

# In-Service Training Framework for Industrial Relations and Training Officer at Malaysian Vocational College

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## Abstract

A collaborative relationship between vocational colleges and the industry sector is essential to provide highly skilled graduates that align with the industry's current demands. The critical need for the implementation of industrial collaboration in vocational colleges has given rise to polemics about the ability and expertise of industrial relations and training officers (KUPLI) in managing the implementation of effective industrial collaborative relations. This study was conducted to explore issues in the implementation of industrial collaborative relationships as well as to explore the need for the implementation of effective industrial collaborative relationships based on KUPLI's perspective. This study is conducted using a qualitative approach, while the design of this study is in the form of a multiple-embedded case study. The implementation of this study is essential in helping every party interested in implementing industrial collaborative relations in improving the role of KUPLI to succeed in effective industrial collaborative relations. The findings of the study found that there are six critical issues and requirements for the implementation of effective industrial collaborative relations in Malaysian vocational colleges, among which are the issue of unclear collaborative direction, training management issues, the need for effective interaction and the need for a comprehensive support system.

## 1. Introduction

In today's academic world, the role of industry is important in the effort to produce holistic, highly skilled human capital and meet the needs of the job market (Syuhaimi, 2020). According to Saud (2021), highly skilled human capital means being able to respond quickly and creatively to change, especially in the application and utilization of knowledge. This need to produce highly skilled human capital encourages educational institutions to develop competitive training programs through the empowerment of collaborative relationships with industries and business centers. A study conducted by Bjursell and Ramsten (2020) states that collaboration between educational institutions and industry can generate relevant educational curricula, create networks between the community and potential employers, as well as encourage lifelong learning implementation.

The Malaysian Education Development Plan 2015-2025 has listed several initiatives to strengthen cooperation between industry players and educational institutions via expertise sharing and advisory services. Examples include collaboration in designing an industry-driven curriculum, internships, and apprenticeships in industrial facilities, as well as improving the quality of teaching staff and program delivery. In Malaysian

Vocational College, the implementation of Vocational Education Transformation (TPV) by the Malaysian Ministry of Education (KPM), which began in 2011, comes with the need for the implementation of collaborative relationships with industry and business centers. The implementation of industrial collaboration is also important for all eighty-six (86) Malaysian Vocational Colleges to be compliant with the academic program structure and accreditation. In order to better manage the industrial collaboration process, The Industrial Relations and Training Unit (UPLI) has been introduced in every vocational college led by the Industrial Relations and Training Officer (KUPLI). The KUPLI and their team in UPLI are responsible for initiating and coordinating all collaborative activities between their institution and industries to fully utilize the collaboration and develop a win-win partnership (Vocational College Industry Cooperation and Relations Guidelines [GPKHIKV], 2021). The implementation of collaborative relationships with the industry and external organizations provides benefits to both vocational college teachers and students by providing added value to the Vocational College Standard Curriculum, improving teachers' skills, and encouraging technology transfer (GPKHIKV, 2021).

