

Group development, team learning, and teaching quality among Chinese vocational college teachers

Hua, Cao ✉

Graduate School, Lyceum of the Philippines University – Batangas, Philippines (406563256@qq.com)

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Abstract

Education is very important aspect of every individual because it is part of life stages and processes. Teacher's role is very crucial because teachers are the primary factors to enhance the quality of life of the students leading to a productive society. This descriptive research made full use of the convenience sampling of online survey and involved 425 Chinese vocational college teachers in first identified five (5) vocational colleges in China. Results showed that majority of the respondents are male, ages 46-50 years old, teaching for 0-5 years, master's degree holder, and 21 years and above length of service. Chinese Vocational Teachers are generally agreed in areas of group development. They agreed most on trust/structure, while least on work and productivity. In addition, they generally agreed in areas of team learning. They agreed most on continuous improvement, while least on dialogue promotion and open communication. Moreover, they generally agreed in areas of teaching quality. They agreed most on content, while relative equal on competence and method. Sex especially female, age especially those who belong to age bracket of 51 years old and above, educational attainment especially doctorate degree and length of service with working for more than 21 years have better assessment than others where the variables group according to profile. There is a significant relationship among the three variables which indicates that the better is the group development, the better is the teaching quality, and the better is the team learning, the better is the teaching quality. An enhanced leadership development program for vocational colleges was proposed to address the least responses. This study may acquire a better understanding of the importance of Chinese vocational teachers' teamwork on group development. This information can help to shape professional development initiatives that encourage effective collaboration and, ultimately, improve the atmosphere for learning and instruction in vocational colleges.

Keywords: development, learning, leadership quality, vocational teachers

Group development, team learning, and teaching quality among Chinese vocational college teachers

1. Introduction

Education is very important aspect of every individual because it is part of life stages and processes. Education enhances life and provides stability on it. It is also something a treasure that no one can never take away from a person. Behind education is a teacher. Teachers are important instruments to cultivate students' abilities and capabilities for them to become useful in the society. Teacher's role is very crucial because teachers are the primary factors to enhance the quality of life of the students leading to a productive society. Teachers in China have encountered difficulties with regards to become effective and efficient. The stability of the vocational teaching workforce may be impacted by the fact that traditional colleges and universities are not found in all postsecondary educational institutions. By the given fact, vocational teachers are given less emphasis. In addition to being called "career institutes" or "technical institutes," several of these schools are trade schools. This is the reason why there is existing vocational college teacher in China. Vocational college teachers are professionals who instruct students in a specific trade or occupation which may call these teachers as a "career teacher" or "technical education teacher". For a vocational college teacher to be effective and efficient, he/she must have cultivated group development, team learning, and teaching quality. The members of newly established work teams get to know one another through group development process. There are four levels under group development which are needed to be examined which are dependency or inclusion, counter dependency or flight, trust or structure, and work and productivity from the scale of Gren et.al.(2020). Dependency and inclusion requires valuing and making people of all identities feel involved, represented, and heard as well. as truly belonging, being able to contribute to the group, and having a voice. Inclusion refers to actively identifying and removing structural and other hurdles as well as consistently and systemically supporting equity and social justice inside the organization. Team members' of high levels of worry, uncertainty, and politeness are characteristics of this era. Team members usually defer to a "leader" because they are concerned about things like being accepted, eliminating uncertainty, and establishing boundaries (Gren et.al., 2020).

On the other hand, counter dependency/flight is the opposite of dependence. It alludes to the anxiety associated with relying on others. Counter-dependent people will go to tremendous efforts to avoid seeking assistance (Gren et.al., 2020). Conflict, power conflicts, the search for identity, and the establishment of roles among team members are characteristics of this stage. The group is still putting effort into creating a suitable social structure. As a result, not all the resources needed to complete the assignment are yet available. Moreover, trust and structure show a high level of cooperation, teamwork, and respect, all of which are characteristics of a team in which looks out for one another. In addition, work, and productivity at the corporate level, refers to how many projects or given tasks team members perform. It can also refer to the number of chats or issues processed in a day in a queue-based position like support. The productivity of an employee and their value are often correlated for many businesses. The idea of both team learning and group development studies is that teams or groups won't be successful until they learn to work together to overcome obstacles like team dictators. During this stage, team members become accustomed to routinely sharing information with one another. Team learning is the process of individuals learning together as a group, exchanging knowledge, and working to achieve common goals.

