

Faculty Expertise and Professional Practices as Predictors of Student Engagement: A Multi-Component Analysis in Business Education

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ABSTRACT

This research aims to analyze the influence of faculty expertise and their professional practices on students' engagement in a business course. The framework used for this analysis was based on Bandura's Theory of Social Learning and Shulman's Model of Pedagogical Content Knowledge; furthermore, the dimensions of student engagement that were analyzed included; participation, learning and teaching experiences, interaction with peers, and retention. For this quantitative, descriptive, predictive study, 251 undergraduate business students were included in the sampling from an institution in Cebu, Philippines. A validated survey instrument was developed to collect the data with a high degree of reliability (Cronbach's $\alpha = 0.88-0.91$). The relationships of faculty attributes with turn key

status of facilities were defined through application of descriptive measures, Spearman correlation and multiple regression. The results indicate that various aspects of university teachers were rated high to very high. These include expertise (subject matter knowledge, industry experience and teaching skills) and professional practices (teaching methods, receptiveness to feedback, professional development and facilitation of critical thinking). As per the correlation analysis results, it can be seen that these faculty items are strongly positive and significantly correlated with all these student engagement dimensions ($\rho = 0.818-0.964$, $p < .001$). According to regression analyses, one of the strongest predictors is critical thinking as is evident for participation engagement, learning experience and retention after accounting for a range of professional development and industry experience in the models. According to the study, a faculty is not only a knowledge provider but also a darn good motivator and engager of students. The study findings indicate that business schools can improve the quality of education through purposeful investment in faculty development and more adaptive and dynamic teaching practices that better prepare student for the professional world.

Keywords: *Faculty Expertise, Professional Practices, Student Engagement, Subject Matter Knowledge, Industry Experience, Teaching Skills, Teaching Methods, Openness to Feedback, Professional Development, Critical Thinking, Student Participation, Learning Experience, Social Interaction*

INTRODUCTION

In this era where institutions of higher education are being measured on the ability to produce graduates who can immediately contribute to the workforce, the problem is no longer what students learn,

but rather the effort and commitment students dedicate to engage in the learning process. Business Schools all over the world are facing teachers' dilemma: there is quality information and technology but a lot of the students are uninterested, not motivated and simply overwritten with content that they do not care about anymore. It is a paradox because it makes, what the researchers believe, an important point – student engagement is not related to the curriculum but to the people who make up the curriculum.

As colleges are trying to ensure that their graduates would be able to take on the trials and challenges of fast-changing professional environments, they are not focusing on curriculum design any longer but on faculty members and their competencies. They have to have not only good subject knowledge but also the ability to apply the theory to practice. Further, they should be ready to involve the students actively in the teaching and learning process. Most important and significant concept students need to develop to succeed academically is student engagement. The notion of engagement by no means confines itself to active participation only in the classroom but refers to cognitive, emotional, and social aspects. Based on research, if the student participates in the learning process, it's easier for him to get good grades, think critically, and graduate (Giang et al., 2022). That is the reason why is it important for business educators to find out the factors to achieve this goal. The influence of faculty is a strong and multidimensional one. As a result, it is one of the key factors affecting student engagement besides any external or internal factors. Expertise stems from subject matter knowledge, teaching aptitude and experience, and industry skills. Expertise alone isn't enough for creating effective learning experiences. The approaches teachers utilize their expertise within the classroom and to accept feedback, alter practice and seek professional development and think critically are just as important in the process (Wong & Chapman, 2023). Although numerous papers exist on the matter, it seems essential to create integrating research that considers faculty influence from the standpoint of multi-component model. Current studies are often more focused on one part of the process, such as teaching methods or content knowledge, and must fail to see how all these aspects are connected to each other and the final result.