However, the implementation of industry collaboration in Malaysian vocational colleges, which started around 2015, was implemented on very short notice, which provided a lack of preparation and training for KUPLI to initiate and sustain effective collaboration with industry. According to Zainuddin and Roslinda (2017), the industrial collaboration between vocational institutions and the industrial sector is still limited and not comprehensive. Therefore, various approaches and improvement measures need to be implemented to increase the number of successful industries and vocational institution collaboration (Awashy et al., 2020). In fact, several issues constrain the effectiveness of industrial-vocational institutions collaboration, especially in Malaysian Vocational Colleges, due to the lack of a strategic plan to maximize the mutual benefits between both parties (Syuhaimi, 2020). Those issues waste both party's resources, as well as reduce industrial trust in having a mutual benefit from the next collaboration activities with any Malaysian Vocational Colleges (Rahim, 2021). Previous studies also listed the following issues that affect the effectiveness of collaboration between industries and vocational institutions in Malaysia including a) cultural, values and goals differences between educational institutions and industry (Norzaini and Morshidi, 2021); b) Expertise organizational background differences (Ramli and Senin, 2021); c) geographical differences with the type of industry (Zuhdi et al., 2017); as well as the absence of a comprehensive support system such as start-up guidance and mentoring behind the growing need for industry collaborative relationships (Ghare and Umarani, 2020). Apart from those differences, more recent issues still need to be identified and studied to open room for continuous improvement in the implementation of collaboration between industries and Malaysian vocational colleges. Hence, this study has been conducted to explore the implementation of industrial collaboration in vocational colleges as well as to identify skills and knowledge required by KUPLI to encourage the implementation of effective industrial-vocational college collaboration. This study will provide suggestions to improve the implementation of industrial collaboration in Malaysian vocational colleges through the construction of a comprehensive training framework for KUPLI in producing trained, competent KUPLI and having a clear direction for the implementation of industrial collaboration.

## 2. Research Methodology

In this study, the researcher used a qualitative approach by using a case study design to explore issues and needs regarding the implementation of industrial collaboration in Malaysian vocational colleges. The multiple embedded case study method has been applied, involving study cases from the Industrial Relations and Training Officer (KUPLI) in Malaysian Vocational Colleges and from the Industrial Relation and Training Unit (UKHI) in the Division of Technical and Vocational Education, Malaysia Ministry of Education. The data collection process for this study involves a combination of interview and document analysis guided by three research questions as follows:

1. How are industry collaborative relationships in Malaysian vocational colleges implemented?
2. What are the issues and needs in creating effective industry collaborative relationships?
3. What are the components needed to create an effective industry collaborative relationship?

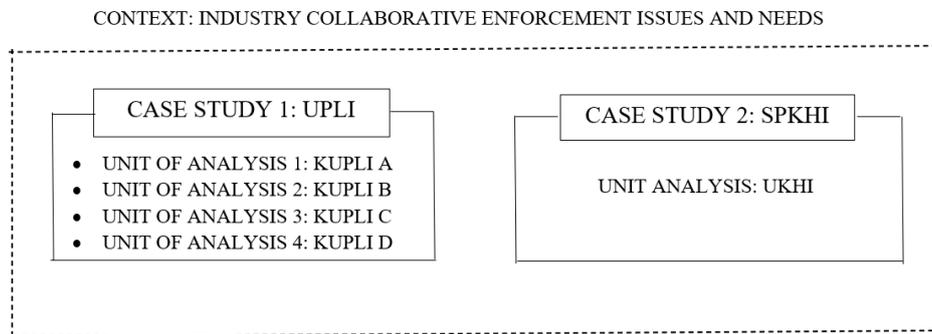
Table 1 shows a matrix of data collection methods applied in this study. The interview method is a primary data collection used to obtain in-depth information from the study's informants. The secondary data of the study was obtained through content analysis of documents related to the implementation of industrial collaboration in Malaysian vocational colleges. Triangulation of data involving more than one collection technique is an important method to prove the data or methods used during data collection are interrelated to form a conclusion on the draft research report (Creswell and Creswell, 2018; Merriam and Tisdell, 2016; Mohd Tobi, 2017).

**Table 1** Proposed data collection matrix table by the researcher

Data Type	Data Collection Method	Item Type
1. Primary	1. Interview	1. Interview Protocol (Semi-structured)
2. Secondary	2. Document Analysis	2.1 Collaborative Activity Report 2.2 Training Placement Report 2.3 MoU/NoU document

## 2.1 Sampling

In this study, the purposive sampling method was used to identify the study informants for data collection. The informants consisted of Industrial Relations and Training Officer (KUPLI) at vocational colleges (Labelled as IK), for the first study unit. Meanwhile, the informant for the second study unit is an informant from the Industrial Relations and Cooperation Unit (UKHI) from Division of Technical and Vocational Education, Malaysia Ministry of Education (Labelled as IU). The sample size will not be determined from the beginning of the study to determine the sample size. According to Othman Lebar (2018), in a qualitative study, the sample size cannot be determined from the beginning of the study because sample selection and data analysis is a continuous process up to a point called saturation point. In this study, the researcher will start the study with a small number of informants until a point of saturation is reached.

