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Evaluation of the practical office advance (POA) training program using the Kirkpatrick model

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ABSTRACT

This study aims to evaluate the effectiveness of the Practical Office Advance (POA) training program at BLK Pasaman Barat using the Kirkpatrick Model, with a focus on the gap between competency improvement and employment outcomes. A quantitative evaluation research design was applied involving 16 trainees selected through total sampling. Data were collected using validated questionnaires, pre-test and post-test, performance checklists, supervisor interviews, and documentation, and analyzed using descriptive statistics, paired comparison, and N-Gain. The results showed significant improvements in knowledge (33.54 to 74.38) and skills (30.62 to 85.43), with most participants achieving moderate to high N-Gain. However, behavioral transfer was moderate, and only 31% of participants obtained relevant employment. In conclusion, the POA training effectively improves technical competencies but has limited impact on employment outcomes, indicating the need to strengthen industry linkages and align training with labor market demands.

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Introduction

In the current era of digital transformation, the demand for workforce competencies in information and communication technology (ICT) has increased significantly. Administrative tasks that were once performed manually are now highly dependent on digital tools such as word processors, spreadsheets, and presentation software. This shift requires job seekers not only to possess basic computer literacy but also to demonstrate advanced operational skills that support efficiency, accuracy, and productivity in modern workplaces (Masters et al., 2024; Plewka et al., 2023). As a result, vocational training institutions are expected to play a strategic role in preparing a workforce that is responsive to these evolving demands.

In Indonesia, the government has strengthened vocational education and training through institutions such as Balai Latihan Kerja (BLK), which are designed to equip job seekers with practical and job-oriented competencies. One of the programs implemented is the Practical Office Advance

(POA) training, which focuses on developing advanced-level office application skills aligned with the national competency standards (SKKNI). Despite this structured and competency-based approach, concerns remain regarding whether such programs are able to produce outcomes that extend beyond classroom learning, particularly in terms of employability and workplace performance (Kirkpatrick et al., 2020; Sperber et al., 2023).

Previous studies have shown that vocational training programs can improve participants' technical knowledge and practical skills, especially when they adopt competency-based and practice-oriented learning strategies (Nascimento & Abbad, 2021; Ries & Johnston, 2023). However, these improvements are often limited to the learning phase and do not always translate into sustained behavioral changes or measurable employment outcomes. This indicates that the effectiveness of training programs cannot be assessed solely based on knowledge acquisition but must also consider how learning is applied in real work contexts.

Furthermore, research in training evaluation highlights that learning outcomes are influenced by multiple factors, including instructional design, participant characteristics, and workplace environment. Contextual elements such as organizational support, availability of technology, and labor market conditions play a critical role in determining whether newly acquired skills can be effectively utilized. In many cases, a mismatch between training content and job requirements reduces the practical relevance of training outcomes, particularly in regions with limited industrial development.

The Kirkpatrick evaluation model has been widely recognized as a comprehensive framework for assessing training effectiveness across four levels: reaction, learning, behavior, and results. While many studies have applied this model, most evaluations tend to focus primarily on the reaction and learning levels, often neglecting the more complex dimensions of behavioral transfer and long-term outcomes (Cordeiro et al., 2025; Olsson et al., 2022). As a consequence, the understanding of whether training programs truly contribute to improved workplace performance and employability remains limited.

Recent studies have increasingly emphasized the importance of linking training outcomes with employability and labor market absorption (Huang, 2025; Stanich et al., 2023). Although training programs may successfully enhance technical competencies, evidence suggests that these competencies do not always align with the actual demands of the job market. This issue is particularly evident in regional areas, where employment opportunities are limited and may not require advanced technical skills. As a result, many training graduates face difficulties in securing relevant employment despite having completed structured training programs.

Despite the growing body of literature, several research gaps remain. First, most studies focus on large-scale or urban training centers, while limited attention is given to regional training institutions such as BLK in less developed areas. Second, many studies rely on single-source data, particularly self-reported questionnaires, which may reduce the objectivity of findings when assessing behavioral changes and real-world outcomes (Azmy & Setiarini, 2023; Seow et al., 2023). Third, there is still a lack of integrated evaluation that simultaneously examines all four levels of the Kirkpatrick model using multiple data sources.