This study has filled the gaps in existing literature by studying the relationship between level of expertise and professional practice of faculty and student engagement in business education. The study has a comprehensive approach that takes into account both the cognitive and behavioral dimensions of education. It is based on widely recognized theories in education such as Social Learning Theory and Pedagogical Content Knowledge. The study aims to obtain a better understanding of the education process through a joint evaluation of some characteristics of faculty on different components of student engagement involving participation, learning experience, social experience, and retention. Therefore, this study could be used for improving teaching and learning processes in institutions of higher education. Institutions can take informed steps towards developing faculty members, creating instruction programmes, and other measures by identifying the most influential faculty characteristics affecting student engagement. Consequently, graduating students would be more equipped with the professional life.

Framework of the Study

The chosen study draws on the social learning theory of Albert Bandura (1977) and Lee Shulman's pedagogical content knowledge (and PCK 1987) forms of a merged viewpoint linking instructor skills to learner gains. Professors are regarded by Bandura as exemplary individuals whose analytical expertise, responsiveness to feedback, and level of engagement are mirrored by students, leading them to believe in their academic capability and involvement. Shulman's PCK adds the backbone for effective teaching as it integrates a robust understanding of the subject matter with deliberate choices regarding how to formally present it to learners. A recent commentary by Rukh and Ali (2025) show that business teaching needs fieldwork too, the link from classroom ideas to job ideas.

By combining these two ideas which work on the research questions of the study as to how teacher characteristics contribute to the classroom environment and also on student retention. Shulman focuses on how individuals share while Bandura discusses how people observe others helping others to persist in their

efforts. Wong and Liem (2022) are in agreement on this point as they believe that engagement is a multilayered process depending on the environment surrounding the teacher. The current work investigates the multilayered faculty impact at University X, providing data-informed evidence of ways in which faculty can change their teaching practice to improve both student achievement and employability over time.

