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Abstract Paper Repository System And Recognition Of Prior Learning Assessment Fast Track Program

I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

Sun, Jul 24, 2022 at 5:53 PM

To: submission@eiconcit.id



Abstract REPOSITORY SYSTEM AND RECOGNITION OF PRIOR LEARNING ASSESSMENT FAST TRACK PROGRAM.pdf

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I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

EIconCIT 2022 decision letter

submission@eiconcit.id <submission@eiconcit.id>
To: I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

Wed, Sep 7, 2022 at 1:04 AM

Dear Dr. Atmaja,

Thank you very much for your reply and support. We are delighted to hear that you agreed to contribute to 4th 2022 East Indonesia Conference on Computer and Information Technology "The Spirit of recovery: IT Perspective, Experience, and Application during Covid Pandemic"! I will record your paper at once.

With this letter, we are informing you that your work entitled "REPOSITORY SYSTEM AND RECOGNITION OF PRIOR LEARNING ASSESSMENT FAST TRACK PROGRAM" is accepted in the EIconCIT publication.

However, to suit the manuscript with the conference topic, we suggest you to add more discussion related to the Covid pandemic in your manuscript

For your convenience, here is a brief guide to prepare and submit paper for our Special Issue:
https://drive.google.com/drive/folders/1YHWyRlqg6Bs8yR3_VR_Sf5lauvhdlqAQ?usp=sharing

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Once you have submitted your paper, please kindly do get in touch with me so I can arrange everything well for you in time.

First-time users are required to register before submitting. Please feel free to contact me if you have any questions. We are looking forward to your submission by then.

Best regards,

6/16/24, 10:45 PM

Politeknik Negeri Bali Mail - EIConCIT 2022 decision letter

Aji Prasetya Wibawa

Editor

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I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

Draft Paper REPOSITORY SYSTEM AND RECOGNITION OF PRIOR LEARNING ASSESSMENT FAST TRACK PROGRAM POST-PANDEMIC COVID-19

I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

Sun, Oct 16, 2022 at 11:50 AM

To: submission@eiconcit.id

2 attachments



Draft Repository System and RPL Assessment Fast Track Program Post-Pandemic Covid19.docx
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467K



I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

Bukti Transaksi BPD Bali Mobile Banking

BPD Bali Mobile <ebanking@bpd Bali.co.id>
To: I MADE ARI DWI SUTA ATMAJA <arisuta@pnb.ac.id>

Sat, Oct 15, 2022 at 6:50 PM

Terima kasih telah menggunakan BPD Bali Mobile Banking.
Transaksi yang anda lakukan adalah:

Jenis Transaksi : Transfer BIFAST
Tanggal Transaksi : 15-Oct-2022 18:50:42 WITA
REFERENCE : MB03921220
Sebesar : Rp. 3,250,000
Biaya : Rp. 2,500

PENGIRIM
DARI REK : 0350212002522
ATAS NAMA : I MADE ARI DWI SUTA ATMAJA
BANK : BPD BALI

TUJUAN
KE REKENING : 1440017598639
ATAS NAMA : FACHRUL KURNIAWAN
BANK : BANK MANDIRI
BERITA : Bayar Seminar EIconCIT 4th
End To End Id : 20221015ABALIDBS010O9900978686
Status : Sukses

Semoga informasi ini bermanfaat bagi anda
Terima kasih.

Hormat Kami,



PT Bank Pembangunan Daerah Bali



I Made Ari Dwi Suta Atmaja <arisuta@pnb.ac.id>

[EIconCIT 2022] Your Paper "Repository System and Recognition of Prior Learning Assessment Fast Track Program Post-Pandemic COVID-19"

submission@eiconcit.id <submission@eiconcit.id>

Mon, Dec 12, 2022 at 2:40 PM

To: arisuta@pnb.ac.id

Along with this email, we are sending back the entire paper manuscript file you submitted to EIconCIT 2022. We have corrected the manuscript that we sent back and provided several reviews. Please check whether you agree with our improvements to your paper. Please complete and correct your paper following the review comments we have given to your manuscript within approximately 1 week.

After you repair and send back the updated manuscript file, we will review again whether the file is ready to be sent or must be repaired again.

Best regards,
Aji Prasetya Wibawa
Editor
E-Mail: aji.prasetya.ft@um.ac.id



#I Made Ari Dwi Suta Atmaja - Repository System and Recognition of Prior Learning Assessment Fast Track Program Post-Pandemic COVID-19.docx
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REPOSITORY SYSTEM AND RECOGNITION OF PRIOR
LEARNING ASSESSMENT FAST TRACK PROGRAM WITH
RECOGNITION OF PRIOR LEARNING IN
POST-PANDEMIC COVID-19 COVID-19

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Abstract: Post-pandemic, like today, job opportunities may be limited. The relevance and quality of the educational process are important factors that must receive the attention of higher education providers. In this case, the government has launched a fast-track education program intended to link and match formal education with the business world of the industrial world and increase the workforce's absorption into the industrial world. The Fast Track Program on Diploma Two was implemented integrated to increase skilled and superior qualified human resources in a shorter time. The recognition of part learning (RPL) process is to accommodate student competencies in the fast-track program. The RPL process can be implemented in the education sector and the world of work. The implementation of RPL is based on equalizing qualifications under the KKNI standards. The RPL system was built to assist the process of Recognition of Prior Learning for the Educational Path, which is specialized in the Fast Track Program to simplify the RPL process. Especially for prospective students who register to participate in the fast-track program that uses the Type A2 RPL method in the selection process. Application access can be done using PC devices and smaller devices such as Smartphones or Tablets, making it easier to carry on Mobile by prospective students.

Keywords: *KKNI, Prior Learning, Type A2, Application, Fast Track, Vocational High School, SMK, Diploma Two, RPL.*

1. Education During ~~Covid-19~~COVID-19

The coronavirus disease 2019 (~~Covid-19~~COVID-19) outbreak ~~which~~ has hit ~~various countries in the world,~~ presents challenges for the global world of education sector, especially universities.

During the ~~Covid-19~~COVID-19 period, the gGovernment imposed restrictions on gathering, social distancing, ~~and~~ physical distancing, wearing masks, and always constantly washing hands in every activity. Through the Ministry of Education, the ~~Government~~government has prohibited higher education from carrying out face-to-face (conventional) learning and requires online learning (Ministry of Education, Culture, Research, and Technology Circular Letter No. 4 of 2020). Universities are led to be able to organize online learning processes. Lectures must be held with scenarios that can prevent physical contact between students and lecturers and students and students (Basilaia, G., 2020).

~~According to Abid Haleema (2022), the use of d~~Digital technology can enable students and lecturers to carry out the learning process even though they are in different places (Haleema, 2022). The online learning process during the pandemic can access mobile devices such as smartphones or android phones, laptops, computers, tablets, and iPhones that can be used to access information anytime and anywhere (Gikas & Grant, 2013). ~~And as a medium that can be used to support the implementation of the online learning process, for example, virtual~~Virtual classes using Google Classroom, Google Meet, Zoom, Edmodo, and Schoology services (Enriquez, 2014); and instant messaging applications, ~~such as WhatsApp~~ (So, 2016) can be used to support the implementation of the online learning process. ~~The online learning process~~Online learning can ~~even~~ be done through social media such as Facebook and Instagram (Kumar &

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Nanda, 2018). ~~And don't forget that online learning will be more effective if the tools used are your applications.~~

Moreover, ~~many files will be uploaded and downloaded by students~~ students will upload and ~~download many files,~~ for safety and convenience, ~~learning tools must be built for their own needs.~~ Online learning connects students with learning resources (databases, experts/instructors, libraries) who are physically separated or even far apart but can communicate, interact or collaborate (directly and indirectly). An online learning process is a form of distance learning that utilizes telecommunications and information technology, such as the internet (Muhammad, 2020).

2. Fast Track Education Post ~~Covid-19~~ COVID-19

During the pandemic, online learning has been carried out almost ~~all over the world~~ worldwide (Goldschmidt, 2020). So, in this online learning, all elements of education are required to ~~still~~ ~~facilitate learning~~ still able to facilitate learning so that it remains active ~~even without face to~~ ~~face~~ without face-to-face interaction. Educators, as the main element in formal education, are encouraged to adapt to the implementation of ~~learning that originally used~~ initially conventional face-to-face methods and switched to online learning (Fo et al., 2021). ~~Not only~~ The problem is not only of online learning during the pandemic, Another problem is including when you students have completed their education and face difficulty finding jobs such as high school and vocational education graduates also experienced a decline in absorption by industry. This is because ~~industrial operations are disrupted due to the pandemic~~ the pandemic disrupts industrial operations, so there are fewer job opportunities fewer job opportunities exist.

Under normal conditions, the uptake of [Vocational High School \(SMK\)](#) ~~SMK~~ graduates by industry is quite ~~large~~[significant](#), because job opportunities are still wide open. However, during an uncertain pandemic, where there are very few job opportunities, recruitment by the industry is ~~greatly significantly~~ reduced, ~~and even if~~ there are any, the competencies required will be ~~very specific~~[particular](#) for the efficiency and effectiveness of industrial operations.