Team learning is a key for effective teamwork because it encourages collaboration and communication in the workplace. Learning in teams can improve productivity and problem-solving skills by encouraging team members to share their knowledge and expertise. Furthermore, it fosters a positive work environment in which everyone feels valued and supported, resulting in employee growth and development that benefits both the individual and the organization. Finally, by implementing team learning in the workplace, managers can improve

their bottom line while staying ahead of the competition. Collaborative learning refers to the extent to which team members are seen and used as knowledge sources by other team members. When a team believes that it can benefit greatly from the contributions of its members, it encourages teamwork as a means of learning from one another. Discussions are encouraged at all meetings and decision-making processes. Before making a decision, the team aims to pool its members' knowledge and evaluate all perspective. Not least among all these responsibilities is the team leader's vital role in encouraging team learning.

Learning teams should be led by leaders who think strategically and pro-actively about their members development, in addition to fostering all the behaviors mentioned above (Swanson et al.,2019). For these leaders, learning is something that must be actively sought for rather than something that just comes organically as time passes. They are concerned about how their team is growing and learning. They firmly believe that this development is essential for gaining and maintaining competitiveness. They employ a variety of tactics to build their teams. Students can create relationships with their peers through team learning, creating a productive and stimulating learning environment. Working together on a project allow students to gain trust, respect, and sense of community with their classmates. Teacher must pay attention to this. Team learning relates to teaching quality (Shimizu et al., 2022).

Teachers and teacher education are frequently introduced as "problems" to be evaluated, with policy solutions centered on how to make teachers "better" and improve teacher "quality" through the implementation of prescriptive strategies (Towers et. al, 2023). For decades, researchers and practitioners have focused on what constitutes high-quality instruction because of its significant impact on students' learning curves. Mamites et. al.(2020) identified those factors which include the instructors' individual characteristics, psychological characteristics, self-efficacy, teaching motivation, teaching experience, professional development, student composition, student feedback, institutional culture, and institutional resources. In scrutinizing teaching quality, there are three variables that are needed to focus: teacher competence level, teaching content, and teaching method. We must first define competency to discuss the significance of teacher competence. Competency is a term that is frequently used by different people in different circumstances, and as a result, it has several definitions. This phrase is used in relation to both job performance and teacher education. Teaching content is also important. Teachers must have both the necessary pedagogical content knowledge and the content knowledge which refers to a body of information made up of facts, theories, principles, concepts, and terminology. They are teaching to provide students with a high-quality education. This policy page will examine several policy initiatives that can enhance and regulate teachers' content knowledge (UNESCO, 2023). In addition, teaching method is another element of teaching quality. Activities are the strategies in which teaching methods are put into practice. Teaching methods are the more broad strategies used to assist students in reaching learning outcomes. Teaching strategies helped students in mastering the course material and learn how to use the knowledge in specific scenarios (Cash et al., 2018).

In addition to several studies about efficiency and effectiveness of teachers in general, this study intended to address the research gap by conducting a study specifically in efficiency and effectiveness of college vocational teachers through measuring group development, team learning, and teaching quality. The gap with group development is that teachers coordination costs represent the time and energy that group work requires that individual work does not, such as the time it takes to coordinate schedules, arrange meetings, meet, correspond, make collective decisions, and integrate group members' contributions. Furthermore, the gap in team learning is disengagement. Teams become disengaged when there's a lack of clear direction or vision. The Team members fail to appreciate their role in the larger picture, leading to lack of motivation. Lastly, the gap in teaching quality is more into lack of resources, poorly trained teachers, or inadequate infrastructure. Limited accessibility to instructional materials, technological advances, or opportunities for professional growth can all impede a teacher's ability to carry out effective practices. From the research gaps mentioned, the importance of this study why to conduct is to address the skill gap, teacher effectiveness, and suggesting China's educational reforms. The study holds a major opportunity for contributing to the improvement of vocational education in China, eventually preparing students with the skills required for success in the job market. This study helped to discover

efficient and effective practices necessary to develop college vocational teacher's skills. It is necessary to address this kind of gap to enhance the productivity and outcome. There is still significant room for improvement in the research and teaching capabilities of vocational college teachers in China. In general, this contributed in the area of education where it addressed different issues from vocational education institutions, expounded the benefits for teachers and learners, and suggested improvement for educational policy in China. In the field of education, it served as a valuable guide to further enhance the theories in education.

