

DOI: 10.5281/zenodo.12426313

PROFESSIONAL DEVELOPMENT ENHANCEMENT MODEL FOR NEW HUMAN RESOURCES IN BORDER UNIVERSITIES IN GUANGXI

Mo Xiuqing¹, Patchara Dechhome^{1*}, Niran Sutheeniran¹, Sarayuth Sethakhajorn¹,
Sahapat Insee¹

¹Faculty of Education, Bansomdejchaopraya Rajabhat University, Bangkok 10600, Thailand.

Received: 17/10/2025

Accepted: 24/02/2026

Corresponding Author: Patchara Dechhome
(patchara.de@bsru.ac.th)

ABSTRACT

The objectives of this research were to study the current situation, formulate and evaluate the suitability and feasibility of the professional development enhancement model for new human resources in the border universities in Guangxi. The sample group of this research included 210 new human resources from 3 border universities in Guangxi. The interviewees included 12 people. The experts for evaluated included 9 people. Research instruments included a questionnaire, structured interview, and evaluation form. Data were analyzed by percentage, mean, standard deviation, and content analysis. The results found that the current situation was at a high level. Among those, the highest mean was content focus, followed by active learning, and reflection was the lowest mean. The professional development enhancement model for new human resources in five aspects contained 46 measures. There are 9 measures for enhancing active learning, 9 measures for strengthening collaboration, 9 measures for optimizing duration, 10 measures for enhancing content focus, and 9 measures for strengthening reflection. The suitability and feasibility evaluation results of the model were at the desired level.

KEYWORDS: Enhancement Model; Professional Development; New Human Resources; Border Universities in Guangxi; China-Vietnam Border.

1. INTRODUCTION

Nowadays, from an international perspective, the core objective of Sustainable Development Goal 4 (Global Goals, 2026) in the United Nations 2030 Agenda for Sustainable Development is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This goal emphasizes that professional development should focus on active learning, collaboration, duration, content focus, and reflection. At the same time, continuing its commitment to Sustainable Development Goal 4, the TPD @ Scale Coalition for the Global South (2025) has launched a large-scale professional development (ETI) development program dedicated to meeting the professional needs of all teachers and driving the transformation of the professional development system to make it more equitable, effective, and efficient. The ETI project aims to understand how to effectively and efficiently scale up high-quality professional development in developing countries, to strengthen the capacity of professional development programs, and to develop evidence-based policies and practices for equitable and effective professional development (Tinio, V. L., 2025, p.1). The professional development of new human resources has become the consensus among global educators and the direction of international education reform.

In China, the Chinese Ministry of Education and the National Development and Reform Commission (2025) jointly issued the Notice on Organizing and Implementing the Teacher Education Capacity Improvement Project to make arrangements for improving the teacher education system with Chinese characteristics and further improving teachers' professional development during the 14th to 15th Five-Year Plan periods. General Secretary Xi Jinping (2024) emphasized at the National Education Conference that it is necessary to implement the spirit of educators to strengthen teachers and the construction of high-quality professional teachers. In China, professional development that focuses on active learning, duration, and content focus is an important strategy for building a strong nation in education.

In Guangxi, Liu Youyi (2025), director of the Guangxi Provincial Department of Education, emphasized at the Guangxi Education Work Conference that it is necessary to implement the spirit of educators to strengthen teachers, accurately improve the quality of teacher training, and strengthen the assistance and treatment guarantee of educational talents. In order to promote the

professional development of teachers, a department of teacher development centers has been set up in every university in Guangxi. The department is mainly responsible for formulating teachers' professional development plans, carrying out pre-service training for new human resources, improving teaching ability, teaching competitions and other activities, strengthening the construction of teaching communities, organizing teaching evaluation and quality monitoring, providing teaching consulting, career planning guidance, and resource support, and helping teachers' professional development. The teacher development center aims to help teachers focus on content focus, active learning, collaboration, reflection, and duration development. At the same time, the Implementation Plan for the Education Improvement Project in Border Areas of Guangxi, issued by the General Office of the People's Government of Guangxi Zhuang Autonomous Region (2022), emphasizes strengthening the construction of the teacher workforce in border area schools and enhancing teachers' professional quality.