The Central Bureau of Statistics (~~BPS~~) recorded that the total unemployed as of February 2020 was ± 6.88 million ~~people~~. With the open unemployment rate, ~~(TPT)~~ [Vocational High School \(SMK\)](#) graduates are still the highest among other education levels, which is 8.49 percent (BPS, 2020). If we talk about the industrial revolution, then the existence of ~~Vocational High Schools (SMK)~~ is the front line in welcoming the industrial revolution era ~~that~~ we are facing. After the ~~COVID-19~~[COVID-19](#) pandemic, the unemployment rate has not decreased even though industrial operations have begun to ~~gradually improve~~[improve gradually](#), ~~and~~ there are many reasons. One of them ~~was unable to survive during the pandemic and ended up having to close the company and so on~~[could not survive during the pandemic and ended up having to close the company](#). Therefore, in the post-~~eovid-19~~[COVID-19](#) pandemic, strategic steps or breakthroughs that are still needed must be prepared ~~in increasing the absorption of the workforce~~[to increase the workforce's absorption](#) by industry.

The government, through the directorate general of vocational education, has launched a fast-track education program that is intended to link and match formal education, both vocational and higher education, with the business world of the industrial world, as well as increase the absorption of the workforce into the industrial world. This breakthrough and innovative program is called the "Fast Track Diploma Program in collaboration with ~~Vocational High Schools (SMK)~~ and Industry, the Business World, and the World of Work." also known as the "Fast

Track Two Vocational Vocational High School Program.". This program ~~is a program that~~ encourages SMK students to get higher competencies faster through a more practical mechanism (Kemdikbudristek, 2021). ~~Of course, accompanied by a degree or higher diploma level. To be able to~~ get a Diploma Two, students of the SMK-D2 Fast Track Program who have been in vocational education for three years (including fieldwork practice for six months), can freely choose to directly continue one and a half years of education ~~at PTV~~ (including one year of internship). The fast track program launched by the government targets SMK graduates who will take higher education specifically for a diploma two.

~~Why diploma two, it's because h~~Higher education Diploma 2 (D2) diploma two is the most appropriate to implement a fast-track program ~~in which it~~ has accommodated the recognition process of past learning, and is also free to study on an independent campus, with one of the points being industrial internships. The Ministry of Education, Culture, Research, and Technology stated that the Diploma 2 (D2) Fast Track program could reduce ~~the unemployment rate~~ unemployment for Vocational High School (SMK) graduates. Through this program, SMK graduates will be strengthened in terms of technical and non-technical skills that are right on target with the needs of industrial partners.

This program is an option that ~~can be taken to be implemented by Vocational Vocational Schools and Colleges and SMK can implement but~~ is not mandatory. The program ~~The program for developing higher education institutions and vocational schools is very good because it carries~~ the spirit of collaboration across education levels ~~and those involved must have experience in~~. Those involved must have experience developing a link-up system with Industry, the Business World, and the World of Work. Therefore, the initial implementation of this program was started by the SMK-PTV- Industry, ~~Business World, and the World of Work who already have the~~

~~readiness to run the Fast Track SMK D2 program; namely 20 PTV, more than 80 Vocational High Schools, and 35 Industries, the Business World, and the World of Work, who are ready to commit to being pioneers in realizing this program. The basic principle is that this program must be based on the real needs of Industry and Business, and the World of Work. Without it, the program cannot run.~~

The ~~real needs of Industry, the Business World, and the World of Work are industry's real needs are competent~~ graduates with **COMPETENCE** (high hard skills and soft skills.) ~~who Who~~ are mentally ready to work and ready to learn for life. ~~Fast Track Diploma Two Program Collaboration with Vocational High Schools and Industry, the Business World, and the World of Work.~~ The Fast Track ~~Vocational High School~~ **SMK** Program is a ~~vocational and Diploma Two program implemented in an integrated mannern~~ integrated vocational and D2 program to increase skilled and superior qualified human resources in a shorter time. ~~Where~~ ~~†~~ The study load of one semester in the ~~Diploma Two~~ D2 program is taken in the last year of SMK, ~~(five and six semesters 5 and 6).~~

~~So~~ ~~†~~ The total time taken by the ~~Vocational High School~~ **SMK** and the ~~Diploma Two~~ D2 program is only 4.5 years. The concept of learning for the ~~second diploma~~ D2 program is that the total number of credits ~~that~~ must be taken ~~is~~ 72 credits, of which 12 credits are obtained when studying at vocational schools, and the remaining 60 credits are taken for three semesters when taking the ~~second diploma~~ D2. The ~~load of~~ 12 credits taken during this vocational education can be carried out through ~~past learning recognition (RPL).~~

The learning process is designed through a tri-partied collaboration between Vocational Schools, the Vocational Schools, Industry, the Business World, and the World of Work. A minimum of one semester during SMK is allocated for the industrial work practice program (Industrial

Internship). Likewise, when in college, to further improve their soft skill and character, students in the eighth and ninth semesters (if calculated from SMK) allocate two semesters for internships at DUDI. With the strengthening of Softskills-soft skills and cCharacters, ~~automatically the hard skills will also~~ the hard skills will automatically be honed and mature. The implementation of this program in 2020 is a pilot/test at several universities assigned to implement it. One of them is the Bali State Polytechnic by opening 8 Fast Track Diploma Two-D2 Study Programs ~~(D2)~~. ~~The name of t~~ The fast-track study program adjust that is opened at the university is to adjust to the work standards of the SKKNI and the fields that are needed by the industrys to the work standards of the SKKNI and the fields that the industry needs.

3. Recognition Prior Learning On Education Program

RPL in the education pathway is intended to provide wider opportunities for each individual to pursue education up to higher education. ~~To fulfill the mandate of the National Education System Law regarding lifelong learning, RPL in the education pathway is intended to provide wider opportunities for each individual to pursue education up to higher education.~~ Ministry of Education, Culture, Research, and Technology will ~~issue~~ s policies, regulations, guidelines, and standard operating procedures for equivalence assessment related to the implementation of RPL, ~~which~~ The program aims to facilitate the community to take formal education at a higher level (Kemdikbudristek, 2021). RPL must also be able to recognize one's past learning achievements without considering the process of increasing one's learning achievements, time, or place. However, RPL must consider national policies on education ~~educational policies~~ such as the obligation to study for twelve years, quality equality, and recognition of nationally recognized learning achievements, ~~and so on~~.

On the other hand, RPL must be accessible to every individual who needs it. Considering that RPL will be different for one field of science and/or expertise from another, then RPL is unique.

Thus, RPL can be prepared or developed by considering the educational path (formal, non-formal, informal) and the type of education (vocational education, profession, academic).

Therefore, ~~differences in regulations or guidelines for evaluating equality through the RPL scheme need to be considered for educational institutions~~educational institutions need to consider differences in regulations or guidelines for evaluating equality through the RPL scheme.
~~that provide RPL because~~Recognizing~~the recognition of~~ the type of experience or past learning that is not following one's own will lead to inefficiency in the educational process. Specifically, RPL in the higher education sector is an acknowledgment or equalization of experience with ~~the abilities and or expertise of a student~~a student's abilities and or expertise at the previous level of education.

~~Recognition of~~ RPL is not the same as recognition of obtaining a degree. In many countries, RPL is used as a consideration for entering an educational program (entry requirement) at a higher level ~~in the form of~~by reducing the number of credits, transferring credits, or releasing some credits for ~~certain specific courses (exemption)~~. A formal educational institution, which ~~is declared by the Ministry of Education and Culture~~the Ministry of Education and Culture declares ~~to be~~ qualified to conduct RPL, may conduct an RPL assessment process for prospective participants in an education program. Participants of the RPL program must submit a written request ~~accompanied by a portfolio that is prepared under their experience or past learning outcomes along with~~and a portfolio prepared under their experience or past learning outcomes.
R-relevant evidence that is valid and recognized~~valid and recognized evidence~~ by the educational institution that administers the RPL.

A person can use RPL as an acknowledgment to attend formal education at a certain level at a university if the person concerned has obtained a minimum education of SMA/SMK/C package. Recognition of learning achievements is also carried out in 11 stages with limited maximum recognition at each level or educational program. This is intended to maintain the quality produced by each level or educational program.

4. Type A2 Recognition Prior Learning On Fast Track Program

RPL ~~or Recognition of Past Learning~~ is one of the educational programs organized by the Ministry of Education ~~and Culture, Research and Technology~~. In more detail, the Type A2 RPL ~~p~~Program is an acknowledgment of a person's Learning Outcomes (LO) obtained through formal, non-formal, and informal education, ~~and/or~~ work experience in formal education. So that all forms of learning achievement outside formal education are then more recognized. ~~As has been exemplified at the beginning such as training certificates and also work experience.~~ If so far it has only been recognized as experience, then the existence of the RPL program is considered a learning experience in formal education.