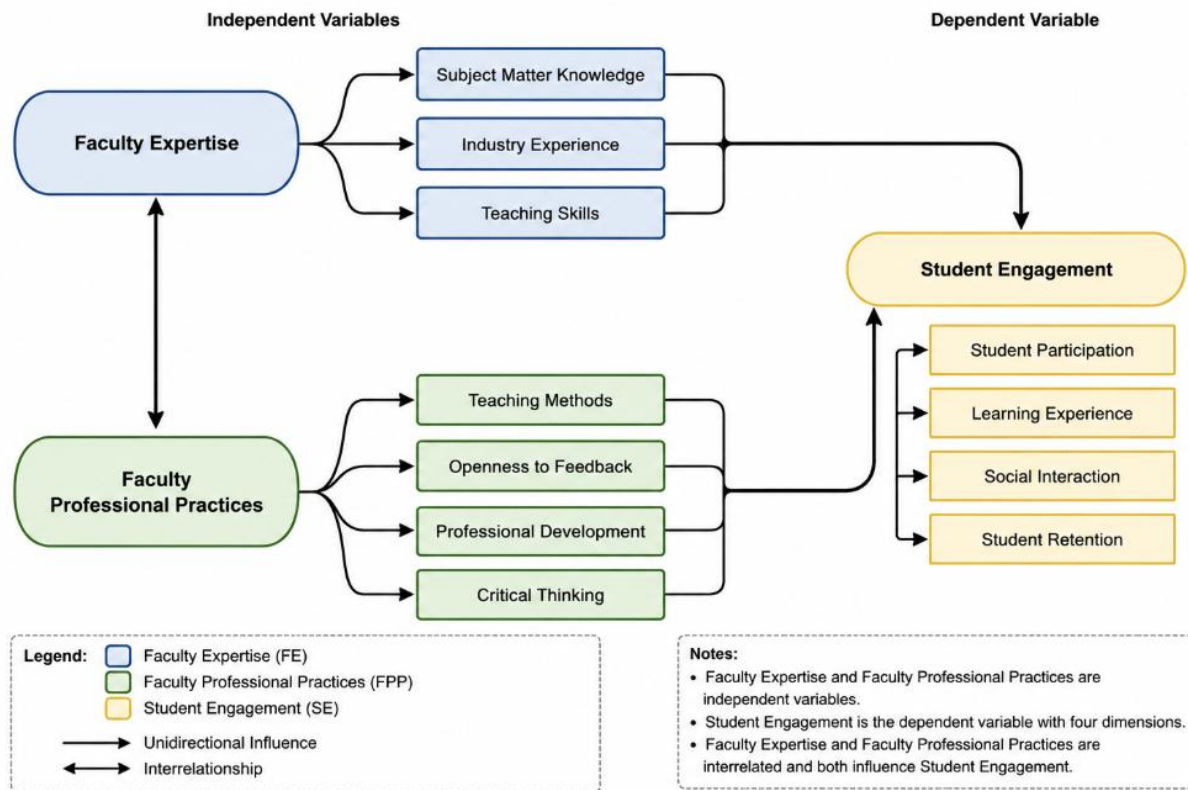


Figure 1. Conceptual Framework of the Study

METHODS

Research Design

This study utilized a quantitative descriptive-predictive research design to determine the effect of the expertise of teachers and professional practices on students' engagement in business education. To be more specific, the descriptive part was used to measure the perceptions of students regarding faculty attribute like subject matter knowledge, teaching competency, instructional methods etc., along with the students' engagement. The research helped provide an objective portrayal of the students' perception of the teaching-learning environment at the Business School. Also, the research design's predictive capacity enabled the researchers to broaden the investigation to the extent of influence of faculty-related variables on student involvement. This study employed a structured survey questionnaire as the data collecting tool. Employing Likert-scale items made it possible to apply suitable statistical techniques such as correlation and regression analysis.

Research Locale

University X located in Cebu City, Philippines, more precisely in its Business School Department, is where this study was conducted. University X is recognized for its industry-oriented education and for making its students career ready for their further career paths. The Business School Department provides many academic programs, such as Accountancy, Business Administration, and more. The involvement of academicians and experts in the teaching process creates an effective learning process that simulates business world conditions. The population of the present study consisted of 717 undergraduate students who were enrolled in Business School Department in Second Semester of the year 2024-2025. With a range of excellent learning experiences available to students through effective teaching methods, modern technology, and links to the industry, the Business School Department provides students with numerous opportunities to learn about business. The environment created by the Business School Department is unique in that it represents both the theoretical and practical aspects of business, which makes it an excellent place to study the effects of faculty expertise on student engagement.

Sampling Technique

Using proportionate stratified random sampling qualified the study to guarantee that students from the various academic programs and year levels within the Business School Department were well represented in the study. This technique was deemed suitable for use as the populations were comprised of various academic programs which had a varying number of populations. Thus, it became necessary to divide the respondents into homogeneous subgroups or strata. The total population of the study was 717 students officially enrolled during the Second Semester of the Academic Year 2024-2025. To calculate sample size Cochran's Formula with Finite Population Correction (FPC) was employed using a confidence level of 95% and margin of error 5% resulted in a minimum sample size of 251 respondents. When the appropriate sample size was determined, the respondents were proportionately allocated according to the population size of each academic program and year level. To minimize sampling bias, participants were selected randomly from each stratum based on their proportionality to the target population. The outcomes were representative and reliable findings which were generalized due to the proportionate stratified random sampling. It helped in capturing the perceptions of Business School students on the faculty competence, professional practices and student engagement.

RESULTS AND DISCUSSION

Table 1. Descriptive Analysis of Faculty Expertise

A. Subject Matter Knowledge

Item	Mean	SD	Interpretation	Rank
Incorporates relevant and updated information into lessons	4.70	0.56	Strongly Agree	1
Responds clearly and effectively to student questions	4.67	0.61	Strongly Agree	2
Explains complex topics in an engaging and understandable manner	4.60	0.68	Strongly Agree	3
Simplifies difficult concepts without losing essential details	4.58	0.69	Strongly Agree	4
Connects concepts to facilitate deeper understanding	4.57	0.69	Strongly Agree	5
Overall Mean	4.63	0.62	Strongly Agree	