However, due to the differences in talent training positioning, educational goals, and environments of different universities, the implementation paths and effects of professional development also show obvious diversity and differences. Located on the border between China and Vietnam, far away from the administrative center of Guangxi Province, Baise City and Chongzuo City in Guangxi Province of China are restricted by geographical location and regional development level, and local universities are facing the dilemma of relative lack of teaching resources, sluggish development of surrounding industries, and high costs of inter-universities and school-enterprise cooperation and exchange, which to a certain extent restricts the overall development of universities in border areas and the professional development of new human resources. New human resources refer to personnel who are first employed by a university and engage in teaching or research work. According to local policies and regulations, this group is considered to be in the early career stage within the first three years after their initial formal employment, during which they need to complete pre-job training and professional development tasks. Therefore, the qualifications for the new human resources in this study are as follows: 1) university teachers; 2) graduated with a master's degree or above; 3) within 3 years of employment.

In conclusion, this study successfully designed and evaluated a new human resources professional development model for border universities in Guangxi, China, emphasizing five key components:

1) active learning, 2) collaboration, 3) duration, 4) content focus, and 5) reflection. The model demonstrated high suitability and feasibility, validated by expert feedback, underscoring its potential to significantly enhance new human resources' professional development.

2. RESEARCH OBJECTIVES

1. To study the current level of professional development of new human resources in border universities in Guangxi.
2. To formulate the professional development enhancement model for new human resources in border universities in Guangxi.
3. To evaluate the suitability and feasibility of the professional development enhancement model for new human resources in border universities in Guangxi.

3. RESEARCH FRAMEWORK

In a study examining the professional development of new human resources in border universities in Guangxi, the researchers guided the professional development of new human resources through a conceptual framework. This framework was informed by a comprehensive review of concepts, theories, and existing research related to professional development. The study synthesized professional development into five key dimensions, as follows: active learning, collaboration, duration, content focus, and reflection.

This study aimed to develop and validate a professional development enhancement model for new human resources staff at border universities in Guangxi. Drawing on the current status of professional development among new human resources, the study systematically examined the existing conditions, institutional contexts, and key challenges shaping their professional growth. Based on the empirical findings, a context-specific enhancement model was designed and implemented to support new human resources' professional development. The suitability and feasibility of the proposed model were subsequently evaluated within the border universities context to determine its effectiveness in supporting sustained and ongoing professional development.

4. RESEARCH METHODOLOGY

Phase 1: Study the current level of professional development of new human resources.

Step 1: Constructing a questionnaire process. The construction process of the questionnaire is as

follows: 1) Reviewing and analyzing documents, concepts, theories, and research related to the professional development of new human resources. This study synthesizes professional development into five key dimensions, as follows: active learning, collaboration, duration, content focus, and reflection. 2) Construct the questionnaire about the current situation of professional development of new human resources. 3) The index of objective congruence (IOC) of the questionnaire was examined by five experts. 4) Revise the questionnaire based on the experts' suggestions. 5) The questionnaires were distributed for a try-out. The reliability of the questionnaire was obtained by Cronbach's Alpha Coefficient.

Step 2: Data collection and analysis. The researcher distributed the questionnaire to 210 new human resources from 3 border universities in Guangxi. A total of 210 questionnaires were collected, including 109 from Baise University, 26 from Guangxi Normal University for Nationalities, and 75 from Youjiang Medical University for Nationalities. The researcher analyzes the data using a package program.

Phase 2: Formulate the professional development enhancement model for new human resources.

Step 1: Interview the new human resources. The interviewees in this research were 12 high-level administrators of the teacher development center in the border universities of Guangxi.