Objectives of the Study - The purpose of this study was to identify group development, team learning, and teaching quality among Chinese Vocational College teachers to suggest an enhanced leadership development program for vocational colleges. Specifically, this study determined the respondents' group development as to dependency and inclusion, counter dependency and fight, trust and structure, and work and productivity; identified the respondents' team learning in terms of continuous improvement seeking, dialogue promotion and open communication, and collaborative learning; assessed the respondents' teaching quality as to competence level, teaching content, and teaching method; assessed the association between group development, team learning, and teaching quality; and proposed an enhanced leadership development program for vocational colleges.

2. Methods

Research Design - This study utilized a descriptive design to investigate on group development, team learning, and teaching quality among Chinese vocational college teachers. Descriptive research describes the characteristics of the subject, topic, scenario, or group being studied. As a result, the goal of all descriptive research is to fully appreciate the issue by investigating its background, characteristics, and existing patterns (Vijayamohan,2022). It is vital to highlight that in descriptive research, unlike experimental research, no factors are controlled or manipulated. Instead, variables are simply identified, observed, and measured. Surveys and observation are the most common methods for conducting this study design. You can collect data using either online or offline survey technologies, depending on your study purpose.

Participants of the Study - The respondents of the study were 425 Chinese vocational college teachers from 8,000. The researcher first identified five (5) vocational colleges in China and had a permission to conduct research. The inclusion criteria for the participants were teachers who are teaching both in public and private vocational college in China. A total number of vocational teachers who needed in answering the questionnaire was determined by Raosoft Sample Size Calculator considering the 95% confidence level and 5% marginal error. A random sampling procedure was used to choose participants. Basic random sampling involves selecting a subset of a population at random. Using this sampling strategy, everyone in the population has an equal chance of being chosen. This is the simplest probability sampling strategy to learn because it just requires one random selection and very little prior population knowledge. Because randomization is applied, any research conducted with this sample should have high internal and external validity, as well as be less likely to be influenced by factors such as sampling and selection bias.

Instrument of the Study - The Group Development Questionnaire Short Scale (GDQS) was used to measure the first variable, group development. It is composed of four sub-scales which are dependency/inclusion, counter dependence/flight, trust/structure, and work productivity. The total number items are 24 items with six items per subscale. The Cronbach's alpha for scale dependency/inclusion was 0.924, indicating that all the items are outstanding. The scale counter dependence/flight inclusion has a Cronbach's alpha of 0.921, indicating that all the elements are excellent. The scale trust/structure has a Cronbach's alpha of 0.871, indicating that all the components are good. The Cronbach's alpha for the work productivity scale was 0.868, indicating that all the items are good. On the other side, the Team Learning Questionnaire was utilized to assess the second variable, team learning. This questionnaire was created by Bresó et al. al (2008), consisting of continuous improvement, dialogue and promotion, open communication, collaborative learning, and strategic and proactive leadership. The overall number of items is 28, with six to seven items in each subscale. The scale continual progress has a

Cronbach's alpha of 0.902, indicating that all of the items are outstanding. The scale discussion, promotion, and open communication has a Cronbach's alpha of 0.855, indicating that all of the components are good. The Cronbach's alpha for the collaborative learning scale was 0.892, indicating that all the items are good. Cronbach's alpha for the strategic and proactive leadership scale was 0.888, indicating that all the items are good. The Influencing Factors and Improving Strategies of Classroom Teaching Quality questionnaire used to measure the third variable, teaching quality. This questionnaire was developed by Shen (2020) on her dissertation. This measures the competence, content and method. The total number items are 22 items with six-eight items per subscale. The Cronbach's alpha for scale competence was 0.918, indicating that all the items were outstanding. The scale content has a Cronbach's alpha of 0.847, indicating that all the items are good. The scale technique achieved a Cronbach's alpha of 0.881, indicating that all the items are good. In summary, these questionnaires are all good to measure the variables of the study because the reliability result attained 0.7 Cronbach's alpha and up according to the interpretation of George and Mallery (2003).