Addressing these gaps requires a more comprehensive evaluation approach that combines quantitative and qualitative data to provide a holistic understanding of training effectiveness. Integrating multiple data sources, such as performance tests, participant perceptions, supervisor feedback, and employment records, can enhance the validity of findings and offer deeper insights into how training outcomes are translated into workplace performance. Such an approach is essential to move beyond surface-level evaluation and to capture the complexity of training impact in real-world settings (Ali et al., 2022; Gupta & Mahajan, 2025).

Based on these considerations, this study aims to evaluate the effectiveness of the Practical Office Advance (POA) training program at BLK Pasaman Barat using the full Kirkpatrick model combined with a triangulation approach. The novelty of this study lies in its focus on the alignment between competency improvement, behavioral application, and employment outcomes within a regional labor market context. By examining not only learning gains but also behavioral transfer and employability, this research is expected to provide both theoretical contributions to training evaluation and practical

recommendations for improving vocational training programs in developing regions (Simangunsong & Purnomo, 2021; Wulandari & Pogo, 2023).

Method

This study employed an evaluation research design using a quantitative approach to assess the effectiveness of the Practical Office Advance (POA) training program at BLK Pasaman Barat. The evaluation was guided by the Kirkpatrick Model, which examines training effectiveness across four levels: reaction, learning, behavior, and results. This model was selected due to its ability to provide a comprehensive and sequential assessment of training outcomes, ranging from immediate participant responses to long-term impacts on performance and employability. Each level was operationalized through specific indicators, including participant satisfaction (reaction), cognitive and psychomotor improvement (learning), application of skills in the workplace (behavior), and performance and employment outcomes (results).

The population of this study consisted of all 16 trainees enrolled in the 2025 POA training program in the ICT vocational field at BLK Pasaman Barat. Given the limited population size, a total sampling technique was applied to include all participants as research respondents. This approach was chosen to ensure full representativeness and to minimize sampling bias. However, it is acknowledged that the small sample size limits the generalizability of findings, and therefore the results are interpreted within the specific context of the training cohort.

Data were collected using multiple instruments aligned with the four evaluation levels. At Level 1 (reaction), a structured questionnaire with Likert-scale items was used to measure participants' perceptions of training organization, materials, instructors, and facilities. At Level 2 (learning), cognitive improvement was assessed through pre-test and post-test instruments, while psychomotor skills were measured using a performance checklist covering competencies in Microsoft Word, Excel, and PowerPoint. At Level 3 (behavior), behavioral transfer was evaluated using both participant self-reports and structured interviews with workplace supervisors to reduce self-report bias. At Level 4 (results), outcomes were assessed through questionnaire items, tracer study data, and employment records, including job relevance and work performance indicators.

All instruments were subjected to quality testing prior to data collection. Content validity was established through expert judgment, while empirical validity was tested using Product Moment correlation, with items considered valid when r-count exceeded r-table values. Reliability testing was conducted using Cronbach's Alpha, with coefficients above 0.70 indicating acceptable reliability. The learning test instrument achieved a reliability coefficient of 0.967, while the questionnaire instrument reached 0.994, both indicating very high internal consistency. In addition, item difficulty analysis was conducted to ensure that test items were appropriately distributed across levels of difficulty.

Data analysis was carried out using both descriptive and inferential statistical techniques. For Levels 1, 3, and 4, questionnaire data were analyzed using mean and standard deviation to capture central tendency and variability and interpreted based on predefined effectiveness categories. For Level 2, learning outcomes were analyzed using paired sample t-tests to determine the statistical significance of differences between pre-test and post-test scores. In addition, Normalized Gain (N-Gain) analysis was used to measure the magnitude of improvement while controlling for initial differences in participant ability, with classifications into high, moderate, and low categories.

To enhance the credibility and validity of findings, data triangulation was applied, particularly for Levels 3 and 4. This involved comparing data from participant self-reports, supervisor interviews, and documentary evidence such as competency test results and employment records. Qualitative data from interviews were analyzed thematically to identify patterns of behavioral change and workplace application, and then integrated with quantitative findings to provide a more comprehensive interpretation of training effectiveness.

Finally, this study adhered to research ethics principles. All participants were informed about the purpose of the study and provided consent prior to data collection. Confidentiality and anonymity were maintained throughout the research process, and all data were used solely for academic purposes. This

ethical consideration ensures that the study complies with standard research protocols involving human participants.