Step 2: Formulate the professional development enhancement model for new human resources in border universities in Guangxi from the interview results.

Phase 3: Evaluate the suitability and feasibility of the professional development enhancement model for new human resources.

Step 1: Evaluate the suitability and feasibility of the professional development enhancement model for new human resources, analyzed by Mean and standard deviation. The experts were 9 experts from border universities in Guangxi.

Step 2: Revising and editing the professional development enhancement model for new human resources in border universities in Guangxi.

5. RESEARCH RESULTS AND DISCUSSION

5.1 Result

Part 1: The analysis results about the current situation of professional development of new human resources. Presented the data in the form of mean and standard deviation.

Table 5.1 The mean and standard deviation of the current situation of professional development of new human resources. (N = 210).

NO	Professional development of new human resources	\bar{X}	S.D.	level	Order
1	Active learning	3.78	1.07	high	2
2	Collaboration	3.59	1.11	high	3
3	Duration	3.47	1.05	medium	4
4	Content focus	3.82	1.07	high	1
5	Reflection	3.45	1.24	medium	5
	Total	3.62	1.11	high	

According to Table 5.1, found that the current situation of the professional development of new human resources in five aspects was at a high level ($\bar{X} = 3.62$). Considering the results of this research aspects ranged from the highest to lowest mean were as follows: the highest mean was content focus ($\bar{X} = 3.82$), followed by active learning ($\bar{X} = 3.78$), and reflection was the lowest mean ($\bar{X} = 3.45$).

Part 2: The analysis results of the interview contents about the professional development enhancement model for new human resources.

1. Enhancing active learning: The model results are obtained: 1) Guided by the context of the China-Vietnam border, integrate regional needs and professional development goals to enhance the practical motivation for proactive learning of new human resources. 2) Drive learning design through real tasks such as teaching, research, and service, enabling new human resources to learn by doing and learn by applying. 3) Institutionalize the 'Plan-Act-Observe-Reflect' active learning cycle to create a closed-loop, continuous, and active learning mechanism. 4) Build a question bank and question-oriented courses to promote in-depth active learning, starting from real teaching and research problems. 5) Establish a mentorship system, peer learning communities, and a lesson observation and feedback mechanism to strengthen active learning support through peer assistance and diversified feedback. 6) Relying on a digital platform to achieve resource integration, process recording, and data feedback, thereby enhancing the visualization and traceability of active learning. 7) Promote interdisciplinary, inter-institutional, and industry-academia collaboration to expand active learning environments and knowledge integration capabilities. 8) Embed the active learning process and its outcomes into evaluation, incentives, and professional development pathways, forming institutional support. 9) Guided by the values of teacher ethics, professional conduct, and regional mission education, promote the transformation of active learning from external drive to internalized

drive.

2. Strengthening collaboration: The model results are obtained: 1) Guided by the school's development vision, align professional development goals with team collaboration goals systematically. 2) Through stable and clear collaboration systems and supporting policies, provide predictable guarantees for new human resources to participate in team collaboration. 3) Institutionalize arrangements to integrate new human resources into teams in phases, promoting the synchronized progression of collaborative tasks and professional development. 4) Relying on the mentorship system and a diverse guidance framework, it provides continuous and precise support for collaborative work in the new human resources team. 5) Promote experience sharing and capability generation through team collaboration learning mechanisms to enhance the quality of collaborative practice. 6) Establish a development-oriented performance feedback and incentive mechanism to enhance the visibility and sense of achievement in collaborative contributions. 7) Foster a team culture of trust, inclusiveness, and sharing to enhance psychological safety and a sense of belonging in collaborative participation. 8) Optimize time scheduling, resource allocation, and administrative support to reduce the practical costs of team collaboration. 9) Improve information governance and problem feedback mechanisms to ensure transparent operation and continuous improvement in team collaboration processes.