Data Gathering Procedures - There was first brainstorming of possible variables to create a good title. Through the guidance of the DW 1 teacher, the working title was established. The researcher formulated the introduction by writing the background of the study, introducing the variables of the study in paragraphs, and putting rationale and significance of the study. The researcher looked to similar studies and literature to further elaborate the chosen variables. The researcher looked for an existing questionnaire that suits to measure the variables. There were altering of these questionnaires so that parallelism on construction were achieved. The researcher employed the redesigned survey method and questionnaire to collect data from respondents on the study's needs. Letters have been revised for follow-up and questionnaire distribution and will be delivered digitally. The appointed statistician calculated the total, coded the data, and analyzed it. The acquired data was statistically processed to identify which statistical technique will be used to analyse the data. There was an acceptable statistical method used, whether the results were parametric or non-parametric.

Data Analysis - The statistical techniques listed below were utilized for data analysis. Weighted means and rankings were used to evaluate group development, team learning, and teaching quality. The study used the T-test, coefficient, and Analysis of Variance to determine significant differences among the variables, and both tools can be used to compare the means of the groups (Mishra et al., 2019). The Person correlated coefficient was used to determine the relationship between the variables.

Ethical Consideration - The identity of the vocational teachers and schools were kept hidden to protect the confidentiality of the research data on the participants' anonymity in this study. This was solely used to give data for statistical analysis, or other numerical calculations required for the tabulation of survey results. Voluntary participation and informed consent were given. Participants understood the nature of the research, its possible advantages and disadvantages, and their freedom to stop participating at any time. Furthermore, it clarified the concepts underlying the survey's conclusions. This dissertation received approval from the research ethical review committee. On the other hand, researchers have accountability for minimizing any possible harm to respondents, psychological as well as physical. Researchers ought to balance any possible advantages associated with the research towards possible hazards to participants. They should be forthcoming and forthright about their approaches and outcomes, and they ought to disclose any findings, even those that are unfavorable.

3. Result and discussion

Table 1
Summary Table on Group Development

Indicators	Weighted Mean	Verbal Interpretation	Rank
Dependency/Inclusion	3.15	Agree	3
Counter dependency/Flight	3.16	Agree	2
Trust/Structure	3.21	Agree	1
Work and Productivity	3.12	Agree	4
Composite Mean	3.16	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 1 summarizes the assessment of Group Development among Chinese Vocational Teachers in terms of dependency/inclusion, counter/dependency/flight, trust/structure and work and productivity. Based on the result, the composite mean of 3.16 presented that the vocational teachers have agreed of group development among of the four indicators in general. In terms of the four indicators, vocational teachers agreed among trust/structure (3.21), counter dependency/ Flight (3.16), dependency/inclusion (3.15) and work and productivity (3.12) with a very small difference respectively. Educational leaders and vocational teachers need to be aware of their academic team's interdependencies and trust structures to mitigate the potential negative effects of counter-dependency behaviors and to leverage such dynamics for improving productivity.

Table 2*Summary Table on Team Learning*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Continuous Improvement	3.19	Agree	1
Dialogue Promotion and Open Communication	3.09	Agree	4
Collaborative Learning	3.14	Agree	2
Strategic and Proactive Leadership	3.13	Agree	3
Composite Mean	3.14	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 2 summarizes the assessment of Team Learning among Chinese Vocational Teachers in terms of continuous improvement, dialogue promotion and open communication, collaborative learning and strategic and proactive leadership. Based on the result, the composite mean of 3.14 presented that the vocational teachers have agreed of team learning among of the four indicators in general. In terms of the four indicators, vocational teachers agreed among continuous improvement (3.19), collaborative learning (3.14), strategic and proactive leadership (3.13) and dialogue promotion and open communication (3.09) with a very small difference respectively. Continuous improvement seems have been achieved through a cycle of open communication, dialogue, and collaborative learning, which is facilitated by strategic and proactive educational leadership. This cyclical process enables Chinese vocational teachers to learn from one another, identify and address challenges, and develop effective teaching practices, resulting in better student learning outcomes. Planas-Lladó et al. (2020) stated that teamwork must be given value because it is one of the most important competencies for professionals. In support, Opdecam et. al.,(2019) found that most students chose team learning form their teachers also. This is because it is most powerful collaborative learning technique that can be used effectively by teachers.

