

Enhancing Training Effectiveness: Evaluating the Blended Learning Method in Basic Training for Probationary Civil Servants at the Ministry of Transportation

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ABSTRACT

In accordance with PerKALAN 14/2022 Latsar CPNS Training Curriculum, the implementation of Latsar CPNS can be carried out with a full online, hybrid, or face-to-face learning model. The Ministry of Transportation organizes Latsar CPNS with a hybrid method which is divided into 3 phases: MOOC-Online Learning-Classical. This change in the learning model is said to have pros and cons because on the one hand it provides cost efficiency and the number of graduates but is felt to reduce the achievement of learning objectives. In this study, an analysis was conducted on the perceptions from the perspective of Latsar CPNS alumni regarding the 3 learning phases. The results were that the MOOC and Online phases with facilitators were quite effective with the lowest average value in the efficiency dimension. Learning ineffectiveness occurs, especially due to network constraints for employees in 3T areas or conflict areas and provisions for being free from duties during Latsar which cannot be carried out because assignments, leader's direction, and services at the workplace must continue. Meanwhile, strengthening the effectiveness of learning occurred more during the classical stage because teachers and participants could explore more material, issues/cases, and best practices.

1. INTRODUCTION

During the increasingly complex world dynamics due to the Covid-19 pandemic and the VUCA era, it has resulted in many changes in areas of life. Significant changes are future challenges related to technological disruption and social change. How to prepare ASN who are ready to face future challenges amidst rapid technological disruption and social change? The answer lies in reforming the education and training system, including the Basic Training for Prospective Civil Servants (Latsar CPNS). Latsar CPNS is training for prospective Civil Servants (CPNS), during a trial period which is carried out through an integrated training process to produce professional Civil Servants with character, based on the core values of the State Civil Servants in carrying out their duties and positions as implementing public policy, public servants and uniting the nation. CPNS training participants themselves are new entries into government with an age range of 18 to 35 years.

LAN Head Decree Number 14 of 2022 is a strategic step in responding to these challenges. The new Latsar CPNS curriculum was designed considering the characteristics of the millennial generation who tend to be flexible and independent. Using technology such as MOOCs, Latsar participants can learn actively and according to their own rhythm. In this way, it is hoped that ASN will be created that is competent, adaptive and able to provide excellent public services based on core value BerAKHLAK. Apart from that, this more flexible learning approach can also increase cost efficiency for education and training institutions.

The learning agenda content in Latsar CPNS is divided into 4 agendas. Agenda 1 studies National Insight, National Defense Values, and Contemporary Issue Analysis. Agenda 2 studies 7 BerAKHLAK (Berorientasi Pelayanan, Akuntabel, Kompeten, Harmonis, Loyal, Adaptif, Kolaboratif) modules. Agenda 3 studies ASN Management and SMART ASN. Agenda 4 is core values actualization project. Affiani (2020) in his research found that Widyaiswara and teaching staff felt that online or distance

learning methods were less effective because the dense and large amount of material was difficult to convey if learning was done online compared to conventional learning. However, online learning can provide greater cost effectiveness for institutions and the effectiveness of absorbing the number of graduates because it can reach training participants who are located far from campus. In research conducted by Fuadi (2021), Agustinus, Muttaqin, and Agustina (2024) shows that the success of online learning also lies in the training participants where the challenge is that the training participants are heterogeneous with all the limitations of facilities and infrastructure in their workplace and the perception of participants is that online learning is not boring, easy, and more flexible but demands higher responsibility and discipline.

The Center for Human Resources Development of Transportation Apparatus as the institution responsible for organizing Latsar CPNS at the Ministry of Transportation found a gap in the implementation of Latsar CPNS, especially after Covid-19. Distance learning is very useful in reaching more than 2000 participants each year at a lower cost, but the achievement of the objectives of Latsar CPNS for CPNS at the Ministry of Transportation has been an issue that has occurred since 2020. The online learning method is considered less appropriate for basic training due to the many obstacles that occur. The ability of participants to absorb learning materials still needs to be studied. CPNS Latsar is also considered as the basis for character formation, not just cognitive knowledge. In this study, an analysis of the perception of the effectiveness of CPNS Latsar learning was carried out according to the latest curriculum from LAN. It is hoped that this research can measure the effectiveness of the implementation of Latsar CPNS at the Ministry of Transportation and can provide input for improvements for future implementation.