~~The RPL program itself is known to be regulated in Regulation of the Minister of Education, Culture, Research, and Technology No. 26 of 2016 which has been replaced by Regulation of the Minister of Education, Culture, Research, and Technology No. 41 of 2021 concerning RPL Guidelines. In addition, it is also stated in the Law on the National Education System No. 20 of 2003, and Government Regulation No. 4 of 2014. The mechanism of RPL Type A2 according to Regulation of the Minister of Education, Culture, Research, and Technology No. 41 of 2021 concerning Recognition of Past Learning (Kemdikbudristek, 2021).~~ Stages of RPL Type A2 are

RPL stages of non-formal, informal education and/or work experience (Minimum B Accredited Higher Education) are as follows:

- a) The applicant consults with the RPL Team on the procedures to be followed. The RPL team assists applicants in identifying study program options, which will enable them to find courses that match the learning outcomes they have gained from non-formal, informal education, and/or work experience.
- b) Prepare evidence: The applicant prepares valid, credible, and relevant documents as evidence of the applicant's ability/competence. ~~The process of e~~Collecting evidence generally takes a long time and must be considered by the applicant.
- c) Applying for transfer of credit: The applicant fills out the application form provided by the university, accompanied by the collection of supporting evidence, to the Higher Education RPL Team.
- d) Evaluating the proposal file: The RPL team appoints an RPL assessor from the study program ~~who has~~ith expertise in the field proposed by the applicant to conduct an evaluation. If ~~in the process of evaluating credit transfer the applicant does not meet the requirements~~the applicant does not meet the requirements in the process of evaluating credit transfer, the process is terminated.
- e) Issuing a credit transfer decision letter: RPL Assessor Sending the results of the credit transfer evaluation, complete with a list of courses and the number of credits obtained by the applicant, to the RPL Team as the basis for issuing a credit transfer decision letter issued by an authorized official, at least at the dean level.

5. RPL on D2 Fast Track Bali State Polytechnic

In 2022 the Bali State Polytechnic will open a Fast Track two Diploma Study Program. The two fast-track diploma study programs opened by PNB are eight study programs. ~~Among the eight study programs opened is the Diploma Two Fast Track Computer Network Administration~~The Diploma Two Fast Track Computer Network Administration is among the eight study programs opened. All fast-track study programs with mechanisms for new student admissions use the ~~Prior Learning Recognition (RPL)~~ system. Where the RPL scheme used is Type A2. The development of this application will later be applied to the Diploma Two Fast Track Computer Network Administration study program ~~which that has been opened by PNB~~PNB has opened. Admission of prospective new students for the fast-track study program will be carried out before the new academic year 2022/2023. ~~is held. Where p~~Prospective students are graduates of SMK Partners who have made an MoU with each study program. ~~that has been opened.~~In the process of selecting prospective students for the fast-track study program, there are obstacles in the current conditions, namely:

I. Location of High School Partners

Each fast-track study program opened by PNB already ~~have~~has a High School partner, ~~where and~~ the locations of the High School partners are spread across different districts. So it takes time in the selection process ~~directly~~ for each student from the High School partner.

II. Selection Process

In its implementation, the Type A2 RPL mechanism is still carried out manually and conventionally for each prospective student. This mechanism requires a complicated administrative process ~~as well as~~and a large amount of funding because it is carried out

directly to the respective High School partners by involving the RPL Team, Assessors, and the School Admin ~~itself~~.

III. No System At All

Since the RPL scheme was launched ~~until now~~, there ~~is~~ has been no system to carry out the RPL implementation process directly. Including an online and integrated system to facilitate the implementation of the RPL process. ~~This~~ will make the process of implementing RPL for High School Partner students be carried out conventionally and requires quite a long time with partner locations spread across various districts in Bali. ~~Currently, Bali State Polytechnic~~ PNB does not yet have a web-based online selection system or CAT for the Fast Track Program.

6. Repository System And RPL Assessment Fast Track Program Design

Based on the problems faced in the selection process for prospective students with the Type A2 RPL scheme, a new system design is made, as shown in Figure 6.1 ~~below~~.

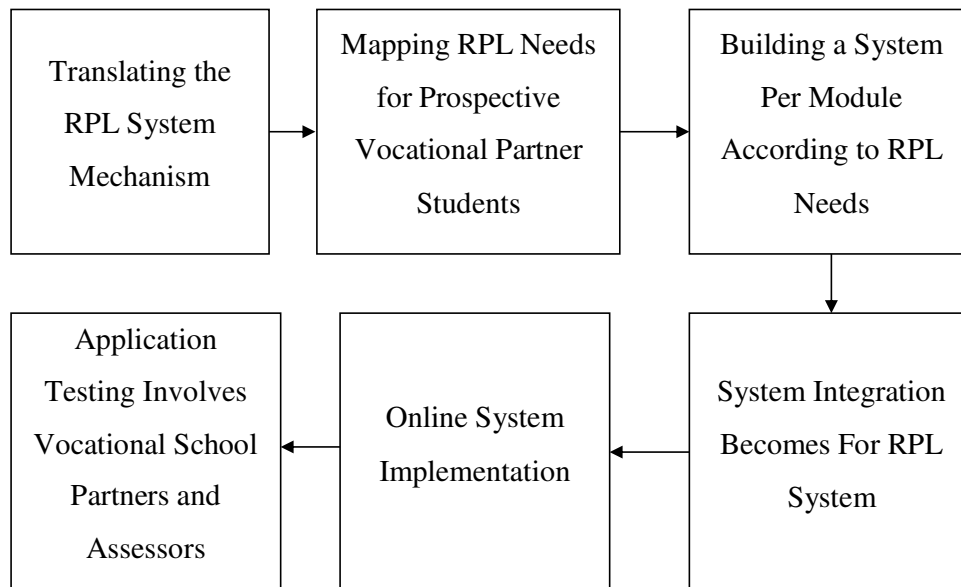


Figure 6.1 System Design Schematic

Translating the RPL System Schematic:

1. This stage is the process of translating the Type A2 RPL scheme mechanism into a procedure that will be the basis for the stages of implementing the RPL process.
2. Mapping RPL Needs for Vocational Partner Candidates: At this stage, the mapping of RPL needs for each SMK partner student who will later become a prospective student ~~is carried out~~. This mapping is necessary because each SMK partner has different characteristics, so it is expected to be able to accommodate each SMK partner's needs and readiness.
3. Building a Divisional System According to the needs of the RPL Selection Process: in this stage, the development of a divisional system for the RPL scheme ~~is carried out~~. The RPL procedure has many stages that must be passed until the desired final result is reached;

therefore, it is ~~important~~ crucial to building a divisional system to minimize missed procedures to be implemented.

4. System Integration per Module Becomes Integrated for the Overall RPL Process: After the development of the divisional system is carried out, ~~then~~ each module is integrated so that the system can be used as a whole from the RPL application process until the RPL selection results are issued.
5. Online System Implementation: After ~~the integration of~~ integrating each part of the system, the next step is to implement an online application ~~so that it can~~ to be accessed from anywhere and anytime. An online system that can be accessed will facilitate the RPL process carried out by prospective students and RPL managers at the organizing college.
6. Application Testing Involves Vocational School Partners and Assessors.

After ~~the implementation of the online system is carried out, then~~ implementing the online system, testing will be carried out, including the RPL application process by prospective students, then self-assessment, to the assessment of files conducted by the Assessor Team. The process of testing this system involves SMK partners, prospective students themselves, and the assessor team. Details of the RPL system design are explained in Figure 6.2 ~~below~~.