Table 3*Summary Table on Teaching Quality*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Competence	3.13	Agree	2.5
Content	3.24	Agree	1
Method	3.13	Agree	2.5
Composite Mean	3.17	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 3 summarizes the assessment of Team Quality among Chinese Vocational Teachers in terms of competence, content, and method. Based on the result, the composite mean of 3.17 presented that the vocational teachers have agreed of teaching quality among of the three indicators in general. In terms of the three indicators, respondents agreed in content (3.24), competence (3.13) and method (3.13) with a very small difference respectively. When Chinese vocational teachers demonstrate strong competence, choose appropriate content, and use effective methods, they create a powerful recipe for successful learning. This trifold teaching quality is the foundation of quality teaching, ensuring that students gain the knowledge and skills they require to thrive. Daumiller et al., (2021) stated that teaching quality is a critical component of higher education. Research on this topic frequently necessitates assessing teaching quality as a global construct using self-reports. Chen (2019) added teachers with extensive pedagogical knowledge can choose content that is both age-appropriate and

relevant to student needs. They can then select the most effective methods for delivering the content in a way that fosters comprehension and engagement.

Table 4*Relationship Between Group Development and Team Learning*

Dependency/Inclusion	r-value	p-value	Interpretation
Continuous Improvement	-0.018	0.705	Not Significant
Dialogue Promotion and Open Communication	.944**	0.000	Highly Significant
Collaborative Learning	.943**	0.000	Highly Significant
Strategic and Proactive Leadership	.959**	0.000	Highly Significant
Counter dependency/Flight			
Continuous Improvement	0.002	0.966	Not Significant
Dialogue Promotion and Open Communication	.951**	0.000	Highly Significant
Collaborative Learning	.951**	0.000	Highly Significant
Strategic and Proactive Leadership	.970**	0.000	Highly Significant
Trust/Structure			
Continuous Improvement	-0.023	0.638	Not Significant
Dialogue Promotion and Open Communication	.939**	0.000	Highly Significant
Collaborative Learning	.951**	0.000	Highly Significant
Strategic and Proactive Leadership	.947**	0.000	Highly Significant
Work and Productivity			
Continuous Improvement	-0.016	0.750	Not Significant
Dialogue Promotion and Open Communication	.955**	0.000	Highly Significant
Collaborative Learning	.946**	0.000	Highly Significant
Strategic and Proactive Leadership	.958**	0.000	Highly Significant

Legend: Significant at p -value < 0.01

Multiple research studies show a link between effective group development and team learning. Findings revealed that team potency (34%) predicts team learning and, at the group level, accounts for 5% of team satisfaction. Group development fosters trust, communication, and a shared vision, which makes it an ideal environment for team learning. This is supported by Zhang et. al (2020), as respect and confidence develop within an organization, members become less afraid of implementing risks and seeking questions, which is essential for learning. Team learning, in turn, strengthens group development by increasing collective knowledge, improving problem-solving abilities, and fostering a sense of community within the group. These concepts interact in a cyclical manner, resulting in a more effective and successful learning environment for all involved.

Table 5*Relationship Between Group Development and Teaching Quality*

Dependency/Inclusion	r-value	p-value	Interpretation
Competence	.965**	0.000	Highly Significant
Content	.888**	0.000	Highly Significant
Method	.945**	0.000	Highly Significant
Counter dependency/Flight			
Competence	.961**	0.000	Highly Significant
Content	.899**	0.000	Highly Significant
Method	.939**	0.000	Highly Significant
Trust/Structure			
Competence	.938**	0.000	Highly Significant
Content	.881**	0.000	Highly Significant
Method	.913**	0.000	Highly Significant
Work and Productivity			
Competence	.953**	0.000	Highly Significant
Content	.887**	0.000	Highly Significant
Method	.947**	0.000	Highly Significant

Legend: Significant at p -value < 0.01

Table 5 depicts the relationship between group development and teaching quality. The computed r-values show a very strong direct connection, and the resulting p-values are smaller than the alpha level. This indicates that a substantial relationship exists and that the greater the group development, the higher the instruction quality.