**Fig. 1** Multiple embedded case study design

This study is carried out in relation to the relationship that exists for all research analysis units involved in the context of issues and needs for the implementation of collaborative industrial relations in vocational colleges. Figure 1.0 shows the relationship between the context of the study and the informant that the researcher focuses on. Through the context of this study, the case study was conducted based on two different groups of informants comprising informants at UPLI and the Coaching Development and Industrial Relations Sector (SPKHI), BPLTV. Meanwhile, the analysis unit of this study involves KUPLI and the person in charge regarding collaborative industrial relations at UKHI.

## 2.2 Interview

For interview data collection, the researcher used a semi-structured interview protocol to explore the issues and needs of the participating informants. According to Othman Lebar (2018), a semi-structured interview combines the flexibility of an open interview with the characteristics of directing and uniformity. The interview session that is conducted lasts between 30 minutes to 45 minutes face-to-face at each interview session. The consent of each informant was obtained in advance before signing the consent form to conduct the study as a guarantee of confidentiality throughout the study.

In order to answer the questions that exist in this study, the researcher developed two different types of protocols according to the groups of informants that have been determined, as in Fig. 1. The interview questions will be determined in advance by the researcher, while the answers to those questions are open and will be developed as appropriate throughout the interview process. The interview questions developed by the researcher are based on research questions in addition to the highlights of past studies. Interview records were then transcribed verbatim and analyzed to identify themes and subthemes that formed.

The interview transcripts were analyzed through NVIVO12 software using the "thematic analysis" approach. Thematic analysis is a method used to identify, analyze and report themes or patterns found in the data obtained. According to Junaid (2016), the themes built after the coding process must be classified based on the principle of

hierarchy, structure or scope appropriate to the study being conducted. Thus, in producing a classification of categories or concepts in the analysis, the researcher will examine and observe the relationship between each theme formed using the inductive analysis process.

### 3. Findings

#### 3.1 The Issue of Unclear Collaborative Goals

Through the research that has been carried out, the researcher found that the collaborative goal that is not clear on the implementation of industrial collaboration is the main issue that becomes an issue on the effectiveness of its implementation. The collaborative implementation of the industry was also found to be performed without clear direction details and was only implemented on the instructions of the implementation.

*IK B: Actually, the function of KUPLI is still vague. I am not sure which KUPLI's priority is for OJT management or collaboration. BPLTV especially needs to show what direction they want in collaboration and what they want from KUPLI to achieve the set KPI.*

Apart from that, this issue occurs due to the difference in interests between vocational colleges and the industry. This is because the industry is an entity built on the basis of profit, unlike the education and training sector, which is more concerned with human capital development. However, for KUPLI C, this issue of interest differences is difficult to overcome because, as a party that wants to collaborate, all forms of decisions and advantages in collaborative interests are subject to the party that wants to collaborate.

*IK C: So to say it's a win-win situation between the two sides, right now, for me, the one who wins is the industry side, in other words, one-sidedness.*

However, different views were expressed by UKHI informants regarding this issue. This issue was found to occur due to problems in the continuity of cooperation that had been built. It further results in collaborative goals that are only focused on the goal of achieving KPIs in the MoU only and cannot be expanded to the generation of various forms of other collaborative activities.