3. Optimizing duration: The model results are obtained: 1) Establish a progressive professional development timeline framework, clarifying the duration goals and task pacing for the three stages: 'onboarding – accumulation – stabilization'. 2) Incorporate duration management capabilities into the long-term development system, making duration management an internalized habit rather than scattered techniques through phased training and practice. 3) Encourage teaching and research to focus on stable directions for sustained duration accumulation, and avoid frequent short-term task

changes to enhance output efficiency per unit of time. 4) Optimize task allocation and role transition mechanisms, control the intensity of administrative tasks during the onboarding period, and provide duration flexibility to support role adaptation. 5) Oriented towards developmental evaluation, reduce one-time performance pressure, recognize phased growth, and process investment to guide sustained investment. 6) Institutionalized reflection and experience internalization arrangements ensure that 'slow time' is used for summarizing, improving, and reusing knowledge, enhancing the cumulative effect of sustained time investment. 7) Implement mentorship systems and team collaboration mechanisms to enhance organizational integration and information sharing, reducing the time cost of trial and error and repetitive work. 8) Establish a stress adaptation and professional identity support system to maintain motivation and resilience for sustained time commitment through psychological counseling and emotional support. 9) Enhance understanding and utilization of systems, simplify system integration and processes, and help new human resources personnel transform institutional resources into a stable development rhythm.

4. Enhancing content focus: The model results are obtained: 1) Guided by the school's mission and the development needs of Guangxi's border areas, guide the content of new human resources to focus on serving the region and strategic goals. 2) By clearly defining core job tasks and priorities, reduce content dispersion and ensure that new human resources content focuses on high-value work. 3) Centering on advantageous disciplines and a clear professional positioning, promote the formation of teaching and research mainlines with a content focus for new human resources. 4) Enhance the structure and focus of teaching content through modularization of teaching content, construction of course clusters, and course chains. 5) Guide the new human resources to establish the main theme of scientific research, achieving coordinated development of scientific research, teaching, and practical content. 6) Leveraging university-enterprise collaboration and project practice, promote content focusing on real problems and application scenarios. 7) Integrate and share resources through digital platforms to improve content management efficiency and focus capability. 8) By utilizing mentorship and apprenticeship-style knowledge transfer, guide new human resources personnel to quickly identify their professional development priorities and reduce trial and error. 9) Implement differentiated training based on professional development stages, guiding new

human resources personnel to systematically focus on core content at different stages. 10) Align evaluation and incentive mechanisms with content-focused goals, and drive dynamic optimization of professional development paths through content-focused adjustments and optimizations.

5. Strengthening reflection: The model results are obtained: 1) Develop a systematic reflection system, incorporating evidence-based reflection into institutional processes such as recruitment, performance evaluation, training, and promotion. 2) Supported by the standardization and visualization of multi-dimensional performance data, promote the objectification and routinization of the reflection process. 3) Establish a 'continuous feedback-improvement' closed loop to ensure that reflection conclusions can be transformed into executable improvement measures and evaluate their effectiveness. 4) Integrate the outcomes of reflection systematically into teacher professional development and promotion evaluations to enhance the motivation for internalizing behavior. 5) Build a knowledge base and a sharing platform for construction reflection outcomes, accumulate typical cases, and achieve experience reuse. 6) Cultivate a reflective organizational culture that encourages experience sharing, tolerance for trial and error, and team learning. 7) Strengthen capacity building and professional training to enhance new human resources' ability in evidence interpretation, data analysis, and reflection. 8) Link the effectiveness of reflection with compensation, training, and job adjustments through incentives and resource allocation to enhance participation enthusiasm. 9) Benchmark against excellent external practices and, in combination with regional positioning, guide reflection focusing on serving the development of the Sino-Vietnamese border region and the cultivation of application-oriented talents.

In summary, the researcher provided the professional development enhancement model for new human resources in border universities in Guangxi, which contained 46 measures. There were 9 measures for enhancing active learning, 9 measures for strengthening collaboration, 9 measures for optimizing duration, 10 measures for enhancing content focus, and 9 measures for strengthening reflection. As shown in Figure 5.1.