Results and Discussions

This study evaluated the effectiveness of the Practical Office Advance (POA) training program at UPTD BLK Pasaman Barat using the four-level Kirkpatrick evaluation model: reaction, learning, behavior, and results. Data were collected from 16 trainees through questionnaires, pre-test and post-test, skills observation checklists, interviews with users/supervisors, and documentation review. The data collection was conducted from 12 February to 12 March 2026.

Table 1. Respondent Profile, Training Overview, and Instrument Quality

Aspect	Description
Number of respondents	16 trainees
Age range	18–28 years (productive age)
Employment status before training	100% job seekers / not formally employed
Educational background	Mostly Bachelor/Diploma graduates; some Senior High School/Vocational graduates
Training standard	Based on SKKNI No. 58 of 2018
Main competency areas	Word processing, spreadsheets, presentation software, workplace K3, soft skills, and productivity
Training duration by units	Basic Word (40 JP), Basic Spreadsheet (40 JP), Basic Presentation (40 JP), K3 (8 JP), Advanced Word (32 JP), Advanced Spreadsheet (40 JP), Advanced Presentation (32 JP), Soft Skills (20 JP), Productivity (8 JP)
Validity test for knowledge test items	26 of 30 items valid; 4 items invalid and revised
Validity test for questionnaire items	All 26 items valid
Reliability of learning instrument	Cronbach's Alpha = 0.967 (very high)
Reliability of questionnaire instrument	Cronbach's Alpha = 0.994 (very high)

The respondents in this study were 16 POA trainees, all of whom were in the productive age category and registered as job seekers before joining the training. Their educational background was relatively diverse, although most had higher education qualifications. The POA program was implemented under the national competency standard SKKNI No. 58 of 2018, covering both basic and advanced office application skills, occupational safety, soft skills, and productivity. Instrument testing showed that the research tools were of high quality. For the learning test, 26 out of 30 items were declared valid, while 4 items required revision. All questionnaire items were valid. In addition, the reliability coefficients for both the knowledge test and questionnaire were very high, indicating that the instruments were appropriate and dependable for measuring the effectiveness of the training program.

Table 2. Level 1 Evaluation: Reaction toward the POA Training Program

Indicator	Mean Score	Category
Training organizer	4.17	Good
Training materials	4.01	Good
Instructor	4.59	Very Good
Training facilities	2.39	Poor
Grand Mean	3.79	Good / Effective

The reaction level evaluation measured participants' satisfaction with the implementation of the POA training program. Overall, the reaction score reached a grand mean of 3.79, indicating that the program was generally perceived as good and effective. The highest score was found in the instructor

component (4.59), showing that participants were very satisfied with the instructors' mastery of the material, communication skills, classroom interaction, and discipline. The training organizer (4.17) and training materials (4.01) were also rated positively, suggesting that the registration process, information access, and relevance of the materials were satisfactory. However, training facilities (2.39) received the lowest score and fell into the poor category, mainly due to limited workshop comfort, inadequate computer specifications, and weak internet connectivity. This finding indicates that the main weakness of the program lies in infrastructure rather than instructional quality.

Table 3. Level 2 Evaluation: Learning Outcomes of the POA Training Program

Component	Indicator	Result
Learning Achievement	Pre-test Mean (Knowledge)	33.54
	Post-test Mean (Knowledge)	74.38
	Improvement (Knowledge)	+40.84
	Pre-test Mean (Skills)	30.62
	Post-test Mean (Skills)	85.43
	Improvement (Skills)	+54.81
N-Gain (Knowledge)	High ($g \geq 0.7$)	5 (31%)
	Moderate ($0.3 \leq g < 0.7$)	10 (63%)
	Low ($g < 0.3$)	1 (6%)
	Total	16 (100%)
N-Gain (Skills)	High ($g \geq 0.7$)	13 (81%)
	Moderate ($0.3 \leq g < 0.7$)	3 (19%)
	Low ($g < 0.3$)	0 (0%)
	Total	16 (100%)
Competency Test Outcome	Competent	14 (88%)
	Did not take competency test	2 (12%)