B. Industry Experience

Item	Mean	SD	Interpretation	Rank
Guides students in understanding industry challenges and trends	4.64	0.62	Strongly Agree	1.5
Shares personal industry experiences to enrich discussions	4.64	0.61	Strongly Agree	1.5
Incorporates case studies and real-world examples into lessons	4.63	0.69	Strongly Agree	3
Uses practical examples from professional experience	4.61	0.64	Strongly Agree	4
Invites industry professionals to share insights with students	3.82	1.21	Agree	5
Overall Mean	4.47	0.69	Strongly Agree	

C. Teaching Skills

Item	Mean	SD	Interpretation	Rank
Uses assessments to evaluate understanding and provide feedback	4.75	0.54	Strongly Agree	1
Utilizes varied teaching strategies and interactive activities	4.65	0.68	Strongly Agree	2
Maintains clear classroom rules and routines	4.62	0.66	Strongly Agree	3
Explains concepts progressively and clearly	4.55	0.72	Strongly Agree	4
Adjusts teaching methods according to students' learning needs	4.48	0.78	Strongly Agree	5
Overall Mean	4.61	0.64	Strongly Agree	

Note. Mean interpretation based on the following scale: 4.21–5.00 = Strongly Agree; 3.41–4.20 = Agree; 2.61–3.40 = Neutral; 1.81–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

As indicated in Table 1, the respondents' perceptions of University X faculty members were predominantly in positive direction for all dimensions. Most notably, Subject Matter Knowledge (SMK), Industry Experience (IE) and Teaching Skills (TS) were interpreted as Strongly Agree. Of the dimensions, Subject Matter Knowledge achieved the highest overall mean ($M = 4.63$) with students acknowledging the faculty member's skill of embedding current issue and industry-related information into a lesson with a mean of ($M = 4.70$). The Business School has maintained its academic credibility and relevance in the manner of delivery. The lower rating for linking concepts across topics ($M = 4.57$) suggests a need to further reinforce the use of integrative and higher-order thinking approaches (Moreno-Guzmán, 2021) among faculty members.

Once again, Industry Experience ($M = 4.47$) and Teaching Skills ($M = 4.61$) received a high rating owing to the perception of students that the faculty members were competent professionals who were able to provide industry-based and effective classroom learning. Students especially valued sharing of professional experience by faculty members ($M = 4.64$) and using assessments to provide feedback and monitor learning progress ($M=4.75$). The findings are consistent with previous studies that highlighted the importance of experiential and student-centered learning in enhancing engagement and employability outcomes (Succi & Canovi, 2020). Nevertheless, the lower scores for inviting and engaging external experts from industry ($M=3.82$) and altering instruction according to the individual learning needs of students ($M=4.48$) were not so encouraging it needs to do better in the future and add further responsiveness to the learning needs of today's students through improving partnerships with industry as well as adopting more adaptive teaching practices (Bond, 2022; Pozas et al., 2023).

Table 2. Descriptive Analysis of Professional Practices

A. Teaching Methods

Item	Mean	SD	Interpretation	Rank
1. Encourages students to develop independent learning skills.	4.67	0.58	Strongly Agree	1
2. Focuses on student-centered learning and encourages participation.	4.64	0.61	Strongly Agree	2.5
3. Relates lessons relevant by connecting theories to real-life applications.	4.64	0.61	Strongly Agree	2.5
4. Uses project-based learning, where students work on real-world problems and collaborate to find solutions.	4.49	0.73	Strongly Agree	4
5. Uses rewards and consequences to shape student behavior and encourage ethical practices.	4.18	0.89	Agree	5
Overall Mean	4.52	0.63	Strongly Agree	

B. Openness to Feedback

Item	Mean	SD	Interpretation	Rank
1. Is approachable and willing to listen to student concerns.	4.72	0.55	Strongly Agree	1
2. Responds to feedback in a constructive and professional manner.	4.70	0.59	Strongly Agree	2
3. Creates a classroom environment where students feel comfortable sharing feedback.	4.67	0.60	Strongly Agree	3
4. Considers student suggestions and makes improvements accordingly.	4.51	0.76	Strongly Agree	4
5. Asks for student feedback about their teaching methods.	4.42	0.74	Strongly Agree	5
Overall Mean	4.60	0.60	Strongly Agree	