*IU: This issue of difference in goals arises because there is no continuity in terms of activities or programs between the two parties. It will lead to the absence of feedback from the industry, and the vocational colleges side that does not take any action will make the collaborative goal only to achieve the MoU KPI but no action after that.*

#### 3.2 Unsystematic Training Management Issues

In order to ensure that the momentum of collaborative implementation goes well, the preparation of comprehensive training needs to be provided to KUPLI to drive effective industry collaboration. However, for the collaborative implementation of industry in vocational colleges, informants stated that the lack of preparatory training related to collaborative implementation was one of the problems they faced. This is due to the absence of a form of specific training guide for it.

*IK A: UKHI itself should provide a form of training framework, which means that when a KUPLI is appointed, he will be provided with appropriate training.*

However, in the process of preparing collaborative training for KUPLI, several issues arose through it. Several issues have been identified in this study, namely in terms of the insufficient number of training sessions for KUPLI. It is needed to overcome the increasingly challenging industry collaborative implementation challenges as well as an alternative explanation of the latest collaborative goals to be achieved by KUPLI according to current needs.

*IK A: The goals of BPLTV all need to be given regularly if previously there were only two meetings a year.*

*IK B: In a year, there must be at least two meetings with all KUPLI to carry out training related to direction.*

However, a different statement was obtained through a UKHI informant who stated that the training program carried out does not require the frequency of implementation because it is assumed that the existing KUPLI have been trained. However, any training carried out should lead to a specific focus and concentration. As stated by the UKHI informant:

*IU: In terms of training, usually our KUPLI is already trained but needs to focus on management skills and management knowledge that he has to know.*

Apart from that, the issue of providing training programs that are not suitable is also a constraint in the process of providing effective training for KUPLI. Implementing online training, an alternative in delivering information and guidance, has also had a less encouraging effect on KUPLI. This matter is seen to give some constraints to KUPLI in obtaining relevant knowledge and information. The background of KUPLI, which consists of lecturers in the technical field, also contributes to this issue. This situation can be referred to the following informant's statement:

*IK A: This KUPLI is mostly from carpentry lecturers, and the online training is purely theoretical, so it is quite difficult to understand if there is no practical experience.*

Thus, the implication of the online training process that does not achieve this objective will lead to different self-understanding by KUPLI and non-standard collaborative results.

### 3.3 Ineffective Description Issues

For this issue, the findings of the study show that this issue occurs due to the lack of training or guidance regarding effective communication methods in public relations in the industry. Indirectly, this causes KUPLI to find it difficult to conduct effective collaborative negotiations with the industry. Some of the informants also felt that their self-confidence level was at a low level when dealing with the industry. Through the findings of the study, this issue is related to the difficulty in providing explanations regarding collaboration when dealing with large industries that require a high level of formality in negotiations.

*IK A: Public relations is a priority, and we need training on dealing with companies and industries.*

In addition, mastery of the English language in public relations is also a factor that causes explanations that are difficult to convey during the collaborative negotiation process. Weaknesses in the mastery of the second language make it difficult for collaborative negotiators to reach a collective agreement because of the existence of interruptions in communication.

*IK B: For English speaking ability, most of them are quite difficult.*

*IK D: The problem for us is that I am not good at speaking English, the head of the department and the management are not good either and it is a problem.*

Next, the study informant also stated that the issue of difficulty in providing a clear explanation regarding collaboration to the industry caused the industry to find it difficult to understand the contents of the memorandum of understanding, thus creating various forms of speculation regarding the agreement to be signed.

*IK A: The level of understanding of the draft MoU is what is preventing the industry from signing an agreement with us because they are worried that there is a clause that allows them to be subject to legal action if they violate the contents of the MoU.*

Therefore, a KUPLI person needs good skills in conveying all forms of cooperation requirements so that they are clearly understood by the parties who wish to collaborate in order to avoid the existence of speculation that can harm both parties. This is because the weakness in public relations reflects the level of commitment given to the collaborative relationship that will be built.

### 3.4 Requirements for Effective Interaction

In implementing the collaborative process, the majority of the informants stated that negotiation skills are a form of skill that is required to form an effective interaction with the negotiated party. This need exists because of the lack of appropriate training the management and BPLTV provide to help KUPLI regarding good negotiation techniques and methods according to the set standards.