At the learning level, the POA training showed substantial improvement in both knowledge and practical skills. The average knowledge score increased from 33.54 in the pre-test to 74.38 in the post-test, while the skills checklist mean rose from 30.62 to 85.43, indicating strong learning gains after the training. The N-Gain analysis further confirmed this improvement. For knowledge, most participants were in the moderate improvement category (63%), while 31% achieved high gains. For practical skills, the results were even stronger, with 81% of participants classified in the high N-Gain category, showing that the training was particularly effective in improving hands-on office application competencies. In addition, the external competency assessment conducted by LSP-P2 BPVP Padang showed that 88% of participants were declared competent, while 12% did not take the test for specific reasons. Overall, these findings demonstrate that the POA training effectively improved participants' cognitive and psychomotor competence.

Table 4. Level 3 and Level 4 Evaluation: Behavior Change and Training Results

Indicator	Mean Score	Category
Level 3: Behavior		
Leaving manual calculation and using Excel functions	2.88	Fair
Using styles/templates consistently	3.75	Good
Presenting reports visually (charts/graphs)	3.13	Fair
Sharing office efficiency tips with colleagues	3.44	Good
Grand Mean Level 3	3.30	Fairly Effective
Level 4: Results		
Faster administrative task completion	3.50	Good
Improved document quality	3.56	Good
Reduced input errors	3.50	Good
Better support for team/division targets	3.31	Good
Reduced paper use through digitalization	3.25	Fair
Grand Mean Level 4	3.42	Good / Effective

The behavior evaluation showed that the program had a moderate effect on workplace behavior change, with a grand mean of 3.30, categorized as fairly effective. Participants reported better use of templates and a greater tendency to share office-related knowledge with colleagues, although the adoption of advanced Excel functions and data visualization remained limited. Interview triangulation with workplace users confirmed that the most visible behavioral changes were improved speed, document neatness, and administrative efficiency rather than complex analytical use of office software. At the results level, the overall score reached 3.42, meaning that the training was effective in producing positive outcomes. Participants perceived improvements in work speed, document quality, and error reduction. In terms of post-training employment outcomes, 31% of alumni obtained linear jobs or developed relevant freelance work, 25% worked in non-linear positions, and 44% remained unemployed. These findings indicate that the POA training successfully strengthened competence and produced measurable workplace benefits, but employment absorption remained constrained by the limited local labor market. This suggests the need for stronger partnerships with industry and greater emphasis on digital entrepreneurship and employability skills.

In summary, the POA training program at UPTD BLK Pasaman Barat was generally effective based on the Kirkpatrick model. At the reaction level, participants expressed positive perceptions of the organizers, materials, and instructors, although facilities were rated poorly. At the learning level, the training significantly improved both knowledge and practical skills, supported by high N-Gain scores and competency test results. At the behavior level, the transfer of learning into workplace habits was moderate, with the strongest changes seen in efficiency and document organization rather than advanced software usage. At the results level, the program produced positive impacts on work quality and productivity, but graduate employment absorption was still limited. Overall, the training succeeded in building administrative office competence, yet future improvement should focus.

The findings of this study indicate that the Practical Office Advance (POA) training program produced substantial improvements in participants' cognitive and psychomotor competencies. The increase in knowledge scores from 33.54 to 74.38 and skills from 30.62 to 85.43 demonstrates that the training intervention effectively facilitated learning acquisition. These results support human capital theory, which emphasizes that structured training contributes to productivity through skill accumulation (S. Liu & Zhou, 2025; M. Wang et al., 2025). However, beyond confirming this theory, the findings also highlight that such improvements are highly dependent on initial participant readiness and training design.

The N-Gain results further confirm that the program was particularly effective in improving practical skills, with 81% of participants achieving high gains. This pattern reflects the nature of competency-based vocational training, where hands-on practice plays a dominant role in skill acquisition. From a theoretical perspective, this aligns with experiential learning theory, which suggests that repeated practice strengthens procedural knowledge more effectively than abstract instruction (Li et al., 2025; To & Leung, 2024). Nevertheless, the stronger gains in skills compared to knowledge indicate a potential imbalance in instructional emphasis that warrants further consideration.