Group development and teaching quality are mutually related. Strong group development creates a positive learning environment in which Chinese students are engaged and motivated, resulting in improved teaching outcomes of Chinese vocational teachers. Effective teachers, on the other hand, can foster a thriving learning community by prioritizing group development and providing the necessary scaffolding (Dunekacke et al., 2024). Furthermore, many authors agreed that the variables had a positive relationship. This positive relationship could be attributed to shared expertise, peer feedback and reflection, as well as problem solving and innovation.

Table 6*Relationship Between Team Learning and Teaching Quality*

Continuous Improvement	r-value	p-value	Interpretation
Competence	-0.005	0.916	Not Significant
Content	-0.022	0.653	Not Significant
Method	0.010	0.837	Not Significant
Dialogue Promotion and Open Communication			
Competence	.959**	0.000	Highly Significant
Content	.888**	0.000	Highly Significant
Method	.945**	0.000	Highly Significant
Collaborative Learning			
Competence	.956**	0.000	Highly Significant
Content	.885**	0.000	Highly Significant
Method	.926**	0.000	Highly Significant
Strategic and Proactive Leadership			
Competence	.974**	0.000	Highly Significant
Content	.905**	0.000	Highly Significant
Method	.948**	0.000	Highly Significant

Legend: Significant at p -value < 0.01

Table 6 shows the relationship between team learning and teaching quality. The estimated r-values show a very strong direct association, and the p-values were smaller than the alpha level except for continuous improvement and teaching quality. This indicates that there is a considerable association between team learning and instructional quality.

The result highlights the necessity of providing possibilities for professional growth which promote cooperation in learning among the instructors. More research can help us understand which aspects of team learning are most important for ongoing enhancement in teaching practice. Team learning and teaching quality are interdependent. When Chinese vocational teachers participate in collaborative learning, they gain valuable knowledge and support, which leads to improved teaching methods and, ultimately, better student learning results. Effective vocational schools foster a culture of team learning by offering opportunities for collaboration and professional development, which improves teaching quality and builds a solid foundation for student success (Punte-Palacios et. al.,2021).

Table 7*Proposed Faculty Development Program for Chinese Vocational College Teacher*

Key Result Areas	Strategies	Success Indicator	Persons Involved
Group Development			
A. Least in Dependency/ Inclusion 1. Individuals seem to follow the group's recommendations. 2. When most individuals speak, the others seem to listen without any difficulty. Program: Bridge Builders Objectives: To promote collaboration and teamwork To foster a sense of belonging and shared purpose	Provide mentorship program for teachers and team building activities. The activities should encourage participants to work together for the common goal and fostering sense of belongingness.	90% of the Chinese vocational teacher develop the sense of the importance of group recommendation and they can able to listen first without any comments or complaints.	School administrators, school heads, faculty members/ vocational teachers
B. Least in Counter Dependency/ Flight 1. Individual seem to be thoughtful. Program: Working together, Buidling together Objectives: To develop healthy relationship with others, &	Conduct orientation and reorientation for vocational teachers regarding the importance of team work. Develop Psychoeducational	90% of the vocational teachers clearly know how they will change their mindset with regards in dealing	School Administrators, Human Resource and Development Office, School