*IK A: It is necessary to think about the form of public relations training regarding how the method of negotiation and understanding of the discussion situation during the collaboration.*

In addition, the KUPLI informant also stated that mastering these negotiation skills is essential because these skills can play a role in controlling the atmosphere of collaborative negotiations so that the momentum of the discussion can be maintained until the end of the discussion session. This informant's statement is as follows:

*IK D: Usually, when the big boss in the industry talks to us, he doesn't want us to just keep quiet, and they want us to always respond to them.*

However, the need for effective interaction in providing clear explanations to the industry can also build a positive perception because the true purpose of the collaboration can be communicated to the industry. This is to ensure that all issues can be dealt with prudently to focus on generating benefits that can be shared together.

*IK B: We must make the company's management understand our wishes and the profit that can be obtained by both parties, fearing that later they will see that we only want to ride on their company's name.*

Therefore, through effective interaction methods, an interactive and successful collaborative industrial relationship can be built because the needs and goals of both parties can be unraveled and refined during the negotiations.

### 3.5 The Essentials of Transformational Leadership

In line with the transformation process at Malaysian vocational colleges, a change in the leadership style of the organization is needed to build a strong and competitive team of consultants and collaborative implementers. This is due to the ever-changing need of TVET, requiring a more open attitude and high professionalism. In order to meet the needs of superior transformational leadership, every layer of organizational members involved in the collaboration needs to have a change of attitude that is in line with the current needs of education at vocational colleges.

*IK A: KUPLI also faces problems when dealing with programs where the program leader is not ready to change. I'm happy to say that we have to change since now we have vocational colleges.*

Along with vocational colleges' transformation process, steps in strengthening the VC brand need to be constantly improved over time. This progressive step is necessary to ensure the industry's confidence in the quality of skills possessed by students and the teaching staff at VC institutions is always in line with the current needs of the industry. Research informants stated the need for continuous branding to have a good impact on the public. They think that the benefits of effective branding can be used to build collaborative relationships because the VC brand is known by the industry and the community. In addition, through good branding, the industry's level of confidence in VC will also increase and can open various forms of cooperation between the two parties. This statement can be referred to as follows:

*IK D: This industry has to have confidence in the VC brand, and when this happens, they will respect us more. So it is easier to approach them.*

Overall, transformational leadership is a form of leadership capable of reforming or transforming the team through a comprehensive leadership style towards individual and organizational excellence.

### 3.6 The Need for Good Work Ethics

In order to ensure good work ethics in line with the work culture in the industry, exposure to the culture in the industry is part of the requirements required by KUPLI as a collaborative preparation is carried out. Focusing on specific terms, use of language and work culture in the industry must be applied to KUPLI to reduce the gap in thinking and cultural differences. In addition, this preparation also needs to include preparation in terms of protocol and appropriate personal equipment in the industry.

*IK A: We need courses, for example, discussion of English that is aimed at the industry, terms used or simpler such as industrial English, exposure to clothing and protocols that are appropriate to the culture of the industry and must fit with their practices.*

Due to the absence of a form of guidelines or guidance related to proper work ethics for KUPLI, they are facing a crisis of trust and a poor response from the industry regarding the ability of the cooperation formed. Therefore, applying good and systematic work ethics is required to give a good impression to KUPLI when dealing with the industry.