The moderate improvement in knowledge suggests that cognitive mastery was not fully optimized. One contributing factor may be the heterogeneity of participants' educational backgrounds, which ranged from secondary school to higher education graduates. This variation likely influenced learning pace and comprehension levels, as participants with lower prior exposure to digital tools may require more structured guidance. In addition, the limited duration of advanced modules may have constrained deeper conceptual understanding, particularly in complex areas such as spreadsheet functions and data processing (Kong et al., 2025; Rehak et al., 2025).

The external competency test results, with 88% of participants declared competent, provide strong validation of the training outcomes. Since the assessment was conducted by an independent certification body, it enhances the objectivity of the findings and confirms that the training meets national competency standards. However, the fact that 12% of participants did not undertake the test indicates a potential gap in program completion or participant readiness. This issue requires further attention, as incomplete certification may limit the recognition of competencies in the labor market (Drydakis, 2025; S. Wang et al., 2025).

At the behavioral level, the findings reveal that the transfer of learning into workplace practice remains moderate. This result is consistent with transfer of training theory, which suggests that learning outcomes are not automatically translated into behavior without supportive environmental conditions. In this study, improvements were observed in routine administrative tasks such as document formatting and efficiency, but the use of advanced features, particularly in Excel and data visualization, remained limited (H. Liu et al., 2025; Srivastava et al., 2025). This indicates that skill transfer is selective and influenced by workplace demands.

The triangulation results provide deeper insight into this phenomenon. Employers confirmed improvements in speed and document quality but also noted that many workplaces do not require advanced digital competencies. This suggests a structural mismatch between the training content and actual job requirements, particularly in small-scale or informal work environments. As a result, even when participants possess higher-level skills, their application is constrained by organizational practices and technological infrastructure (Mavrot et al., 2025; Sturmey & Maffei-Almodovar, 2025; Zhang et al., 2025).

At the results level, the program demonstrated positive impacts on individual performance, including faster task completion, improved document quality, and reduced errors. These outcomes indicate that the training contributes to workplace efficiency and productivity. However, the relatively low employment absorption rate, with only 31% of participants securing relevant jobs, highlights a critical limitation. This finding reinforces previous studies showing that skill development alone is insufficient to ensure employment outcomes without considering broader labor market dynamics (Chuan et al., 2025; Whitacre, 2025).

The limited employment outcomes can be explained by structural factors such as the availability of local job opportunities and the alignment between training competencies and market needs. In regional contexts with limited industrial development, the demand for advanced office skills may not be sufficiently strong. Consequently, many graduates either remain unemployed or work in non-linear fields. This finding is consistent with previous research on vocational training and employability, which emphasizes the importance of aligning training programs with labor market demand (Sandhu et al., 2025; Shuyu et al., 2024).

From a theoretical perspective, this study extends the application of the Kirkpatrick Model by demonstrating that effectiveness across its four levels is not always linear. While reaction and learning levels showed strong results, the transition to behavior and results levels was more limited. This suggests that training evaluation should not only assess each level independently but also examine the relationships between levels, particularly the factors that influence the transfer of learning and long-term outcomes.

In terms of practical implications, the findings suggest that improving training effectiveness requires more than enhancing instructional quality. Strengthening industry partnerships, integrating job placement mechanisms, and incorporating entrepreneurial skills into the curriculum are essential strategies to bridge the gap between training and employment. Additionally, improving training facilities and aligning course content with local labor market conditions will help ensure that competencies gained during training are relevant and applicable.

Despite its contributions, this study has several limitations. The small sample size limits the generalizability of the findings, and the reliance on self-reported data at the behavioral level may introduce bias. Furthermore, the study was conducted in a single training center, which may not fully represent other contexts. Future research should involve larger samples, comparative designs, and more objective measures of workplace performance to provide a more comprehensive understanding of training effectiveness.

Conclusions

This study concludes that the Practical Office Advance (POA) training program at BLK Pasaman Barat is generally effective in improving participants' competencies, as evidenced by significant increases in knowledge and practical skills based on the Kirkpatrick evaluation model. The program successfully

achieved positive outcomes at the reaction and learning levels, while moderate improvements were observed in behavioral application. At the results level, the training contributed to better work performance; however, its impact on employment absorption remains limited. Therefore, while the program is effective in developing technical competencies, it requires further improvement in training facilities, alignment with labor market needs, and stronger job placement support to maximize its overall effectiveness.

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