C. Commitment to Professional Development

Item	Mean	SD	Interpretation	Rank
1. Provides guidance on career growth and professional opportunities.	4.66	0.57	Strongly Agree	1
2. Encourages students to take leadership roles in academic and extracurricular activities.	4.55	0.70	Strongly Agree	2
3. Integrates discussions on professional ethics and workplace expectations.	4.53	0.72	Strongly Agree	3
4. Provides mentorship and career advice to help me achieve my goals.	4.41	0.75	Strongly Agree	4
5. Recommends seminars, workshops, and certifications for career advancements.	4.32	0.83	Strongly Agree	5
Overall Mean	4.49	0.67	Strongly Agree	

D. Encouragement for Critical Thinking

Item	Mean	SD	Interpretation	Rank
1. Promotes discussions that help us develop logical and analytical thinking skills.	4.68	0.61	Strongly Agree	1
2. Assigns tasks that require analysis and problem-solving.	4.65	0.63	Strongly Agree	2
3. Encourages us to question ideas and explore different viewpoints.	4.64	0.64	Strongly Agree	3
4. Guides us in applying critical thinking to business problems.	4.63	0.69	Strongly Agree	4
5. Asks thought-provoking questions to challenge our perspectives.	4.52	0.73	Strongly Agree	5
Overall Mean	4.62	0.63	Strongly Agree	

Note. Mean interpretation based on the following scale: 4.21–5.00 = Strongly Agree; 3.41–4.20 = Agree; 2.61–3.40 = Neutral; 1.81–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

As observed in Table 2, students’ perceptions of the professional practices of University X faculty members are generally positive in almost all dimensions and all overall mean scores have been interpreted as Strongly Agree. According to the results Tab, Openness to Feedback dimension whereby faculty can/deal with students was rated very high (M=4.60). The dimension of faculty approachability whereby faculty members can listen to students scored (M=4.72). The result signifies that instructors provide a soothing

environment where students feel at ease to provide feedback. They are not afraid to ask questions and always initiate communication (Paderes et al., 2024).

According to the results, students recognized faculty members' efforts in helping students learn independently ($M = 4.67$) and adopt student-centered learning approaches ($M = 4.64$). With respect to Teaching Methods ($M = 4.52$). The implication of these findings is that the instructors are effective in linking theory and practice, which thus helps students in becoming, more engaged, self-directed learners. These findings align with previous studies that noted the learner-centered and inquiry-based methods result in better student engagement and learning outcomes (Sarsale & Langub, 2023). Nonetheless, a lower mean rating of 4.18 for using reward and consequence-based systems to promote ethical behavior indicated a need for improvement in this area.

Likewise, Commitment to Professional Development ($M=4.49$), and Encouragement for Critical Thinking ($M=4.62$) both received a positive evaluation. Students liked classroom discussions that foster logical and analytical thinking which had the highest mean ($M = 4.68$.) This shows faculty members foster higher order thinking and active learning. The result agrees with others who emphasize reflective questioning, peer-learning and the development of critical thinking in higher education (Viado & Espiritu, 2023). Despite slightly lower scores for recommendations on career progression ($M = 4.32$) and on using thought-provoking questions ($M = 4.52$), there is still room for enhancing recommendations to strengthen mentoring and critical thinking activities. In general, the finding indicate that faculty members demonstrate professional practices that contribute positively to student learning, engagement, and academic development.

Table 3. Descriptive Analysis of Student Engagement

A. Student Participation

Item	Mean	SD	Interpretation	Rank
1. I feel a strong sense of motivation and inspiration to be present in every class.	4.37	0.76	Strongly Agree	1
2. I am excited to collaborate with my classmates in group projects and case studies.	4.32	0.83	Strongly Agree	2
3. I actively participate in class discussions and activities while showing interest in the subject matter.	4.26	0.77	Strongly Agree	3
4. I feel encouraged to share my thoughts and ask questions in class.	4.21	0.82	Strongly Agree	4
5. I take initiative in engaging with course materials and group works beyond the required readings or instructions.	3.74	0.90	Agree	5
Overall Mean	4.18	0.76	Strongly Agree	