*IK B: As for cooperation for training programs and also those that require equipment sharing, they do have some doubts about us.*

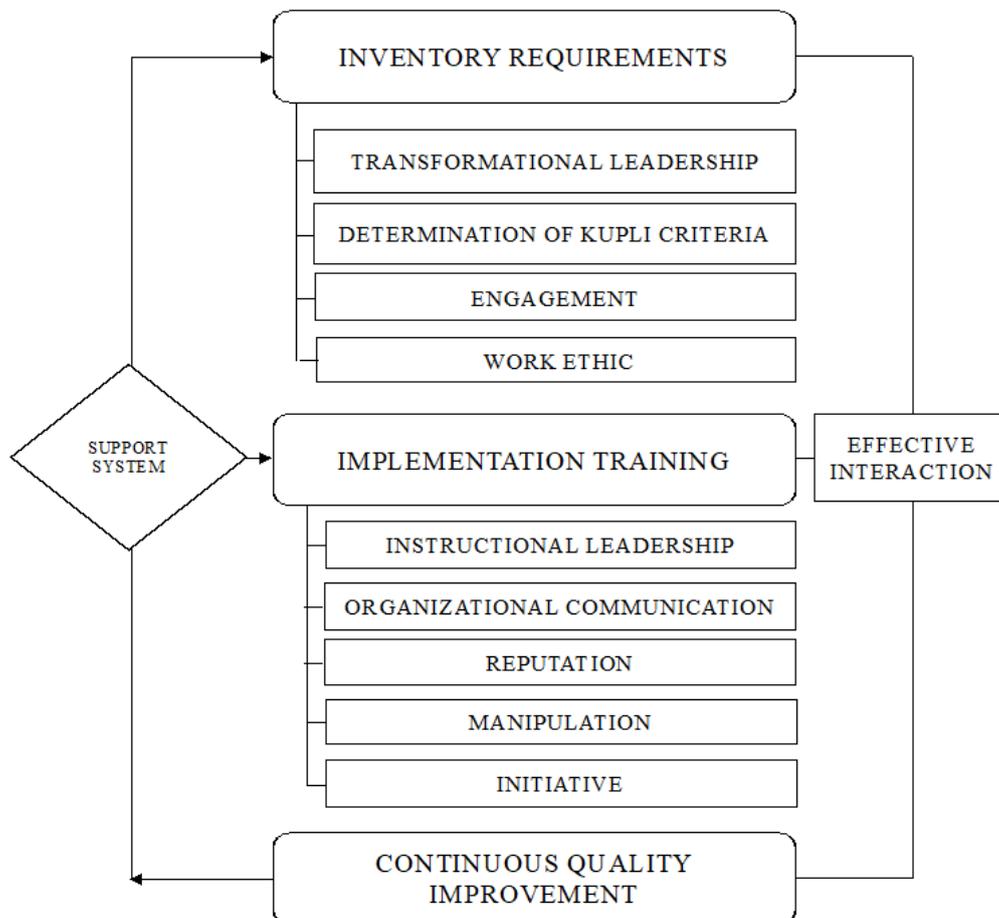
Apart from that, the need for good work ethics also involves the operation of effective publicity programs through official channels to have a positive impact on the stigma of belief. Besides being a method of approaching potential industries, it will also provide added value in introducing the VC brand in the industry.

*IK D: Through the industrial tour, we can see their equipment, products and employees. Then, we offer the opportunity to collaborate, but depending on their agreement and needs.*

Thus, guidance on work ethics practices that align with the industry landscape can be seen to provide an alternative to KUPLI in the process of conducting collaborative negotiations. Through adequate psychological preparation, KUPLI plays a more effective role because it has been prepared with good psychological preparation as a result of exposure to work culture and communication experience in the industry.

#### 4. KUPLI Training Framework

Based on the combination of themes, findings obtained through the analysis of the study carried out through partnership and the experience of KUPLI and UKHI informants, the researcher developed an in-service training framework for KUPLI in implementing collaborative industrial relations, as shown in Fig. 2.



**Fig. 2** In-service training framework for KUPLI

Based on Figure 2, several factors are involved in preparing requirements and training for KUPLI. It includes preparation requirements, implementation training, effective interaction, support systems, and continuous

improvement measures. Preparatory requirements are a form of basic requirements or preliminary preparation required by KUPLI before an industry collaborative negotiation is conducted. In this section, KUPLI will be explained concerning the focus and goals of industry collaboration that need to be implemented to determine the direction of industry collaboration that is set. This preparation should be regulated by the management to ensure that each KUPLI has a uniform basic knowledge, conclusive goals and directions as well as systematic planning through the involvement of all parties and the establishment of industry-oriented work ethics.