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<p>To build a stronger and more fulfilling relationship</p> <p>C. Least in Trust/Structure 1.Members of the group have faith in one another's talents. Program: Open Communication Workshop Objectives: To enhance collaboration and teamwork, To foster transparency and communication</p> <p>D. Least in Work and Productivity 1.The group encourages innovation and creativity. Program: Work and Productivity Enhancement Program Objectives: To improve time management and enhance focus, and to foster a healthy work-life balance</p>	<p>Workshops to address a positive outlook for other teachers. Conduct a webinar or training session for vocational teachers to enhance their communication skills and adopting transformational leadership in their practices to ensure that teachers' concerns are heard. Administer series of trainings and seminars that target continuous learning among vocational teachers. These trainings may focus on goal setting and time management, prioritization and organization, communication and collaboration.</p>	<p>withothers</p> <p>95% of the vocational teachers can actively participate in decision making process and can vocally air their concerns to the proper focal person. 90 % of the vocational teachers collaborate with other group and have the initiative for group innovation and creativity.</p>	<p>Heads, Teachers</p> <p>School administrators and school heads</p> <p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p>
Team Learning			
<p>A. Least in Continuous Improvement 1.Cross-training programs in learning and development are constantly implemented. Program: Learning and Development Seminar Objective: To address the vocational teachers growth, and to address teamwork and flexibility.</p> <p>B. Least in Dialogue Promotion and Open Communication 1. We question each other when we think the work can be done better. 2. Different points of view are expressed openly and sincerely. Program: Dialogue Promotion and Open Communication Workshop Objectives: To enhance active listening and communication skills and fostering dialogue and information sharing.</p> <p>C. Least in Collaborative Learning 1.We learn from one another. Program: Peer-to-peer learning program Objective: To create learning oppurtunities and to facilitate collaboration</p> <p>D. Least in Strategic and Proactive Leadership 1. Looks for learning opportunities for him/herself or any team member. Program: Educational Assessment for Learning Needs Objectives: To analyze the skill gaps, and to address needs for improvement.</p>	<p>Conduct seminar focusing on learning and development that will help vocational teachers in handling work related task efficiently and effectively.</p> <p>Offer training on active listening skills, and avoiding interruptions. Teach clear and concise communication techniques to ensure messages are understood effectively.</p> <p>Organize sessions where vocational teachers with expertise in specific areas present their knowledge and answer questions from their peers. Conduct an assessment for skills gap analysis to identify discrepancies between current teacher skillsets and the skills required for their current and future roles.</p>	<p>90 % of the vocational teachers appreciate the importance of cross-training programs.</p> <p>95% of the vocational teachers will practice building trust and psychological safety.</p> <p>95% of the vocational teachers will learn from peer to peer mentoring.</p> <p>90% of the vocational teachers will look for learning opportunities.</p>	<p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p> <p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p> <p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p> <p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p>
Teaching Quality			
<p>A. Least in Competence 1. I manage and organize the classroom well. Program: Classroom Management Enhancement Objectives: To build a positive classroom culture and to create clear and consistent routines.</p> <p>B. Least in Content 1. The course content has educational assessment based on higher order thinking skills. 2. The course content is composed of clear teaching objectives. Program: Needs Assessment & Feedback Objectives: To improve strategies in classroom deliveries and to create adaptive learning techniques</p> <p>C. Least in Method 1. I consider each student's uniqueness and adapt my instruction to their aptitude. Program: Catering student's uniqueness Objetive: to identify the student uniqueness, to utilize the diverse instructional strategies, technology integration, and to promore student ownership.</p>	<p>Conduct seminar focusing on time management that will help teachers in handling classroom related task and personal life as home becomes their workplace.</p> <p>Incorporate active learning techniques and real life examples like case studies, simulations, role-playing activities, and group discussions to foster deeper engagement with the material.</p> <p>Develop a curriculum that will help in identifying strengths and weaknesses of students. Once identified, school leaders can properly assign work on teachers based on their skills proper to the needs of the students.</p>	<p>90 % of the vocational teachers manage their time fruitfully.</p> <p>90 % of the vocational teachers improve their teaching strategies by enhancing the course content and learning objectives aligned in the higher order thinking skills.</p> <p>95 % were checked and validated course plan or course outline set for the whole school year aligned on the needs, and student's capabilities.</p>	<p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p> <p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p> <p>School Administrators, Human Resource and Development Office, School Heads, Teachers</p>

Table 7 is the proposed faculty development program for Chinese vocational college teachers. It is

composed of key result area, strategies and success indicator, and persons involved. In the key result areas, these composed of least responses from the different subscales of the questionnaire. Strategies are on how the proposed programs and objectives would be implemented. On the other hand, success indicator is the assessment on how strategies address the problem.