2. METHOD

Hypothesis

Based on PerKALAN 14/2022 Latsar CPNS Training Curriculum, that the implementation of training can be done online, hybrid, and classically. From 2021, the implementation of CPNS latsar training at the Ministry of Transportation has been carried out online, and in 2022 it will be carried out in a hybrid manner. From the results of the learning evaluation from the Training Quality Assurance Division and the evaluation of teaching staff/Widyaiswara, the goal of forming the core value character of BerAKHLAK is not felt optimally with the learning model in this latest curriculum. The level of focus, commitment to independent learning and assignments are still lacking. However, technically the implementation of ease and reach of access and budget efficiency are the superior points of this learning model. This research aims to measure the perceptions as follow:

1. Perception of the effectiveness of the Massive Online Open Course (MOOC) learning stage in the Latsar CPNS.
2. Perception of the effectiveness of the online learning stage in the Latsar CPNS.
3. Perception of increasing the effectiveness of learning through a classical stage in Latsar CPNS.

Quantitative Analysis Method

This study used a quantitative analysis method by distributing questionnaires to respondents. The respondents were alumni of the 2023 Basic Training for Probationer Civil Servants (Pelatihan Dasar CPNS) held at the Pusat Pengembangan SDM Aparatur Perhubungan. Data collection was carried out on March 11-24, 2024. In 2023, the number of graduates was 2,120 people. Based on the Slovin formula with a tolerance value (e) of 0.1, the minimum sample required was 95 respondents. From the questionnaires distributed, 126 respondents were collected, so that the data obtained met the analysis requirements. To determine the validity and reliability of the questionnaire, Cronbach's Alpha and Pearson values were used. Hair, et.al (2019) stated that for Alpha values > 0.6 and Pearson < 0.05 , the instrument met the validity and reliability requirements. Filling out the questionnaire using a Likert scale of 1 – 4 with a value of 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

3. RESULTS AND DISCUSSION

Before distributing the questionnaire to the target respondents, the instrument that was prepared was pre-tested by distributing it to 30 pretest samples. The results of the pre-test have shown the validity and reliability of the instrument that was prepared. Furthermore, data processing and analysis were carried out for the collected research respondent data.

Table 1. Validity dan Reliability Instrument Pre-Test Result

No.	Variables	Dimension	Cronbach's Alpha	Sig. Pearson
1.	Perception of MOOC Learning Effectiveness	Relevance of Material	0.933	<0.05
		Adequacy of Information	0.949	
		Efficiency	0.824	
2.	Perception of Effectiveness of Online Learning	Relevance of Material	0.952	
		Adequacy of Information	0.929	
		Efficiency	0.942	

The demographics of respondents were 64% male and 36% female. This data represents the distribution of the Ministry of Transportation's employee mostly came from Cadets graduated, which are indeed dominated by men with typical jobs in the field and in the technical fields of land, sea, air, and railways. Most of the 'Pola Pembibitan' graduates are placed in Unit Pelaksana Teknis (UPT), ships and ports, terminals, stations, and airports. They are prepared to become transportation human resources where the knowledge and skills learned as Cadets could not be obtained from learning at university. As many as 51% of Latsar CPNS participants are in the age range of 23-27 years who are Gen-Z and Millennials. Meanwhile, the distribution of respondents' education is 56% D3, 27% D4/S1, 13% SMA/SMK, and 4% S2. The largest placement is in the Direktorat Jenderal Perhubungan Udara at 45% with total respondents 61% coming from the regular CPNS test and 39% from the Ministry of Transportation's 'Pola Pembibitan' civil service school. The questions formulated in the research instrument refer to Maharani, et al (2020), Salter, et al (2013) and Sue, et al (2005) for the perception of effectiveness of online learning variable and Lu, et al (2021), Goh, et al (2018) for the perception of MOOC learning effectiveness variable. Table 2. shows the items to measure MOOC for Latsar CPNS.