Part 3: The analysis result about the evaluation of the suitability and feasibility of the professional development enhancement model for new human resources. Presented the data in the form of average value and standard deviation.

Table 5.2 The mean and standard deviation of the evaluation of the suitability and feasibility of the professional development enhancement model for new human resources in five aspects. (n = 9)

Professional development enhancement model for new human resources		Suitability			Feasibility		
		\bar{X}	S.D.	Level	\bar{X}	S.D.	Level
1	Enhancing active learning	4.67	0.78	highest	4.42	0.84	high
2	Strengthening collaboration	4.64	0.78	highest	4.46	0.83	high
3	Optimizing duration	4.51	0.83	highest	4.31	0.82	high
4	Enhancing content focus	4.63	0.80	highest	4.44	0.88	high
5	Strengthening reflection	4.63	0.78	highest	4.40	0.85	high
		4.62	0.78	highest	4.41	0.84	high



Figure 5.1 Professional development enhancement model for new human resources in border universities in Guangxi.

According to Table 5.2, the data showed that the suitability of the professional development enhancement model for new human resources was at the highest level ($\bar{X} = 4.62$), which means the professional development enhancement model for new human resources is suitable. Considering the results of this research, the highest suitability data was "enhancing active learning" ($\bar{X}=4.67$), followed by "strengthening collaboration" ($\bar{X}=4.64$), and "optimizing duration" ($\bar{X}=4.51$) was the lowest.

5.2 Discussion

The professional development enhancement model for new human resources.

It is proposed that the professional development enhancement model for new human resources in border universities in Guangxi in five aspects, which contain 46 measures.

1) Enhancing active learning: Among the 9 measures to enhance active learning, the more important ones are the following: 3) Institutionalize the 'Plan-Act-Observe-Reflect' active learning cycle to create a closed-loop, continuous, and active learning mechanism. 8) Embed the active learning process and its outcomes into evaluation, incentives, and professional development pathways, forming institutional support. 9) Guided by the values of teacher ethics, professional conduct, and regional mission education, promote the transformation of active learning from external drive to internalized drive. These measures were summarized based on the respondents' recommendations, which are consistent with the results of some studies. Due to the development of a professional development programme aimed at improving feedback during active learning. It will incorporate realizing the conditions for active learning, setting clear learning goals, focusing the feedback on the development of students' metacognition and social learning skills, and adopting a more facilitative way of giving feedback (Keuvelaar-van den Bergh, L., 2013, p.65). This corresponds to measures 1, 3, 6, and 8 measures above. Based on cases of enhancing active learning in teaching practice, a practical framework system has been constructed for teachers' professional development, including building a faculty community, allowing implementation time, using feedback loops, creating spaces for collaboration, developing persistence in improving practice, building confidence and motivation, providing external support, and providing a variety of professional development formats (Soto, R. C., &

Marzocchi, A. S., 2021, p.275-279). This corresponds to measures 2, 3, 5, 6, 7, 8, and 9. Based on the exploration of active learning teaching practices, Pelletreau, K. N (2018, p.9-10) provided guiding principles such as take a data-driven iterative approach, use a designated, knowledgeable facilitator, minimize risk and maximize reward for the faculty, and a little variation in teaching practices is okay. This corresponds to measures 1, 3, 5, 6, 8, and 9. To promote teachers' professional development, using the concept of 'school as a professional learning community' as the framework, five types of interventions are proposed, specifically including shared school vision on learning, professional learning opportunities for all staff, collaborative work and learning, change of school organization, and learning leadership (Admiraal, W., 2021, p.694). This corresponds to measures 1, 2, 3, 4, 5, 7, 8, and 9. Successful professional development relies on teacher agency, and important factors that promote teacher professional learning include human resources, scientific resources, practical resources, and organizational resources (Bergmark, U., 2023, p.222). This corresponds to measures 1, 2, 4, 5, 6, 7, and 9.