In general, these considerations would be considered according to different authors. Workshops, which are modeling, and collaborative endeavors are examples of active learning strategies that can outperform traditional lectures (Ahn et al., 2020). Differentiated teaching or coaching can improve the effectiveness of programs by addressing the teaching profession different requirements as well as experience levels (Guskey, 2019). Given the growing significance of technological advances in education, methods which successfully utilize technology for professional growth may be advantageous (Egden et al., 2023). Specifically, for the group development, the proposed programs are bridge builders; “working together, building together”; open communication workshop; and work and productivity enhancement program. Filipe et al. (2022) expound the role of internationalization by thought collaboration and online learning modality experiences in faculty development for procedural specialists, resulting in the formation of a community of practice. Surprisingly, while these research articles focus on teamwork along with growth in specific contexts, they also have broader implications for educational practices.

Maslova et al. (2020) mention, the use of digital technologies and the creation of digital educational resources can be integrated into group development plans by facilitating diverse teaching methods and improving educational quality. Furthermore, Kirdan and Kirdan (2021), group activities and collaborative learning strategies can help future professionals develop soft skills, which are critical for self-realization. In addition, for team learning, the proposed program were learning and development seminar, dialogue promotion and open communication workshop, peer-to-peer learning program and educational assessment for learning needs. As an illustration, Project Based Learning (PBL) has been shown to promote innovative thinking abilities among students working in groups to design colleges and universities, implying that PBL can be an effective component of a group plan for development (Yusup et al., 2023). Furthermore, the establishment of a growing setting within schools of secondary education demands the structure of continuing education for pedagogical individuals as well as participatory management structures that are consistent with group development principles in classrooms (Kryshinets-Andyaloshiy, 2021). Moreover, for teaching quality, the proposed program were classroom management enhancement, needs assessment and feedback and catering student’s uniqueness. Johnson (2023) discovered that applying a Teaching Quality Plan with an emphasis on decision-making based on data, continuing education, successful teaching, and continuous improvement can help you create a learning environment that promotes student success and allows teachers to reach their full potential.

For the future educational leaders to assess the how effective the action plan. These success indicators might be considered. Assessing expertise or abilities prior to and following the program can help determine learning outcomes. Participants' experiences and perceptions of the effect that the program has can be gathered through surveys or interviews. Monitoring teachers in the classroom following the curriculum can reveal changes in how they instruct practices. School Administrators, HR&D Offices, School Heads, and Teachers can collaborate on these strategies to create a school environment that promotes collaborative learning, excellent instruction, and interpersonal growth. This will eventually assist both teachers and students by encouraging ongoing education, promoting better teaching practices, and fostering a more constructive and interactive school culture.

4. Conclusions and recommendations

Chinese Vocational Teachers are generally agreed in areas of group development. They agreed most on trust/structure, while least on work and productivity. Chinese Vocational Teachers are generally agreed in areas of team learning. They agreed most on continuous improvement, while least on dialogue promotion and open communication. Chinese Vocational Teachers are generally agreed in areas of teaching quality. They agreed most on content, while relative equal on competence and method. There is a significant relationship among the three variables which indicates that the better is the group development, the better is the teaching quality, and the

better is the team learning, the better is the teaching quality. The faculty development plan was designed to address the least responses from the group development, team learning and teaching quality.

Chinese vocational teachers may encourage collaboration, share decision-making and help other vocational teachers to develop their group development, team learning and teaching quality. High leaders and school administrators may adopt their own faculty development program for group development, team learning and teaching quality based on their school culture. School managers may investigate benefits of the role of technology in facilitating group development and team learning activities for geographically dispersed teachers in China. The Ministry of Education in China can foster cooperation, sharing of information, and ongoing professional development among vocational college teachers. This will eventually result in higher quality of instruction, better-prepared recent graduates, and an increasingly competitive personnel for China's expanding economy. Future researchers may help educators to understand how to create a cooperative and imaginative learning atmosphere that is beneficial to both teachers and students by conducting research related to educational management. The suggested faculty training program could be tabled for discussion and implementation.

5. References

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