Table 2. Perception of MOOC in Latsar CPNS Ministry of Transportation

Dimension of MOOC	No	Question
Material Relevance	1.	MOOC learning materials are arranged according to the needs of knowledge, skills, and provisions of behavioral attitudes as a civil servant
	2.	MOOC learning materials are made with slide/video/handbook displays that are easy to learn
	3.	I get a good understanding of the material through independent learning during MOOC
	4.	After MOOC I am more confident in discussing, asking, and answering questions in online learning sessions with facilitators
	5.	Evaluation of learning and quizzes in MOOC are in accordance with the material references given to participants
Information Adequacy	1.	The facilitator is ready to answer questions and discuss if there is material in the MOOC that I do not understand
	2.	MOOC provides good basic knowledge and motivates me to learn further
	3.	I am sure that everything I learn from this MOOC will help me in the future, especially in my daily work
	4.	The MOOC material that I learned is related to the actualization and habituation agenda. Efficiency 1. MOOC makes my learning time more effective and efficient.
Efficiency	1.	MOOC makes my learning time more effective and efficient

2.	The costs incurred for MOOC (internet, transportation, and others) are relatively low/economical
3.	The additional costs that I spend to buy equipment (hardware) or applications (software) used in MOOC learning do not burden me
4.	I am familiar with the MOOC learning media used

The average value of the results of the Perception of the Effectiveness of the Massive Online Open Course (MOOC) learning stage in the Latsar CPNS is 3.52 with the lowest average value in the Efficiency dimension. If we analyzed per question, the answer with the lowest value is in the question item "The costs incurred for MOOC (internet, transportation, and others) are relatively low/economical". Theoretically, the distance learning pattern is considered to have better economic costs because it does not require funding for transportation, food, accommodation, and rental costs. Previous research from Rohman, et al (2020) found that for the student agreed with online learning which is considered to save more resources owned by students. They do not need transportation costs to go to class/school and save more time. Meanwhile, CPNS in Ministry of Transportation they are mostly placed in 3T work areas where access to electricity and internet networks is limited. Based on the collected respondent data, 73% of participants did MOOC and online learning in the office, 17% at home, 8% in dormitories/messes/official residences and 2% other locations. The obstacles that occur are that training participants must still go to the office with transportation costs for each online learning schedule because the stable network is centered in the office. However, the WiFi available in the office also encounters problems if there are blackouts which occur quite often in the 3T area. Several participants with placements in passenger service units, such as airports, ports, stations, and terminals can overcome these obstacles with the availability of generators, but for placements in offices, supporting infrastructure such as generators still have minimal maintenance or even lack of fuel supplies. For example, participants from UPBU Nop Goliat Dekai Papua Pegunungan must go to Nabire to get more stable and better network access when they must undergo online learning. Not to mention the problems in conflict areas such as participants with placements in Ilaga are rotated to Nabire (a week in Ilaga then switch to Nabire for the following week and so on), so when the online learning schedule and the participants are on the Ilaga office for guard schedule, they cannot follow online learning as they should. None the less, the potential obstacles related to supporting facilities such as laptops/smartphones/other devices to access learning materials were not big deal because almost all CPNS Latsar participants are a digital savvy generation and have been socialized with the CPNS Latsar curriculum and learning methods with an online/hybrid pattern so that they are able to prepare their needs.

Referring to the Decree of The Head of The State Administrative Institution Number: 13/K.1/PDP.07/2022, the implementation of Latsar CPNS at the Ministry of Transportation is carried out in a hybrid manner. After the training participants complete the MOOC, online learning is then held on a scheduled basis with facilitators/Widyaiswara on each agenda. Ideally, online learning is implemented to deepen and enrich the material from the substance of the material that has been studied in MOOC. So, it is expected that participants will be active in discussions, solving case studies, questions and answers, and interactive online learning guided by student-centered learning.

Table 3. Perception of Online Learning (synchronous and asynchronous) in Latsar CPNS Ministry of Transportation

Dimension of Online Learning	No	Question
Material Relevance	1.	The learning material in the synchronous class is delivered according to the reinforcement needed by participants in understanding the material according to the training curriculum
	2.	The learning material in the synchronous class is made with easy-to-understand slide/video/presentation displays
	3.	I get a better understanding of the material after discussing in the synchronous session and working on asynchronous assignments from the facilitator