2) Strengthening collaboration: Among the 9 measures to strengthen collaboration, the more important ones are the following: 4) Relying on the mentorship system and a diverse guidance framework, which provides continuous and precise support for collaborative work in the new human resources team. 7) Foster a team culture of trust, inclusiveness, and sharing to enhance psychological safety and a sense of belonging in collaborative participation. These measures were summarized based on the respondents' recommendations, which are consistent with the results of some studies. The research revealed that effective teaming is highly dependent upon common project goals among team members, structural opportunities for working as teams, and similarities in the developmental needs of participants (Burbank, M. D., 2003, p.513). This corresponds to measures 1, 2, 3, 4, 5, 6, 7, and 8. Focused on collaborative design as a form of professional development, identified situatedness, agency, and the cyclical nature of learning and change as key features of learning in collaborative design processes (Voogt, J., 2015, p.279). This corresponds to measures 1, 4, 6, 7, and 9. To explore the conditions and possibilities for promoting teacher collaboration in implementing professional development programs, the discussion focuses on three key areas: the organisational potential of rearticulation in the division of labour, the pivotal

role of artefacts in the innovation process, and the emergent importance of co-teaching as a central element in fostering collaboration (Díaz-Sacco, A., 2024, p.9). This corresponds to measures 3, 4, 5, 7, and 8. Successful professional development relies on teacher agency, and important factors that promote teacher professional learning include human resources, scientific resources, practical resources, and organizational resources (Bergmark, U., 2023, p.222). This corresponds to measures 1, 2, 4, 5, 7, and 8. To promote teachers' professional development, using the concept of 'school as a professional learning community' as the framework, five types of interventions are proposed, specifically including shared school vision on learning, professional learning opportunities for all staff, collaborative work and learning, change of school organization, and learning leadership (Admiraal, W., 2021, p.694). This corresponds to measures 1, 2, 3, 4, 5, 7, 8, and 9.

3) Optimizing duration: Among the 9 measures to optimize duration, the more important ones are the following: 2) Incorporate duration management capabilities into the long-term development system, making duration management an internalized habit rather than scattered techniques through phased training and practice. 3) Encourage teaching and research to focus on stable directions for sustained duration accumulation, and avoid frequent short-term task changes to enhance output efficiency per unit of time. 5) Oriented towards developmental evaluation, reduce one-time performance pressure, recognize phased growth, and process investment to guide sustained investment. These measures were summarized based on the respondents' recommendations, which are consistent with the results of some studies. Professional development activities focus on specific training for pedagogy, subject content knowledge, and classroom management. Ongoing sharing of ideas, guidance, and support, and care among teachers, support of the school leader, and obtaining sufficient free time to participate in training or workshops (Tanang, H., 2021, p.3). This corresponds to measures 2, 3, 7, and 8. Universities can communicate a clear vision for professional development (PD), vet PD programmes and resources for quality assurance, design and maintain online platforms, and guide to help schools and educators make better use of technology to support PD and, at the same time, more closely align broader educational goals with school improvement efforts (Fairman, J. C., 2022, p.11). This corresponds to measures 1, 2, 3, and 7. Online instructors face unique challenges that should be tackled through efficient PD programmes, in-service training

opportunities, additional courses within pre-service teacher training, and graduate degree programmes (Adnan, M., 2018, p.20). This corresponds to measures 1, 2, 3, 4, and 7. Articulating a clear and consistent vision and goals for improvement, aligning PD with school improvement goals, providing time for PD within the school day, mobilising expertise through personnel and external partners to support and guide teachers' learning, and engaging together with teachers in professional learning and activity are all high-impact strategies for supporting PD (Fairman, J. C., 2023, p.207). This corresponds to measures 1, 2, 3, 6, and 7. Policymakers and administrators could evaluate and redesign the use of time and school schedules, including participation in professional learning communities, peer coaching, observations across classrooms, and collaborative planning. (Darling-Hammond, L., 2017, p.24). This corresponds to measures 1, 2, 3, 5, and 7.