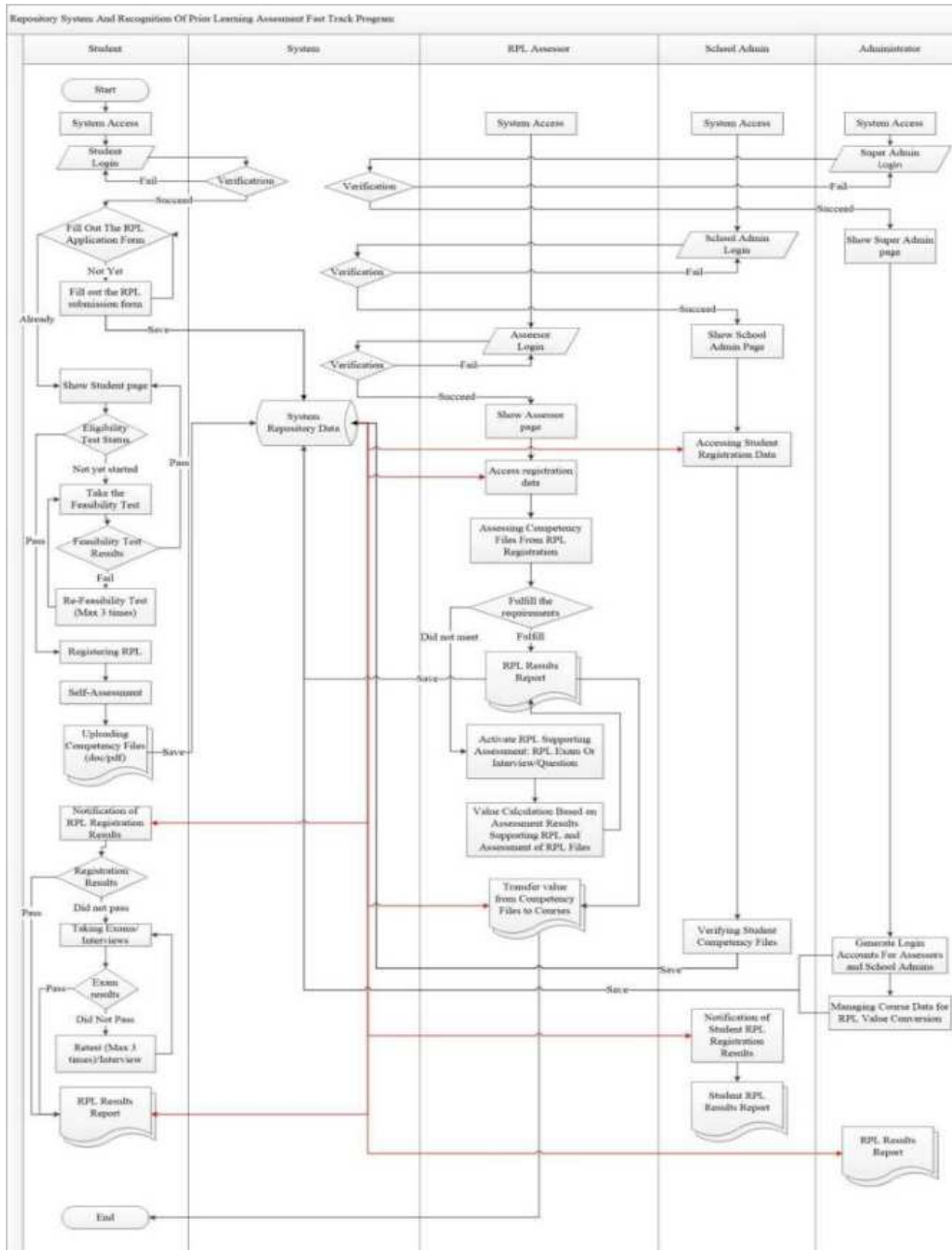


Figure 6.2 Flowchart Detail Repository System dan and Assessment RPL

The detailed mechanism for the system is as follows:

1. The Super Admin is the Head of the fast-track D2 Study Program, who will create an account for the admin of the SMK partner school and the assessor. The number of accounts for school operators depends on the number of SMK partners who work jointly with the D2 study program. Meanwhile, the assessor assessors are the assessment assessor team according to the assessment team's decree made by the head of the D2 study program. Super Admin also plays a role in inputting course names which are the results of the RPL process assessment. The number of courses resulting from the RPL may vary according to the curriculum of each study program.
2. The school admin is the operator of the SMK. In charge of creating a default account for SMK students ~~who are~~ interested in D2 and following the RPL process. ~~Vocational~~ ~~s~~Students who have obtained an account, then complete their data (biodata).
4. The ~~next following~~ process for vocational students is to conduct an independent assessment. Self-assessment is an assessment ~~that is~~ filled in independently to assess one's readiness for one's competencies.
5. The completeness of the self-assessment is uploading competency files such as competency certificates.
6. If SMK ~~students~~ or prospective students have done points 3, 4, and 5, then the Appraisal Assessor will get a notification. The assessor will provide an assessment and provide recommendations.
7. If the recommendation for the value of the prospective student is still lacking, the assessor can give a test or remedial until the score meets the requirements.

8. Each prospective student will receive notification of the results of the RPL assessment by the Appraisal Assessor. Those who do not meet the requirements ~~are required to~~ must conduct an RPL Supporting Assessment. After the RPL supporting assessment has been completed and the results meet the requirements, ~~then the next following~~ process can be carried out, ~~namely the~~ assessment of the RPL results courses.
9. After the course assessment is completed, the assessor will print an RPL report ~~on the results of the RPL~~ to be submitted to the Head of the D2 Study Program.
10. ~~The school, in this case,~~ the school operator, also gets a notification and can print a report on the results of their respective school's RPL. ~~This includes~~ notifications that will be sent to the prospective student's account.
11. ~~After the report on~~ the results of the RPL is printed and submitted to the Head of the respective Study Programs. ~~The~~ task of the Head of Study Program is to re-verify the results of the RPL, ~~and if it is appropriate, it remains to be submitted to the Head of the Higher Education~~ remains to be submitted to the Head of Higher Education if appropriate.
12. The results of this RPL report can also be in the form of a decree which ~~will later be signed by the Director of PNB~~ the Director of PNB will later sign as a decision letter on the results of the RPL for prospective students.

7. Implementation of Prior Learning System Applications

RPL applicants can access the website page at <https://rplpnb.id/>. For RPL applicants, please register first to be able to use the system. ~~Applicants Prepare-prepare~~ all files so that the RPL process can be carried out. ~~Then you~~ Applicants can continue the RPL process according to the instructions from the system. The system display is shown in Figure 7.1, ~~below~~

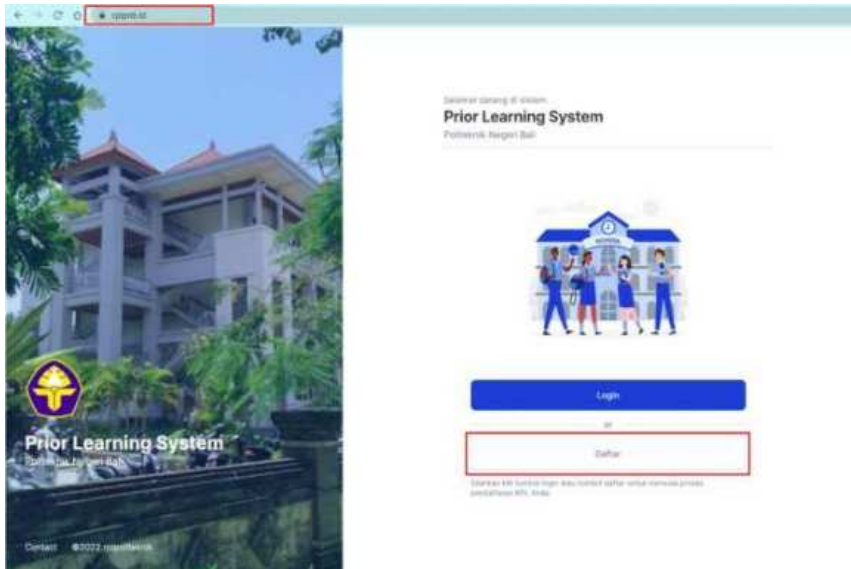


Figure 7.1 Main Page of Prior Learning System

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- Circular of the Ministry of Education, Culture, Research, and Technology Number 4 of 2020. 2020. Implementation of Education During Coronavirus Disease (~~Covid-19~~COVID-19) Emergency. (Government Policy Briefs, 2020).
- Basilaia, G. (2020). Replacing the Classic Learning Form at Universities as an Immediate Response to the ~~COVID-19~~COVID-19 Virus Infection in Georgia. *International Journal for Research in Applied Science and Engineering Technology*, 8(3), 101–108. <https://doi.org/10.22214/ijraset.2020.3021>

- Abid Haleema, Mohd Javaida, Mohd Asim Qadri, & Rajiv Suman. (2022). Understanding the Role of Digital Technologies in Education: A review. *Journal Sustainable Operations and Computers*, 3(2022), 275-285. DOI: [10.1016/j.susoc.2022.05.004](https://doi.org/10.1016/j.susoc.2022.05.004)
- Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *Internet and Higher Education*, 19, 18-26. <http://dx.doi.org/10.1016/j.iheduc.2013.06.002>
- Enriquez, M. A. S. (2014). Students' Perceptions on the Effectiveness of the Use of Edmodo as a Supplementary Tool for Learning. *DLSU Research Congress*. <https://doi.org/10.1017/CBO9781107415324.004>
- Adodo, S.O. 2016. "Effect of Mind-Mapping as a Self-Regulated Learning Strategy on Students' Achievement in Basic Science and Technology". *Mediterranean Journal of Social Sciences*. 4 (6): 30-41
- Kumar, V., & Nanda, P. (2018). Social Media in Higher Education. *International Journal of Information and Communication Technology Education*. <https://doi.org/10.4018/ijicte.2019010107>
- Muhammad Nang Al K. (2020). The Role of Digital Technology in Sustaining Online Learning during the Pandemic Covid19. *UHAMKA International Conference on ELT and CALL (UICELL) 2020*.
- Goldschmidt, K. (2020). The ~~Covid-19~~[COVID-19](https://doi.org/10.1016/j.pedn.2020.08.004) Pandemic: Technology use to support the wellbeing of children. *Journal of Pediatric Nursing*, 88-90
- Foo, Cc., Cheung, B. & Chu, Km. A comparative study regarding distance learning and the conventional face-to-face approach conducted problem-based learning tutorial during the ~~COVID-19~~[COVID-19](https://doi.org/10.1186/s12909-021-02575-1) pandemic. *BMC Med Educ* 21, 141 (2021). <https://doi.org/10.1186/s12909-021-02575-1>.
- Central Bureau of Statistics. (2020). *Berita Resmi Statistik*. BPS 2020.
- President Instruction Number 9. Year 2016 on Revitalization of Vocational Education to Improve Quality and Human Resource Competitiveness. The Republic of Indonesia. The Republic of Indonesia. 2016
- Kemdikbudristek. (2021). **Regulation of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia Number 41 of 2021 concerning Recognition of Past Learning**. Jakarta