Next, in the implementation training section, KUPLI will be exposed to various forms of specific skills and communication training in conducting effective collaborative negotiations. Comprehensive implementation training provides the narrative of a competent KUPLI with skills to conduct effective industry collaborative negotiations. Effective collaborative negotiation reflects the collaborative relationship that was successfully formed as a result of agreement in the negotiation process. Therefore, planning to carry out this industry collaborative implementation exercise requires the active involvement of various parties, especially UPLI, KUPLI, and vocational college management. This action is to identify weaknesses in the collaborative management of the industry by KUPLI that need to be improved and strengths that can be streamlined in line with the elements found in this training framework.

Meanwhile, for continuous improvement measures within the framework of this training, the application of an effective interaction process at various levels of needs and training needs to be emphasized to launch the process of delivering and receiving accurate information without any form of leakage. In addition, in this continuous improvement step, there is a support system at various implementation stages. This system acts as a facilitator in ensuring the momentum of the implementation of collaborative industry relations is always at the highest level.

## 5. Discussion

### 5.1 Collaborative Industry Issues in VC

The issue of unclear cooperative goals in the collaborative implementation of industry in Malaysian vocational colleges today is closely related to the level of understanding of the direction as well as the need for collaborative implementation. KUPLI, as an implementer of industrial collaborative relations, is seen to be still weak in clearly identifying the direction and goals of the industrial collaborative implementation that it implements. The weakness of a collaborative operator in identifying the goals of the collaborative relationship can lead to the industry's doubts about the priority of the collaborative relationship being carried out (Awashy et al., 2020).

The difficulty in adjusting similar collaborative goals in the dynamics of diverse industrial collaborative relationships also causes KUPLI to face difficulties in formulating collaborative strategies according to current needs. According to a study carried out by Belfield (2012), unclear collaborative goals occur due to educational institutions that are not dynamic in redefining collaborative direction and goals that are compatible with the industry's current capabilities and needs.

Nevertheless, in dealing with the various issues of differences between vocational colleges and industry, one of the central points that can be taken to ensure that this issue is overcome in the implementation of industry collaboration in VC is through the selection of the right collaborative partners and having the goals and direction of industry collaboration aligned. In a study carried out by Arvanitis, Kubli and Woerter (2008), the authors stated the correct and accurate selection of collaborative partners is necessary to ensure that the needs of one's own and the collaborative partner can be determined in advance through the setting of corresponding goals and directions before the collaborative relationship begins.

Following the development of information and communication technology, online training medium is often used by BPLTV in the implementation of training to ensure that the training can be implemented quickly with a more flexible time setting. This method coincides with the findings of the Stirpe and Zárraga-Oberty (2017) study, which states that the use of technology in an organization can greatly improve employee performance compared to primitive methods. This is because the role of information and communication technology can contribute to an effective communication process in an organization (He, Donnellan and Mendoza, 2019).

However, such forms of training are seen to have less effect in influencing KUPLI's ability to implement industrial collaboration relationships. This is because the training was found not to meet the current requirements of KUPLI, which is more inclined towards face-to-face training requirements. This coincides with the findings of Sim, Khan, Shafee, Maulod, Yusof and Zulkernain (2022), who stated that face-to-face training methods are the best method in providing a great impact on information transfer. This tendency may be due to the age factor of KUPLI, which causes it to be unable to provide good focus when training is held online. This is due to the conduct of training online that does not map the categories of participants who follow the training provided.