4) Enhancing content focus: Among the 10 measures to enhance content focus, the more important ones are the following: 3) Centering on advantageous disciplines and a clear professional positioning, promoting the formation of teaching and research mainlines with a content focus for new human resources. 4) Enhance the structure and focus of teaching content through modularization of teaching content, construction of course clusters, and course chains. 6) Leveraging university-enterprise collaboration and project practice, promote content focusing on real problems and application scenarios. These measures were summarized based on the respondents' recommendations, which are consistent with the results of some studies. Successful professional development emphasizes the importance of principals grouping teachers by teams, focuses on content instead of software, emphasizes being flexible and listening to the needs of teachers, and models classroom examples (Vavasseur, C. B., 2008, p.532). This corresponds to measures 1, 3, 4, 6, and 8. Options for administrators include: encourage teachers to take challenging professional development by scaffolding and matching activities to teachers' level of expertise; build links between the activities and the school's vision; require teachers to take high-quality professional development (Desimone, L. M., 2006, p.179). This corresponds to measures 1, 3, 6, and 9. The content focuses primarily on teacher knowledge and teacher practice, where teacher practice includes: classifying teacher actions, curriculum design, self-learning, and reflective practice (Lindvall, J., 2018, p.125). This corresponds to measures 3, 4, 5, 6, and 10. Teacher professional

learning that is context-specific, job-embedded, and content-based is particularly important for addressing the diverse needs of teachers in differing settings (Darling-Hammond, L., 2017, p.7). This corresponds to measures 1, 2, 3, 4, and 6. By organizing to engage in activities focused on core subject concepts and discussing practical activities that help enhance professional development, including subject teaching demonstrations, student assignment analysis, classroom video analysis, curriculum research, joint teaching demonstrations, and teaching demonstration sessions (Gibbons, L. K., & Cobb, P., 2017, p.421). This corresponds to measures 1, 4, 5, and 6. The Technological Pedagogical Content Knowledge (TPACK) model enables educators to acquire subject matter knowledge and promote professional development through specific teaching methods and the integration of particular technological tools. It specifically comprises seven knowledge domains: TK, PK, CK, TPK, TCK, PCK, and TPACK (Mahlo, L., & Waghid, Z., 2025, p.7). This corresponds to measures 3, 4, 5, and 7.

5) Strengthening reflection: Among the 9 measures to strengthen reflection, the more important ones are the following: 3) Establish a 'continuous feedback-improvement' closed loop to ensure that reflection conclusions can be transformed into executable improvement measures and evaluate their effectiveness. 6) Cultivate a reflective organizational culture that encourages experience sharing, tolerance for trial and error, and team learning. These measures were summarized based on the respondents' recommendations, which are consistent with the results of some studies. A truly reflective teacher should proactively take responsibility for knowledge construction by engaging in reflective activities. The common value of all these methods lies in providing teachers with support and multiple pathways for reflecting on teaching (Farrell, T. S, 2007, p.187). This corresponds to measures 2, 3, 5, 6, and 9. A concept of reflection that does justice to the specificity of the teaching profession does not only need to be broad or wide in its content, but also deep enough. It should move beyond the level of action to the level of underlying beliefs, ideas, knowledge, and goals (Beauchamp, C., 2015, p.133). This corresponds to measures 3, 4, 5, 6, and 9. By consciously focusing automatic reflection into a structured response, its usefulness is maximized, encouraging the reflector to become a reflective and self-aware person (Helyer, R., 2015, p.18-23). This corresponds to measures 3, 6, and 9. The guidelines for introducing and fostering teachers' reflection, including consideration of the

influence of the contextual factors, effective practice, differentiating between constructive and nonconstructive self-focused thought, and being attentive to the emotional dimension of reflective practice (Saric, M., & Steh, B., 2017, p.81). This corresponds to measures 2, 3, 4, 5, and 6. To help new teachers cope with the challenges, it is important to consider how to implement a cyclical mechanism that supports observation, acceptance, analysis, and reflection on experiences, and to propose 10 reflection steps (Stewart, T. T., & Jansky, T. A., 2022, p.8). This corresponds to measures 3, 5, and 6.

