trainers/teachers, materials, and the overall organization of education and training. The questionnaire is filled out according to the scheduled JP in the evaluation session. The participant satisfaction questionnaire includes:

**Satisfaction with trainers/teachers, covering:**

- 1) Trainer's knowledge of the taught material.
- 2) Ability to explain the course material.
- 3) Ability to respond to problems and questions from students.
- 4) Ability to manage time.

**Satisfaction with the program content, covering:**

- 1) Suitability of the program content to the objectives.
- 2) Appearance of material handouts.
- 3) Content of the training program.
- 4) Use of examples/exercises/discussions/case studies for understanding.
- 5) Addition of skills/knowledge from the taught training program.

**Satisfaction with the education and training organizers, covering:**

- 1) Service from organizer staff.
- 2) Training facilities (classrooms, libraries, training media).
- 3) Room facilities (study tables/chairs, room space).
- 4) Bathroom/toilet facilities.
- 5) Menu served (variety and quantity of food, meal and snack schedules).

d. Evaluation of Employee Competency Improvement After Training:

- 1) The evaluation of employee competency improvement after training is conducted by the immediate supervisor of the employees who have undergone the training.
- 2) The assessment of employee competency enhancement after training includes knowledge, skills, and attitude.

FORM EVALUASI KEPUASAN SISWA													
NAMA DIKLAT :					Skor Penilaian:								
TEMPAT DIKLAT :					4 = Sangat Puas 😊								
TANGGAL DIKLAT :					3 = Puas 😊								
					2 = Tidak Puas 😞								
					1 = Sangat Tidak Puas 😞								
<p>WA Peserta                      Kami ingin mendengar pendapat Anda, untuk itu mohon kesediaan Bapak/Ibu untuk memberikan penilaian dan komentar terhadap Pengajar pada pelatihan ini.                      Penilaian untuk penilaian pengajar, mohon diisi pada SAAT PENGUJIAN YANG BERKONDISIFAN/LELUAS MENGUJAI.                      Terima kasih.</p>													
NO	KEPUASAN TERHADAP PENGAJAR	NAMA PENGAJAR											
		1	2	3	4	5	6						
1	Pengalaman Pengajar terhadap materi yang diajarkan	4	3	2	1	4	3	2	1	4	3	2	1
2	Kemampuan dalam menjelaskan materi pelajaran	4	3	2	1	4	3	2	1	4	3	2	1
3	Kemampuan melibatkan peserta dalam proses belajar	4	3	2	1	4	3	2	1	4	3	2	1
4	Kemampuan dalam menanggapi permasalahan dan pertanyaan peserta	4	3	2	1	4	3	2	1	4	3	2	1
5	Kemampuan mengendalikan penggunaan waktu	4	3	2	1	4	3	2	1	4	3	2	1
NO	KEPUASAN TERHADAP PENGAJAR	NAMA PENGAJAR											
		7	8	9	10	11	12						
1	Pengalaman Pengajar terhadap materi yang diajarkan	4	3	2	1	4	3	2	1	4	3	2	1
2	Kemampuan dalam menjelaskan materi pelajaran	4	3	2	1	4	3	2	1	4	3	2	1
3	Kemampuan melibatkan peserta dalam proses belajar	4	3	2	1	4	3	2	1	4	3	2	1
4	Kemampuan dalam menanggapi permasalahan dan pertanyaan peserta	4	3	2	1	4	3	2	1	4	3	2	1
5	Kemampuan mengendalikan penggunaan waktu	4	3	2	1	4	3	2	1	4	3	2	1
NO	KEPUASAN TERHADAP ISI PROGRAM	KEPUASAN TERHADAP PELAYANAN STAF PENYELENGGARA & FASILITAS											
		1	2	3	4								
1	Kesesuaian isi program terhadap esaran	4	3	2	1	Pelayanan staf penyelenggara	4	3	2	1			
2	Tampilan hand out bahan materi	4	3	2	1	Fasilitas Pelatihan (ruang kelas, perpustakaan, media pelatihan)	4	3	2	1			
3	Isi program pelatihan	4	3	2	1	Fasilitas kamar (ruang kamar, meja kursi belajar)	4	3	2	1			
4	Penggunaan contoh/latihan/diskusi/studi kasus untuk pemahaman	4	3	2	1	Fasilitas kamar mandi/WC	4	3	2	1			
5	Pembantuan keterampilan/ pengetahuan dal program pelatihan yang diajarkan	4	3	2	1	Menu yang disajikan (varias & jumlah makanan, jadwal makan & snack)	4	3	2	1			
KRITIK DAN SARAN SISWA TERHADAP :													
1. PENGAJAR : .....													
2. PROGRAM : .....													
3. FASILITAS & PELAYANAN : .....													

Figure 11. Satisfaction Evaluation Form



**EVALUASI PENINGKATAN KOMPETENSI PEKERJA  
PASCA MENGIKUTI DIKLAT**

Yth. Manager/Junior Manager/Asisten Manager/KUPT

di  
Kantor Pusat/Doap/Divre/Subdivre/BI

1. Mohon kesediaan Bapak/Ibu untuk memberikan penilaian terhadap peningkatan kompetensi pekerja diunitnya pasca mengikuti diklat.
2. Penilaian bersifat objektif, mencakup penilaian terhadap peningkatan pengetahuan, keterampilan serta perubahan sikap dan perilaku di tempat kerja.
3. Apabila pengisian evaluasi telah selesai, mohon dikembalikan kembali kepada General Manager Training Center BFTI/BFTP/BPOPSAR/BPST/BPM, cc: Manager SOM dan Umum Doap/Divre/BI, paling lambat 5 (lima) hari kerja setelah form evaluasi ini diterima.
4. Terlampir daftar Pekerja yang harus dinilai, atas kerjasamanya diucapkan terima kasih.