Director General of Vocational Studies. (2022). **Regulation of the Director General of Vocational Studies number 18 of 2022 concerning Guidelines for Implementing Recognition of Past Learning in Vocational Higher Education.**
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ABSTRACT



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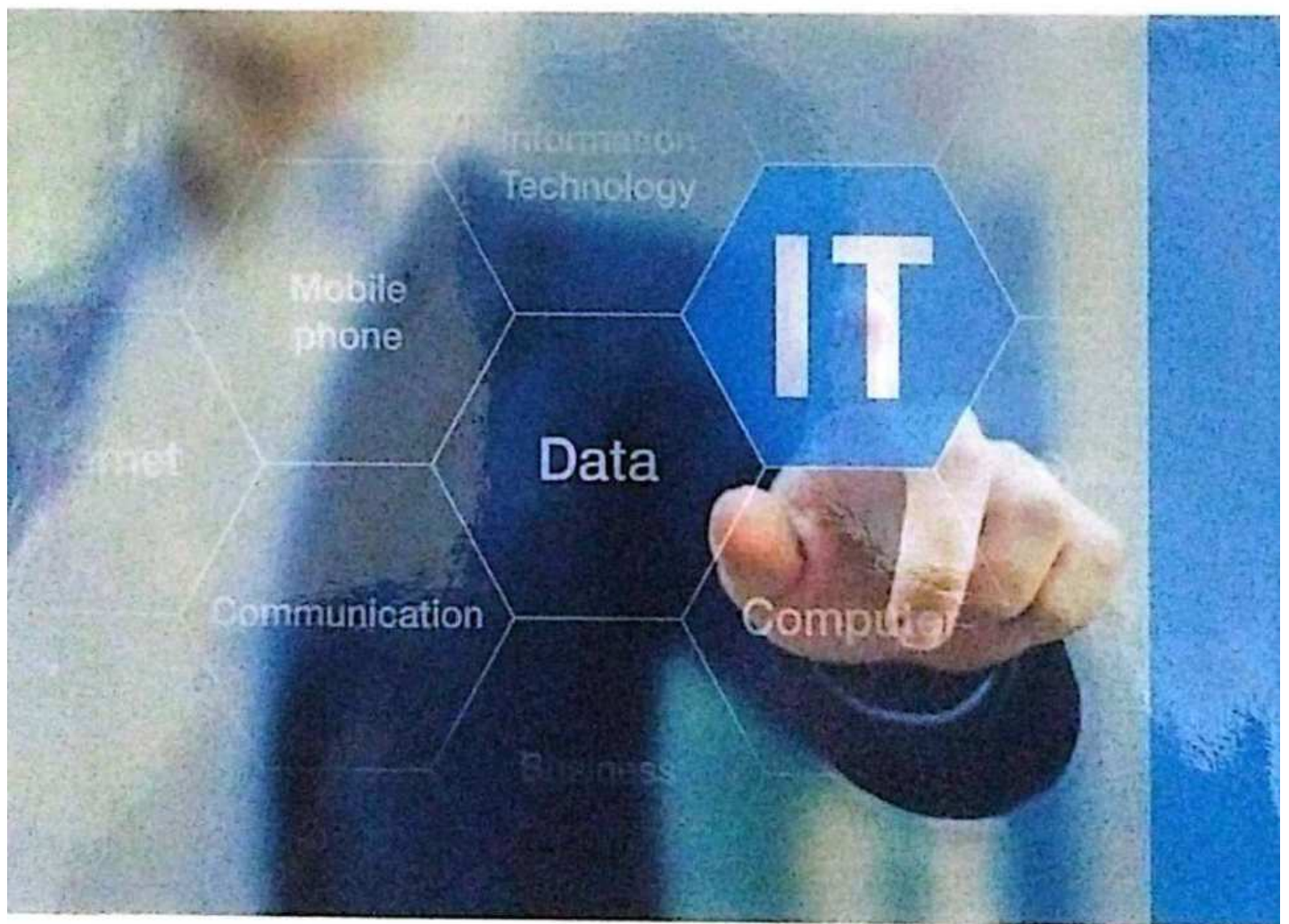
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Back to Top

THE SPIRIT OF RECOVERY

IT Perspectives, Experiences, and Applications
during the COVID-19 Pandemic



EDITED BY

Aji Prasetya Wibawa



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The scope of this book focuses on how information technology may assist in achieving goals and in providing solutions to problems such as a pandemic. Research on the Internet and on technology has been done, and the findings have applications in various sectors that rely on interdisciplinary knowledge. This book explores and describes state-of-the-art research conducted during the COVID-19 pandemic. Topics covered include the IT viewpoint and the rules governing digital transformation throughout the pandemic. The Digital Revolution sped up by a decade during COVID-19, which impacted both the user experience and that of software developers. As a component of the digital transformation process, this book explores the experiences of both the user and developer when attempting to change and adapt while utilizing an information technology program.

This book includes five topics: (1) multidisciplinary artificial intelligence, (2) Smart City and Internet of Things applications, (3) game technology and multimedia applications, (4) data science and business intelligence, and (5) IT hospitality and information systems. Each topic is covered in several book chapters with some application in several countries, especially developing countries. The chapters provide insight from contributors with different perspectives in several diverse fields who present new ideas and approaches to solving problems associated with the worldwide pandemic.

Aji Prasetya Wibawa was awarded a doctoral degree in Electrical and Information Engineering from the University of South Australia (UniSA). He was formerly the head of the Electrical Engineering Department at Universitas Negeri Malang (UM) in Indonesia. He is currently head of the Academic Publication Center at UM. He is the leader of a research group that focuses on knowledge engineering and data science (KEDS). His research interests include artificial intelligence, data mining, machine translation, and social informatics. These research interests are reflected in the journals he edits, such as *Knowledge Engineering and Data Science (KEDS)* and *Bulletin of Social Informatics Theory and Application (BUSINTA)*.

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13.3	The Challenge of Online Supervision	167
13.4	The Role of ICT in Online Supervision	168
13.5	Build an Online Supervision System.....	169
13.6	Conclusion	170
	References	170
Chapter 14	The Lecturer Document Management System in the COVID-19 Pandemic: Benefits, Challenges, Potential, and Difficulties	173
	<i>Ni Gusti Ayu Putu Harry Saptarini, Putu Indah Ciptayani, I Nyoman Eddy Indrayana, and I Putu Bagus Arya Pradnyana</i>	
14.1	Introduction	173
14.2	ICT for Paperless Data and Information Sharing in Education.....	174
14.3	Information System for Lecturer Document Management	175
14.4	The Developing Phase of the Lecturer Document Management Information System	176
14.5	Critical Success Factor of the Information System for Lecturer Document Management	176
14.6	Conclusion	179
	References	179
Chapter 15	Fast-Track Program with Recognition of Prior Learning in Post-Pandemic COVID-19	182
	<i>I Made Ari Dwi Suta Atmaja, I Nyoman Gede Arya Astawa, Ni Wayan Wisswani, I Ketut Parnata, and Putu Wijaya Sunu</i>	
15.1	Education During COVID-19.....	182
15.2	Fast-Track Education Post COVID-19.....	183
15.3	RPL in Education Program	184
15.4	Type A2 RPL on Fast-Track Program	185
15.5	RPL on D2 Fast-Track Bali State Polytechnic	186
15.6	Repository System and RPL Assessment Fast-Track Program Design.....	187
15.7	Implementation of Prior Learning System Applications.....	190
	References	191
Chapter 16	Student Satisfaction with Distance Learning during Pandemic Era Using Machine Learning Methods.....	193
	<i>Erry Fuadillah and Lala Septem Riza</i>	
16.1	Introduction	193
16.2	Research Method	194

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15 Fast-Track Program with Recognition of Prior Learning in Post- Pandemic COVID-19

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15.1 EDUCATION DURING COVID-19

The COVID-19 outbreak had hit the global education sector, especially universities. During the COVID-19 period, the government imposed restrictions on gathering, social distancing, physical distancing, wearing masks, and constantly washing hands in every activity (Government Policy Briefs, 2020). Through the Ministry of Education, the government has prohibited higher education from carrying out face-to-face (conventional) learning and requires online learning (Kemdikbudristek, 2021). Universities are led to be able to organize online learning processes. Lectures must be held with scenarios that can prevent physical contact between students-lecturers and students-students (Basilaia, 2020).

Digital technology can enable students and lecturers to carry out the learning process even though they are in different places (Haleema et al., 2022). The users of online learning process during the pandemic can access mobile devices such as smartphones or Android phones, laptops, computers, tablets, and iPhones that can be used to access information anytime and anywhere (Gikas & Grant, 2013). Virtual classes using Google Classroom, Google Meet, Zoom, Edmodo, and Schoology services (Enriquez, 2014) and instant messaging applications such as WhatsApp (Adodo, 2016) can be used to support the implementation of the online learning process. Online learning can be done through social media such as Facebook and Instagram (Kumar & Nanda, 2018).

Moreover, students will upload and download many files for safety and convenience. Online learning connects students with learning resources (databases, experts/instructors, libraries) that are physically separated or even far apart but can communicate, interact, or collaborate (directly and indirectly). An online learning process is a form of distance learning that utilizes telecommunications and information technology, such as the Internet (Muhammad, 2020).