6. RECOMMENDATIONS

6.1 Implications

The research results showed that the recommendations about the professional development enhancement model for new human resources in border universities in Guangxi are as follows:

1) Enhancing active learning: The survey results indicate that the proposed model should further strengthen institutional mechanisms that motivate sustained engagement in the Plan-Act-Observe-Reflect cycle. Greater alignment with the China-Vietnam border context, together with clearer evaluation and incentive designs, would enhance the effectiveness and sustainability of active learning in professional development.

2) Strengthening collaboration: The survey results suggest that future models should move beyond interaction toward structured team-based collaboration. Aligning institutional vision with team goals, providing protected collaboration time and mentorship, and embedding regular evaluation and knowledge sharing can strengthen collaborative skills and ensure sustained synergy between professional development and organizational development.

3) Optimizing duration: The survey results indicate that professional development remains overly plan-oriented and insufficiently sustained in practice. Administrators should adopt a phased "onboarding-accumulation-stabilization" framework with protected time, clear milestones, and mentoring support, shifting toward feedback-driven time management to enhance continuity, engagement, and long-term professional growth.

4) Enhancing content focus: The survey results indicate that while systematic frameworks are in place, content updating remains weak. Administrators should align professional development with institutional missions and regional priorities, encourage regular syllabus

renewal, and integrate cutting-edge knowledge through evaluation-linked incentives and mentor- and data-informed feedback loops to sustain content relevance and professional growth.

5) Strengthening reflection. The survey results show that although targeted reflection is encouraged, evidence-based analysis and critical attribution remain weak. Administrators should benchmark exemplary border-university practices, align reflection with Sino-Vietnamese regional needs, and institutionalize an evidence-driven “reflection-improvement” loop to translate reflection into curriculum reform and sustainable talent development.

6.2 Future Researches

In order to better enhance professional development for new human resources, future research should examine integrated models that combine phased time governance, contextualized active learning, low-cost collaboration, and mentorship in Guangxi border universities. Particular attention should be given to duration mechanisms, exploring how staged time investment and sustained implementation influence long-term teaching quality, research capacity, and professional identity development.

1) In terms of duration, adopt a phased and cumulative perspective by developing an “onboarding-accumulation-stabilization” time investment-performance model. Longitudinal studies should examine how mentoring duration, protected time, and teamwork shape teaching, research productivity, professional identity, and sustained growth across career stages.

2) In terms of active learning, future research should

be grounded in the China-Vietnam border context and examine how contextualized tasks, action-learning cycles, cross-cultural collaboration, digital tools, and professional learning communities operate in authentic practice. Longitudinal mixed-methods studies should assess impacts on teaching quality, research capacity, and professional identity, while analyzing institutional incentives and policy supports for sustainability.

3) In terms of collaboration, future research should examine how institutional vision, team collaboration, and professional development interact, particularly through low-cost models suitable for resource-constrained border universities. Longitudinal and action-research approaches should assess mentorship effects, cross-institutional networks, and localized collaboration metrics, ensuring empirical evidence directly informs policy and management decisions.

4) In terms of content focus, future research should explore the dynamic alignment of HRM professional development with institutional missions and regional needs in Guangxi border universities. Using curriculum needs analysis, case studies, and action research, studies should examine content-oriented evaluation and incentive mechanisms that link curriculum reform, performance, and talent cultivation quality.

5) In terms of reflection, future research should investigate how reflective mechanisms integrate theory with the practical needs of the China-Vietnamese border region in cultivating application-oriented talents. Studies should examine interactions between reflection, HRM systems, teacher development, and curriculum reform, emphasizing the institutionalization of reflection through localized adaptation of exemplary external practices.

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