A. Biodata/Unit (Atasan Langsung Pekerja)

Nama : \_\_\_\_\_  
NIP : \_\_\_\_\_  
Jabatan : \_\_\_\_\_  
Kedudukan : \_\_\_\_\_

B. Biodata/pekerja yang dinilai

Nama : \_\_\_\_\_  
NIP : \_\_\_\_\_  
Jabatan : \_\_\_\_\_  
Nama Diklat : \_\_\_\_\_

C. Aspek/penilaian

**Bagian Pertama : Knowledge/Pengetahuan.**

No	URAIAN	Tidak Meningkat	Kurang Meningkat	Meningkat	Sangat Meningkat
1	Peningkatan Pengetahuan dan wawasan				
2	Peningkatan Pemahaman mengenai Tugas				
3	Peningkatan Pemahaman Perintah Atasan				
4	Peningkatan Kemampuan Tata Kelola Pekerjaan				
5	Peningkatan Kemampuan Menyelesaikan Pekerjaan				

**Bagian Kedua : Skill/Keterampilan.**

No	URAIAN	Tidak Meningkat	Kurang Meningkat	Meningkat	Sangat Meningkat
1	Peningkatan Keterampilan kerja				
2	Peningkatan Kreativitas dan inovasi kerja				
3	Peningkatan Kualitas Hasil Kerja				
4	Peningkatan Efektifitas pola Kerja				
5	Peningkatan Efisiensi waktu dan alat/bahan kerja				

**Bagian Ketiga : Attitude/Sikap.**

No	URAIAN	Tidak Meningkat	Kurang Meningkat	Meningkat	Sangat Meningkat
1	Peningkatan Disiplin dan Integritas Kerja				
2	Peningkatan Motivasi Kerja				
3	Peningkatan Etika Kerja				
4	Peningkatan Pergendalian Diri				
5	Peningkatan Kerjasama dalam Lingkungan Kerja				

D. Hal-hal yang perlu disampaikan :

..... / 20.....  
Atasan Langsung Pekerja

NIPP:

Figure 12. Evaluation of student work improvement

## CONCLUSION

Overall, the curriculum development for the training conducted at Pusdiklat KAI appears to be commendable. To further enhance the curriculum at Pusdiklat KAI, the author provides several suggestions and feedback, including:

1. Based on the components of curriculum objectives, competency standards, and training competency indicators, the average use of operational verbs remains at the C1 level in Bloom's taxonomy, such as the use of verbs like explaining, understanding, and so forth.
2. The aspects used as assessment criteria are too numerous in the assessment section and appear to overlap. The criteria for discipline, leadership, and cooperation aspects should be based on scientific and valid considerations. This ensures that the assessment instruments accurately and validly evaluate the intended aspects.
3. In determining the graduation of training participants, there is an indicator of a pre-test. The pre-test should not be part of the graduation criteria for training participants. The purpose of the pre-test is to assess learners' initial capabilities, which trainers can use as material for developing the curriculum, strategies, and methods to be used in the upcoming training.

These recommendations aim to contribute to the continuous improvement of the curriculum at PT. KAI Training Center.

## REFERENCES

- [1] C. Boon, D. N. Den Hartog, and D. P. Lepak, "A Systematic Review of Human Resource Management Systems and Their Measurement," *J. Manage.*, vol. 45, no. 6, pp. 2498–2537, 2019, doi: 10.1177/0149206318818718.
- [2] M. Da Bormida, "The Big Data World: Benefits, Threats and Ethical Challenges," pp. 71–91, 2021, doi: 10.1108/s2398-601820210000008007.
- [3] M. N. Jotabá, C. I. Fernandes, M. Gunkel, and S. Kraus, "Innovation and human resource management: a systematic literature review," *Eur. J. Innov. Manag.*, vol. 25, no. 6, pp. 1–18, 2022, doi: 10.1108/EJIM-07-2021-0330.
- [4] Kasmir, *Manajemen Sumber Daya Manusia (Teori dan Praktek)*. Medan: Rajagrafindo Persada, 2016.
- [5] S. Anjum, "Impact of internship programs on professional and personal development of business students: a case study from Pakistan," *Futur. Bus. J.*, vol. 6, no. 1, pp. 1–13, 2020, doi: 10.1186/s43093-019-0007-3.
- [6] S. Hollings, "Implementation Barriers of Inclusive Education and Their Impact on Stakeholders: A Review of the Literature," *Int. J. Child. Educ.*, vol. 2, no. 1, pp. 27–45, 2021, doi: 10.33422/ijce.v2i1.36.
- [7] Rusman, *Manajemen Kurikulum*. Jakarta: Rajagrafindo Persada, 2012.
- [8] R. . Hernawan, A.H. & Johan, *Pengertian, Dimensi, Fungsi, dan Peranan Kurikulum. Dalam: Kurikulum dan Pembelajaran. Bandung*. Bandung: Jurusan Teknologi Pendidikan Universitas Pendidikan Indonesia, 2009.