	4.	There is a relationship between the topic of the material studied and the current issues/case studies as reinforcement in online learning (synchronous and asynchronous) with the facilitator
	5.	Assignments and quizzes are in accordance with the references and discussion of the material given to participants
Information Adequacy	1.	The facilitator is ready to answer questions and discuss if there is material in online learning (synchronous and asynchronous)
	2.	After the online learning meeting with the facilitator, I feel that I have received more enrichment of the material, and it makes it easier for me to implement the material in the workplace
	3.	The online learning material (synchronous and asynchronous) that I learned strengthens the relationship with the actualization and habituation agenda that I do at work
Efficiency	1.	Online learning is carried out at the right/appropriate/effective time
	2.	Online learning is easy to do anywhere (including the location where I live/placement)
	3.	Online learning allows me to use equipment and applications that I already have (smartphone, laptop, PC, zoom application, etc.)
	4.	I am familiar with online learning methods
	5.	Online learning can improve my learning ability quickly and easily
	6.	Online learning encourages me to look for more additional sources of information from the topics/materials being studied

The average value of Perception of the effectiveness of the online learning stage in the Latsar CPNS is 3.49. This result is almost the same as the previous perception of the MOOC phase. The average value of the lowest perception is also in the efficiency dimension. The lowest value is on the question item "Online learning can improve my learning ability quickly and easily". These data show that there is still a gap between the expectations and objectives of the learning curriculum and the competency achievement results of training participants. Apart from network and technical network constraints, post-MOOC material reinforcement and enrichment are not effective because in fact participants do not really read the MOOC modules, even in online classes, participants are often found who do not know at all the materials that will be discussed on each agenda. The reading interest of generation Z and millennials is indeed an issue in the implementation of MOOCs which are based on independent/self learning styles. Amalyah, et al (2024) stated that the use of print media (book, handout, and printable materials) access is increasingly less in demand by gen Z and millenials, because of the ease of information that can be accessed through technology. The latest generation generally really likes instant things. Although MOOC materials can be accessed in online platforms, they prefer to learn instantly from AI, such as chat GPT. Those generations also prefer experiential learning or learning theory through videos and animations rather than reading modules.

Internal obstacles for participants in the Ministry of Transportation are limited human resources, especially in the 3T region UPT and new offices from the development of transportation infrastructure that occurs, causing new employees (CPNS) who are assigned automatically to become new talents to drive the organization goals. The workload and job responsibilities become more important than the CPNS Latsar learning process. When implementing a zoom meeting with a facilitator, there are also participants who are simultaneously zooming in with several other activities. The focus of the participants will be divided when the superior often calls or gives directions while the participants are in a learning session. Whereas Latsar CPNS is mandatory training and is mandatory for all CPNS in Ministries/Institutions throughout Indonesia. Based on this research 97% respondents get a Letter of Release from Duty during the implementation of basic CPNS training from the Head/the Director/the Leader, but in its implementation, no more than half of the respondents continued to work in the office, on field assignments, and even on business travel in accordance with the directives of their leaders. Some leaders in work units do not seem to have the option to completely release CPNS to focus on basic training due to the lack of competent human resources to carry out functions in the work unit. This position cannot be rejected by CPNS because the organizational culture based on hierarchy tends to

require subordinates to immediately obey the orders of their superiors. In addition, network access that can only be obtained easily, cheaply, and stably is in the office, so their presence in the office is required to continue working. However, this is not always wrong because basic training should be character building as well as preparing CPNS to be ready to work and recognize the organization and their job description, so that when experiential learning through the learning by doing process runs parallel with Latsar, it can have a more positive impact on training results. What needs to be developed for participants in distance learning methods is commitment, discipline and understanding of learning objectives. The effectiveness of distance learning is also achieved if the facilitator/Widyaiswara has good competence and commitment in managing online learning. Online learning requires different handling to attract the focus and interest of participants, for example with games, quizzes, interactive case selection and minimizing theoretical lectures.

After completing the MOOC phase and then online learning, CPNS Latsar participants have time to go off campus (actualize the material that has been learned with work in the work unit) to then meet again after approximately 1 month for the implementation of classical learning as well as the final evaluation. In this final phase, the learning method is face-to-face or classical. The goal is to review and evaluate learning. In general, participants have a better perception at this stage of learning because class activities are packaged more interactively through discussions, class debates, role plays, group assignments, and case studies where facilitators/Widyaiswara also have more freedom to explore resources and learning tools on campus. We conducted interviews with several respondents related to the impression of classical learning and obtained a more positive perception. From the classical session, participants had higher attention and discipline in entering the classroom and following the learning.