15.2 FAST-TRACK EDUCATION POST COVID-19

During the pandemic, online learning was carried out almost worldwide (Goldschmidt, 2020). In other words, in this online learning, all elements of education still are required to facilitate learning so that it remains active without face-to-face interaction. Educators, as the main element in formal education, are encouraged to adapt to the implementation of initially conventional face-to-face methods and switch to online learning (Foo et al., 2021). The problem is not only online learning; another problem is when students have completed their education and face difficulty finding jobs. This happens because the pandemic disrupts industrial operations, so fewer job opportunities exist.

Under normal conditions, the uptake of Vocational High School (SMK) graduates by industry is quite significant because job opportunities are still wide open. However, during an uncertain pandemic, where there are very few job opportunities, recruitment by the industry is significantly reduced. If there are any jobs, the competencies required will be particular for the efficiency and effectiveness of industrial operations.

The Central Bureau of Statistics recorded that the total unemployed as of February 2020 was ± 6.88 million. With the open unemployment rate, SMK graduates are still the highest among other education levels, which is 8.49% (Kurniawan et al., 2021). If we talk about the industrial revolution, then the existence of SMK is the front line in welcoming the industrial revolution era we are facing. After the COVID-19 pandemic, the unemployment rate had not decreased even though industrial operations had begun to improve gradually, and there were many reasons for this. One of them could not survive during the pandemic and eventually had to close the company. Therefore, in the post-COVID-19 pandemic, strategic steps or breakthroughs that are still needed must be prepared to increase the workforce's absorption by industry.

The government, through the directorate general of vocational education, has launched a fast-track education program that is intended to link and match formal education (The Republic of Indonesia, 2016), both vocational and higher education, with the business world of the industrial world, as well as increase the absorption of the workforce into the industrial world. This breakthrough and innovative program is called the "Fast-Track Diploma Program in collaboration with SMK and Industry, the Business World, and the World of Work," also known as the "Fast-Track Two Vocational High School Program." This program encourages SMK students to get higher competencies faster through a more practical mechanism (Kemdikbudristek, 2021). To get a Diploma Two (D2), students of the SMK-D2 Fast-Track Program who have been in vocational education for 3 years (including fieldwork practice for 6 months) can freely choose to directly continue 1½ years of education (including 1 year of internship). The fast-track program launched by the government targets SMK graduates who will enter higher education specifically for a D2.

Higher education D2 is the most appropriate to implement a fast-track program that has accommodated the recognition process of past learning and is also free to study on an independent campus, with one of the points being industrial internships. The Ministry of Education, Culture, Research, and Technology stated that the D2 Fast-Track program could reduce unemployment for SMK graduates. Through this

program, SMK graduates will be strengthened in terms of technical and non-technical skills that are right on target with the needs of industrial partners.

This program is an option that SMK can implement but is not mandatory. The program carries the spirit of collaboration across education levels. Those involved must have experience developing a link-up system with industry, the business world, and the world of work. Therefore, the initial implementation of this program was started by the SMK-PTV-Industry: 20 PTV, more than 80 vocational high schools, and 35 industries, who are ready to commit to being pioneers in realizing this program. The basic principle is that this program must be based on the real needs of industry and business.

The industry's real needs are competent graduates with a high level of hard skills and soft skills who are mentally ready to work and ready to learn for life. The Fast-Track SMK Program is an integrated vocational and D2 program to increase skilled and superior qualified human resources in a shorter time. The study load of one semester in the D2 program is taken in the last year of SMK, which is equal to five and six semesters.

The total time taken by the SMK and the D2 program is only 4.5 years. The concept of learning for the D2 program is that the total number of credits must be taken (72 credits), of which 12 are obtained when studying at vocational schools, and the remaining 60 are taken for three semesters when taking the D2. The 12 credits taken during this vocational education can be carried out through Recognition of Prior Learning (RPL).

The learning process is designed through a tri-partied collaboration between vocational schools and industry, and the business world, and the world of work. A minimum of one semester during SMK is allocated for the industrial work practice program (industrial internship). Likewise, when in college, to further improve their soft skill and character, students in the eighth and ninth semesters (if calculated from SMK) allocate two semesters for internships at *Dunia Usaha Dunia Industri* (DUDI). With the strengthening of soft skills and character, the hard skills will automatically be honed and mature. The implementation of this program in 2020 is a pilot/test at several universities assigned to implement it. One of them is the Bali State Polytechnic, which opened eight Fast-Track D2 study programs. The fast-track study program adjusts to the work standards of the *Standar Kompetensi Kerja Nasional Indonesia* (SKKNI) and the fields that the industry needs.

15.3 RPL IN EDUCATION PROGRAM

RPL in the education pathway is intended to provide wider opportunities for each individual to pursue education up to higher education. The Ministry of Education issues policies, regulations, guidelines, and standard operating procedures for equivalence assessment related to the implementation of RPL. The program aims to facilitate the community to take formal education at a higher level (Kemdikbudristek, 2021). RPL must also be able to recognize one's past learning achievements without considering the process of increasing one's learning achievements, time, or place.

However, RPL must consider national educational policies such as the obligation to study for 12 years, quality equality, and recognition of nationally recognized learning achievements.

On the other hand, RPL must be accessible to every individual who needs it. Considering that RPL will be different for one field of science and expertise from another, RPL is unique. Thus, RPL can be prepared or developed by considering the educational path (formal, non-formal, informal) and the type of education (vocational education, profession, academic). Therefore, educational institutions need to consider differences in regulations or guidelines for evaluating equality through the RPL scheme (Director General of Vocational Studies, 2022). Recognizing a type of experience or past learning that is not one's own will lead to inefficiency in the educational process. Specifically, RPL in the higher education sector is an acknowledgment or equalization of experience with a student's abilities and or expertise at the previous level of education.

RPL is not the same as recognition of obtaining a degree. In many countries, RPL is used as a consideration for entering an educational program (entry requirement) at a higher level by reducing the number of credits, transferring credits, or releasing some credits for specific courses. A formal educational institution, which the Ministry of Education and Culture declares qualified to conduct RPL, may conduct an RPL assessment process for prospective participants in an education program. Participants of the RPL program must submit a written request and a portfolio prepared under their experience or past Learning Outcomes (LOs) and must be relevant, valid, and recognized evidence by the educational institution that administers the RPL.

A person can use RPL as an acknowledgment to attend formal education at a certain level at a university if the person concerned has obtained a minimum education of the SMA/SMK/C package. Recognition of learning achievements is also carried out in 11 stages, with limited maximum recognition at each level or educational program. This is intended to maintain the quality produced by each level or educational program.

15.4 TYPE A2 RPL ON FAST-TRACK PROGRAM

RPL is one of the educational programs organized by the Ministry of Education. In more detail, the Type A2 RPL program is an acknowledgment of a person's LOs obtained through formal, non-formal, and informal education and work experience in formal education. Thus, all forms of learning achievement outside formal education are recognized. If learning achievement has only been recognized as experience, then the existence of the RPL program is considered a learning experience in formal education.

RPL Type A2 stages of non-formal and informal education, and work experience (Minimum B Accredited Higher Education) are as follows:

- a. The applicant consults with the RPL team on the procedures to be followed. The RPL team assists applicants in identifying study program options, which will enable them to find courses that match the LOs they have gained from non-formal and informal education, and work experience.

- b. Prepare evidence: The applicant prepares valid, credible, and relevant documents as evidence of the applicant's ability/competence. Collecting evidence generally takes a long time and must be considered by the applicant.
- c. Applying for transfer of credit: The applicant fills out the application form provided by the university, accompanied by the collection of supporting evidence, to the Higher Education RPL team.
- d. Evaluating the proposal file: The RPL team appoints an RPL assessor from the study program with expertise in the field proposed by the applicant to conduct an evaluation. If the applicant does not meet the requirements in the process of evaluating credit transfer, the process is terminated.
- e. Issuing a credit transfer decision letter: RPL assessor sending the results of the credit transfer evaluation, complete with a list of courses and the number of credits obtained by the applicant, to the RPL team as the basis for issuing a credit transfer decision letter issued by an authorized official, at least at the dean level.

15.5 RPL ON D2 FAST-TRACK BALI STATE POLYTECHNIC

In 2022 the Bali State Polytechnic opened a Fast-Track two Diploma Study Program. The two fast-track diploma study programs opened by Politeknik Negeri Bali (PNB) include eight study programs. The D2 Fast-Track Computer Network Administration is among the eight study programs opened. All fast-track study programs with mechanisms for new student admissions use the RPL system, which uses Type A2. The development of this application will later be applied to the D2 Fast-Track Computer Network Administration study program that PNB has opened. Admission of prospective new students for the fast-track study program will be carried out before the new academic year 2022/2023. Prospective students are graduates of SMK partners who have made an Memorandum of Understanding (MoU) with each study program. In the process of selecting prospective students for the fast-track study program, there are obstacles in the current conditions:

i. Location of High School Partners

Each fast-track study program opened by PNB already has a high school partner, and the locations of the high school partners are spread across different districts. So it takes time in the selection process for each student from the high school partner.

ii. Selection Process

In its implementation, the Type A2 RPL mechanism is still carried out manually and conventionally for each prospective student. This mechanism requires a complicated administrative process and a large amount of funding because it is carried out directly with the respective high school partners by involving the RPL team, assessors, and the school admin.

iii. No System At All

Since the RPL scheme was launched, there has been no system to carry out the RPL implementation process directly. Including an online and integrated system to

facilitate the implementation of the RPL process will improve the process of implementing RPL for high school partner students. Now it is carried out conventionally and requires quite a long time with partner locations spread across various districts in Bali. PNB does not yet have a Web-based online selection system or Computer Assisted Test (CAT) for the fast-track program.