The absence of interactive elements and follow-up activities from this online training also caused KUPLI to be less aware of the main importance of the training in improving their performance. This is because they feel that the training provided is just an ordinary briefing delivered by BPLTV to them. This situation coincides with the

findings of a study conducted by Lamsah et al. (2021) in which an online training approach that is less interactive without appropriate follow-up activities will cause training participants to not focus during training and consider the received training to be an unimportant and trivial activity.

Apart from that, the weakness of communication in English is also an issue that exists in the collaborative in Malaysian vocational colleges. This is identified as happening due to socio-cultural factors in vocational colleges that do not require emphasis on the use of English as part of the intermediate language. Socio-culture is important in determining a person's ability to speak English (Fitri et al., 2023). The importance of mastering the English language has only become an important matter after the existence of the need for collaborative relationships between vocational colleges because it involves the need for communication with external parties, especially the industry. Weaknesses in providing explanations, especially those that require explanations in English, are a special priority that must be addressed. This priority needs to be taken into account because the number of individuals who use English in the work environment, especially in the industrial sector, is increasing (Fitri et al., 2023).

## 5.2 Requirements in Effective Industry Collaborative Implementation

The need for effective interaction with KUPLI in effective collaborative implementation can be built through a strategic communication approach. Strategic communication is implemented with careful planning, economical implementation, and continuous evaluation (Mahbob et al., 2019). The need to apply a strategic communication approach is to ensure that every form of collaborative interaction made by KUPLI is always guided through comprehensive planning and its effectiveness is evaluated to be improved over time. However, an added value needs to be given to KUPLI in this strategic communication, which is by applying the latest communication technology. This is because communication technology is an advanced tool in the communication process due to its sophisticated features as the most dominant medium of information delivery (Mahbob et al., 2019).

Apart from that, in meeting the need for effective interaction during negotiations, each KUPLI should be capable of formulating an accurate explanation strategy, capable of delivering specific information, as well as good bargaining skills. The negotiation resulting from the bargaining process is an accurate method of determining the need and significant impact on the ability to achieve collaborative goals (Cohen, 2004).

The impact of the vocational college transformation program has led to the need for effective industry collaborative implementation. Thus, this transformation requires a comprehensive form of change from the highest to the lowest academic management level at vocational colleges. This shift requires a form of competitive management to make the transformation agenda successful so that its implementation meets the planned goals (Praditya, 2022).

This transition process to transformational leadership needs to be expedited and addressed with progressive steps to transform the passive attitude of leaders through the provision of transformational leadership training to the management and program leaders involved in the industry collaborative. Abu-Tineh, Khasawneh and Al-Qamari (2008) also asserted that the most important element for the successful transformation of an educational institution is through the leadership change of its leader.

Thus, in facing the challenge of collaborative implementation of the industry, which has not yet reached the maturity level of its implementation, KUPLI should have a form of comprehensive support system among KUPLI to ensure that the process of mutual assistance can take place. This process can be translated through sharing knowledge and skills among them to facilitate work (Hamdan-Mansour, Al-Gamal, Puskar, Yacoub and Marini, 2011). In addition, the support system among colleagues can also be support in the form of encouragement, guidance, constructive advice and a collective protection mechanism (Amir and Zakari, 2022).

## 6. Conclusion

Thus, through this in-service training framework for KUPLI, the form of providing training to KUPLI can be planned more effectively to meet all the training needs and skills required in the collaborative implementation of the industry. This training framework is also a form of representation of seriousness and commitment in providing comprehensive training to KUPLI. Through comprehensive training, the role and function of KUPLI can be enhanced to a higher level to ensure effective, high-impact collaborative implementation and meet the goals of collaborative industrial implementation in Malaysian vocational colleges.

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## Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Mohd Azlan Mohammad Hussain; **data collection:** Ramli Sappar; **analysis and interpretation of results:** Rafeizah Mohd Zulkifli; **draft manuscript preparation:** Mohd Firdaus Mustaffa Kamal, Khaizer Omar. All authors reviewed the results and approved the final version of the manuscript.

## Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of the paper.

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