“This classical activity can better strengthen the material obtained from distance learning in relation to actualization.” (Participant X, UPBU Djalaludin Gorontalo).

“This classic is a closing moment that provides insight into building the character expected from Latsar as a professional civil servant.” (Participant Y, BPTD Kelas II Bali).

“From all of the learning sessions in Latsar, the most enjoyable one was in this classical session because we could have more direct discussions with the instructors and friends in the class and the results of the discussions were easier to understand because they raised best practices and bad practices.” (Participant Z, Biro Keuangan).



Fig. 1. Class Activity in Pusat Pengembangan SDM Aparatur Perhubungan

Returning to the spirit and purpose of the implementation of the Latsar CPNS, it turns out that during this classical session it has an influence on character formation in accordance with the objectives of the designed curriculum. So, for basic training, a classical session is needed, therefore from the choice of CPNS Latsar methods; online, hybrid, and classical with budget considerations but still accommodating the success of achieving learning objectives, the hybrid method can be a wise choice.

Discussion

The findings of this study indicate that while the hybrid learning model (MOOC, online learning, and classical sessions) for Latsar CPNS at the Ministry of Transportation provides flexibility and cost efficiency, its effectiveness varies across different learning phases. The MOOC and online learning phases, though effective in delivering materials, face significant challenges, particularly in efficiency. The lowest perception scores were in the efficiency dimension, especially regarding costs incurred for internet access and network instability in remote (3T) areas [16]. Participants in these areas often had to travel to offices with stable connections, increasing their financial burden despite the theoretical cost-effectiveness of online learning.

Another challenge was the level of engagement in self-directed learning. Many participants did not fully read the MOOC materials before online classes, reducing the effectiveness of discussions and facilitator-led reinforcement [12]. Additionally, online learning requires a higher level of discipline and responsibility, which some participants found difficult [11]. The study also found that many CPNS were unable to be fully relieved from their duties despite the official policy, resulting in divided focus during training sessions. This hierarchical work culture issue aligns with findings from [15], which suggest that organizational commitment plays a crucial role in e-learning effectiveness.

Despite these challenges, classical learning emerged as the most effective phase in strengthening understanding, promoting interaction, and reinforcing the core values expected of civil servants. Participants found the face-to-face setting more engaging and beneficial for discussing practical applications, case studies, and best practices. This aligns with previous studies [17] that highlight the importance of direct engagement and experiential learning in professional training programs. The interviews with participants also reinforced this conclusion, with many stating that classical sessions were the most enjoyable and impactful for character-building.

Given these findings, future improvements should focus on enhancing the accessibility and engagement of online learning through interactive digital tools, gamification, and structured facilitator-led discussions. Additionally, infrastructure support for remote participants should be strengthened to minimize technical barriers [13]. The results suggest that while the hybrid model remains a viable approach, greater emphasis on participant engagement, organizational support, and learning reinforcement strategies is crucial to optimizing its effectiveness.

4. CONCLUSION

Based on the results of respondents' answers from alumni of Latsar CPNS at the Ministry of Education who completed the training using the hybrid method (Phase 1: MOOC, Phase 2: Online with facilitators, and Phase 3: Classical/Face to Face), it was found that in general the participants' perception of the effectiveness of learning was quite good. However, in the Efficiency dimension, the average value of perception is the lowest among the others, both in the assessment of MOOC and Online Learning. The managerial implications that can be obtained are the need for commitment and firmness of the leadership in releasing the participants of Latsar CPNS in accordance with the provisions and guidelines for the implementation in force where during the MOOC and asynchronous distance learning periods, participants are allowed to continue working, but during synchronous with the facilitator, participants are required to follow properly and thoroughly. The demographics of CPNS in the Ministry of Transportation, some of whom do not come from transportation science, need to be equipped with basic transportation material and the organizational culture of the Ministry of Transportation, so it is necessary to prepare an additional curriculum based on the substance of strengthening the transportation sector knowledge for Latsar CPNS participants in the Ministry of Transportation. In classical learning with facilitators on campus, there is an increase in perceptions regarding the effectiveness and achievement of learning objectives, so standardization of learning materials between facilitators is needed, including providing analysis of best and bad practice cases. Further research is expected to be conducted to explore the performance of excellent service of training institutions in supporting learning standards as well as analyzing the perception of facilitator competence in providing materials in CPNS Latsar training, especially at the Ministry of Transportation.

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