15.6 REPOSITORY SYSTEM AND RPL ASSESSMENT FAST-TRACK PROGRAM DESIGN

Based on the problems faced in the selection process for prospective students with the Type A2 RPL scheme, a new system design is made, as shown in Figure 15.1.

Translating the RPL system schematic:

1. **Translating the RPL System Mechanism:** This stage is the process of translating the Type A2 RPL scheme mechanism into a procedure that will be the basis for the stages of implementing the RPL process.
2. **Mapping RPL Needs for Prospective Vocational Partner Students:** At this stage, the mapping of RPL needs is done for each SMK partner student who will later become a prospective student. This mapping is necessary because each SMK partner has different characteristics, so it is expected to be able to accommodate each SMK partner's needs and readiness.
3. **Building a System Per Module According to RPL Needs:** In this stage, the divisional system for the RPL scheme is developed. The RPL procedure has many stages that must be passed until the desired final result is reached; therefore, it is crucial to building a divisional system to minimize missed procedures to be implemented.
4. **System Integration Becomes for RPL System:** After the development of the divisional system is carried out, each module is integrated so that the

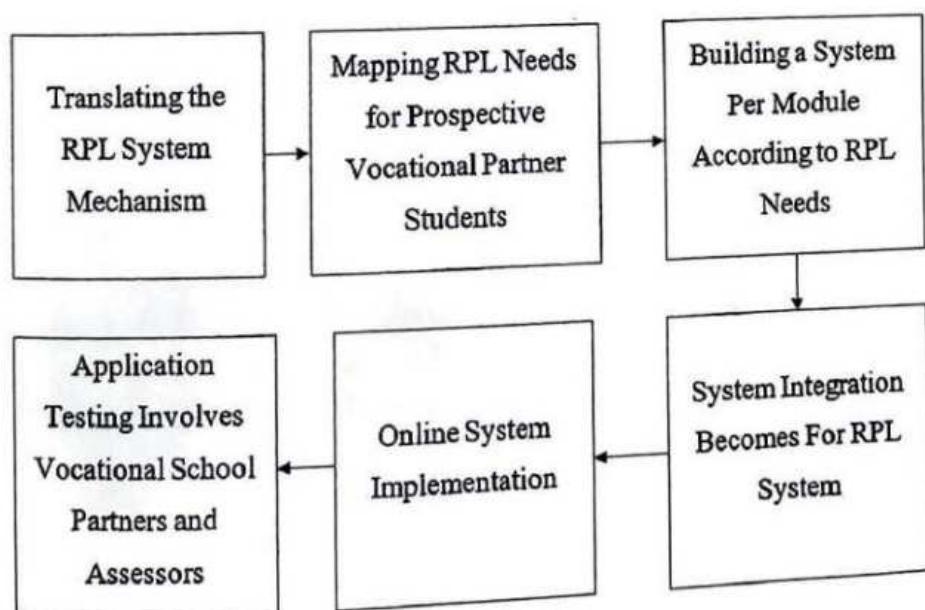


FIGURE 15.1 System design schematic.

system can be used as a whole from the RPL application process until the RPL selection results are issued.

5. **Online System Implementation:** After integrating each part of the system, the next step is to implement an online application to be accessed from anywhere and anytime. An online system that can be accessed will facilitate the RPL process carried out by prospective students and RPL managers at the organizing college.
6. Application testing involves vocational school partners and assessors.

After implementing the online system, testing will be carried out, including the RPL application process by prospective students, then self-assessment, to the assessment of files conducted by the assessor team. The process of testing this system involves SMK partners, prospective students themselves, and the assessor team. Details of the RPL system design are explained in Figure 15.2.

The detailed mechanism for the system is as follows:

1. The super admin is the head of the Fast-Track D2 Study Program, and he will create an account for the admin of the SMK partner school and the assessor. The number of accounts for school operators depends on the number of SMK partners who work jointly with the D2 study program. Meanwhile, the assessors make up the assessment team according to the assessment team's decree made by the head of the D2 study program. Super admin also plays a role in inputting course names, which are the results of the RPL process assessment. The number of courses resulting from the RPL may vary according to the curriculum of each study program.
2. The school admin is the operator of the SMK and is in charge of creating a default account for SMK students interested in D2 and following the RPL process. Students who have obtained an account then complete their data (biodata).
3. The following process for vocational students is to conduct an independent assessment. Self-assessment is an assessment filled in independently to assess one's readiness for one's competencies.
4. The completeness of the self-assessment is uploading competency files such as competency certificates.
5. If SMK or prospective students have done points 3, 4, and 5, then the appraisal assessor will get a notification. The assessor will provide an assessment and provide recommendations.
6. If the recommendation for the value of the prospective student is still lacking, the assessor can give a test or remediate until the score meets the requirements.
7. Each prospective student will receive notification of the results of the RPL assessment by the appraisal assessor. Those who do not meet the requirements must conduct an RPL supporting assessment. After the RPL supporting assessment has been completed and the results meet the requirements, then assessment of the RPL results courses can be carried out.

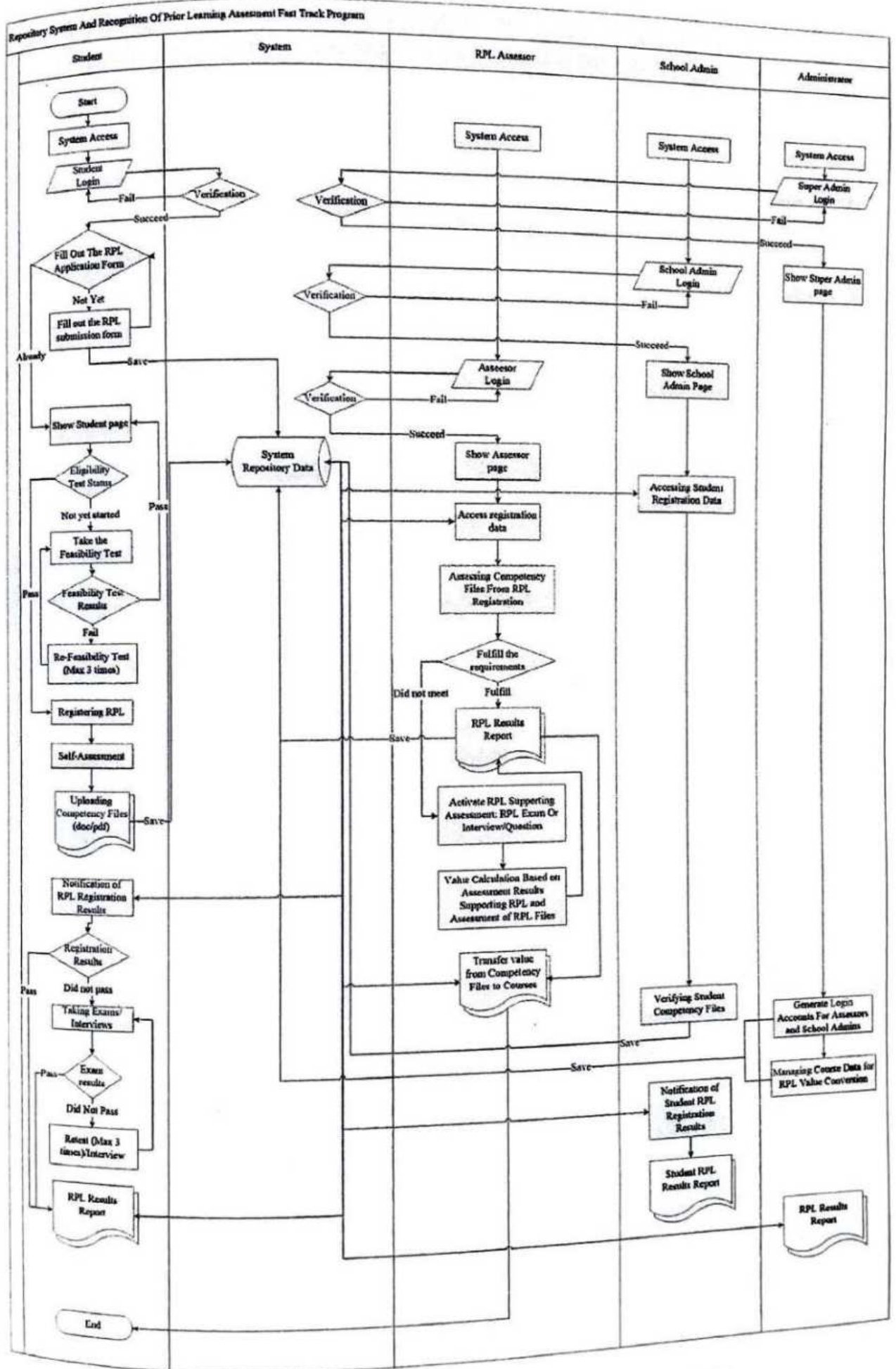


FIGURE 15.2 Flowchart detailing repository system and assessment RPL.

8. After the course assessment is completed, the assessor will print an RPL report to be submitted to the head of the D2 Study Program.
9. The school operator also gets a notification and can print a report on the results of their respective school's RPL, including notifications that will be sent to the prospective student's account.
10. The results of the RPL is printed and submitted to the head of the respective study programs. The task of the head of the study program is to re-verify the results of the RPL. It remains to be submitted to the head of higher education if appropriate.
11. The results of this RPL report can also be in the form of a decree, which the director of PNB will later sign as a decision letter on the results of the RPL for prospective students.

15.7 IMPLEMENTATION OF PRIOR LEARNING SYSTEM APPLICATIONS

RPL applicants can access the website page at <https://rplpnb.id/>. For RPL applicants, please register first to be able to use the system. Applicants prepare all files so that the RPL process can be carried out. Applicants can continue the RPL process according to the instructions from the system. The system display is shown in Figure 15.3.

Figure 15.3 shows the front page of the RPL system. This system is made only for RPL applicants, heads of study programs, assessors, and assessment teams from SMKs. Each entity has access rights according to its function. After the prospective

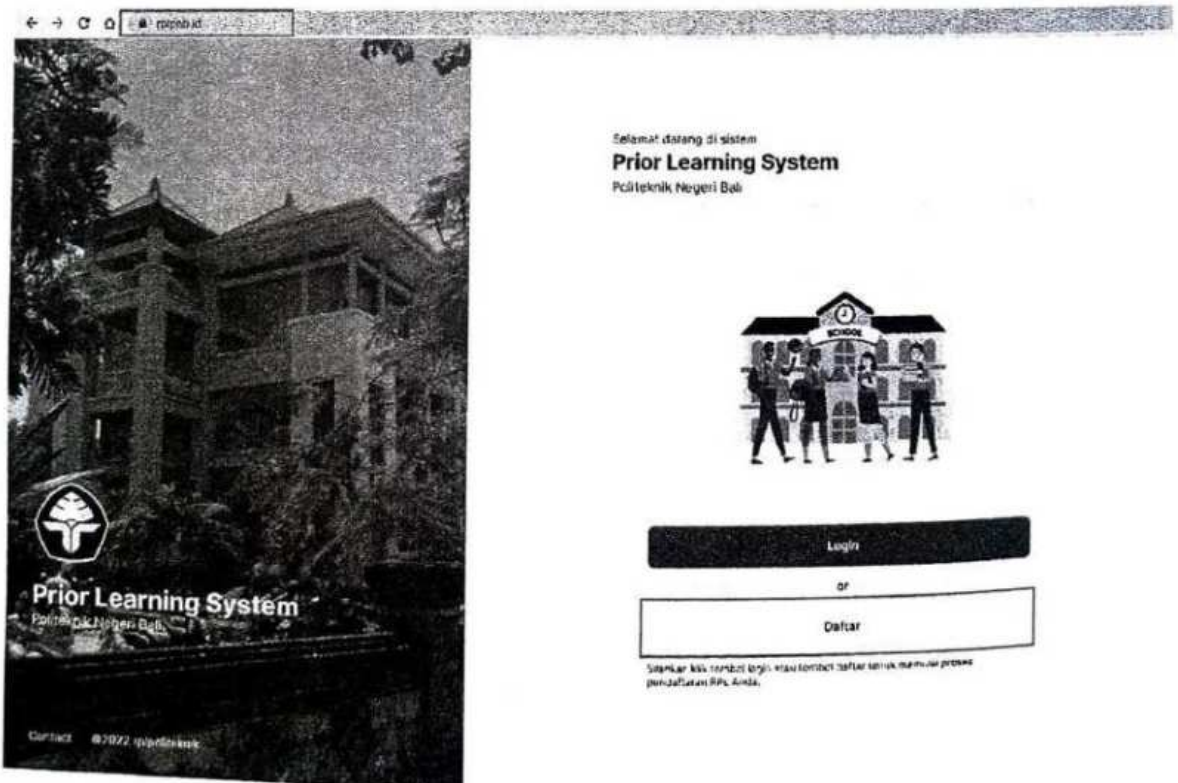


FIGURE 15.3 Main page of prior learning system.

student registers, they will be verified by the assessor team to continue carrying out the next RPL process, such as the independent assessment process and uploading files for RPL assessment. After completing the assessment process, each prospective student will receive notification of the results of the RPL and the results of the RPL used in issuing a decision letter on the RPL results of the D2 fast-track program.

Based on the previous description, it can be concluded that the system was made to make it easier for users to carry out the RPL process without having to come to the location of each SMK. The online system can be accessed anytime and anywhere without being limited by place and time. In the COVID-19 condition, the RPL system that was built greatly assisted the competency assessment process for prospective D2 *Asesor Jaminan Kualitas* (AJK) students by eliminating the face-to-face process. This can help to prevent transmission for prospective students who were sick or indicated that they had contracted COVID-19.

Then the RPL assessment process is carried out by the assessment team, which is determined by the organizing study program and can be added or removed by the system admin, namely the head of the Fast-Track D2 Study Program. The process of verifying and authenticating the RPL file collaborates with the SMK because the files submitted were as long as they were SMK students. In the end, the output of the RPL results can be used as an attachment in making the SK results of the RPL to be announced by the academic section of the tertiary institution.

For suggestions for future system development, registration facilities and at the same time a selection system can be added for prospective students of the D2 Fast-Track study program. Also suggested is the addition of an assessment system by field lecturers from industry for industrial internship courses, which will be carried out by students in the next second and third semesters.

REFERENCES

- Adodo, S. O. (2016). Effect of Mind-Mapping as a Self-Regulated Learning Strategy on Students' Achievement in Basic Science and Technology. *Mediterranean Journal of Social Sciences*, 4(6), 30–41.
- Basilaia, G. (2020). Replacing the Classic Learning Form at Universities as an Immediate Response to the COVID-19 Virus Infection in Georgia. *International Journal for Research in Applied Science and Engineering Technology*, 8(3), 101–108. <https://doi.org/10.22214/ijraset.2020.3021>
- Director General of Vocational Studies. (2022). Regulation of the Director General of Vocational Studies number 18 of 2022 concerning Guidelines for Implementing Recognition of Past Learning in Vocational Higher Education. Jakarta
- Government Policy Briefs (2020). Circular of the Ministry of Education, Culture, Research, and Technology Number 4 of 2020. 2020. Implementation of Education During Coronavirus Disease (COVID-19) Emergency.
- Enriquez, M. A. S. (2014). Students' Perceptions on the Effectiveness of the Use of Edmodo as a Supplementary Tool for Learning. *DLSU Research Congress*, 2(6), 1–6.
- Foo, C., Cheung, B., & Chu, K. (2021). A Comparative Study Regarding Distance Learning and the Conventional Face-to-Face Approach Conducted Problem-Based Learning Tutorial During the COVID-19 Pandemic. *BMC Medical Education*, 21(141). <https://doi.org/10.1186/s12909-021-02575-1>

- Gikas, J., & Grant, M. M. (2013). Mobile Computing Devices in Higher Education: Student Perspectives on Learning With Cellphones, Smartphones & Social Media. *Internet and Higher Education*, 19, 18–26. <http://dx.doi.org/10.1016/j.iheduc.2013.06.002>
- Goldschmidt, K. (2020). The COVID-19 Pandemic: Technology Use to Support the Wellbeing of Children. *Journal of Pediatric Nursing*, 53:88–90.
- Haleema, A., Javaida, M., Qadri, M. A., & Suman, R. (2022). Understanding the Role of Digital Technologies in Education: A Review. *Journal Sustainable Operations and Computers*, 3(2022), 275–285. <http://dx.doi.org/10.1016/j.susoc.2022.05.004>
- Kemdikbudristek. (2021). Regulation of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia Number 41 of 2021 concerning Recognition of Past Learning. Jakarta.
- Kumar, V., & Nanda, P. (2018). Social Media in Higher Education. *International Journal of Information and Communication Technology Education*, 15(1), 12. <https://doi.org/10.4018/ijicte.2019010107>
- Kurniawan, R., Jaedun, A., Mutohhari, F., & Kusuma, W. M. (2021). The Absorption of Vocational Education Graduates in The Automotive Sector in The Industrial World. *Journal of Education Technology*, 5(3). <https://doi.org/10.23887/jet.v5i3.35365>
- Muhammad, N. A. K. (2020). The role of digital technology in sustaining online learning during the pandemic Covid19. *UHAMKA International Conference on ELT and CALL (UICELL) 2020*, Jakarta, Indonesia
- The Republic of Indonesia. (2016). President Instruction Number 9. Year 2016 on Revitalization of Vocational Education to Improve Quality and Human Resource Competitiveness. The Republic of Indonesia.