B. Learning Experience

Item	Mean	SD	Interpretation	Rank
1. I feel that I am learning valuable skills that will benefit me in my future career.	4.62	0.68	Strongly Agree	1
2. I find the learning materials and resources provided to be helpful.	4.51	0.78	Strongly Agree	2
3. I am satisfied with the quality of instruction, learning and education I receive from my professors.	4.50	0.76	Strongly Agree	3
4. I am exposed to diverse perspectives that enrich my learning experience.	4.49	0.72	Strongly Agree	4.5
5. I have opportunities to apply what I learn through hands-on experiences and projects.	4.49	0.77	Strongly Agree	4.5
Overall Mean	4.52	0.71	Strongly Agree	

C. Social Interaction

Item	Mean	SD	Interpretation	Rank
1. I collaborate effectively with my peers on group assignments.	4.39	0.80	Strongly Agree	1
2. I feel comfortable approaching my peers and professors for help or support.	4.29	0.81	Strongly Agree	2
3. I feel a sense of community or belongingness within my program or course.	4.26	0.80	Strongly Agree	3
4. I take initiative in learning from students outside my course or department.	4.04	0.97	Agree	4
5. I participate in social events like networking, business forums or industry related activities organized by the department or sub organization like JBES, SYHM, JPIA.	4.01	1.06	Agree	5
Overall Mean	4.20	0.83	Strongly Agree	

D. Student Retention

Item	Mean	SD	Interpretation	Rank
1. I am likely to continue my studies here until graduation.	4.67	0.70	Strongly Agree	1
2. I am committed to completing my degree at Southwestern University PHINMA.	4.62	0.71	Strongly Agree	2
3. I believe that my experiences at this university will positively impact my future.	4.59	0.69	Strongly Agree	3
4. I would recommend this program to other prospective students.	4.44	0.85	Strongly Agree	4
5. I feel supported by faculty and staff in my academic journey.	4.40	0.73	Strongly Agree	5
Overall Mean	4.54	0.68	Strongly Agree	

Note. Mean interpretation based on the following scale: 4.21–5.00 = Strongly Agree; 3.41–4.20 = Agree; 2.61–3.40 = Neutral; 1.81–2.60 = Disagree; 1.00–1.80 = Strongly Disagree.

Table 3 shows the participants in general show a positive image of University X in terms of Student Engagement. This is in terms of Student Retention (overall mean score of 3.59) and Learning Experience (overall mean score of 3.48) which are interpreted as Strongly Agree. The average score for Student Retention ($M = 4.54$) indicates that students have a high willingness to complete their studies and think the educational experience will benefit their career. In the same way, Learning Experience ($M = 4.52$) received positive evaluations particularly for the marketing-related career skills ($M = 4.62$) and the availability of learning resources. Consequently, the Business School provides a viable teaching and learning environment that is relevant and effective in preparing students for professional practice (Morris, 2020; Xie et al., 2021)

Student Participation had a mean rating of 4.18; Social Interaction 4.20. These indicate that students participated actively in class and with classmates. Students especially enjoyed opportunities for cooperation with classmates and participation in class, which encourages classroom engagement. The independent engagement of course materials had the lowest rating ($M = 3.74$) while participation in external social and industry-related activities had a low indication ($M = 4.01$) thereby, improving these areas will be beneficial. Involving students in pursuits outside of standard curriculum while enabling them to apply concepts learnt, can strengthen their learning and promote professional expertise.

The results do suggest that, overall, students are engaged. However, the fact that perceived level of support from faculty and staff is rated the lowest indicates the need for enhanced mentoring initiatives and individualized academic counselling. Improving these aspects may continue to enhance students' academic experiences, sense of belonging, and longer-term commitment to the institution (Prananto et al., 2025; Rukh & Ali, 2025).

Table 4. Regression Analysis: Student Participation versus Faculty’s Expertise and Professional Practices

A. Analysis of Variance (ANOVA)					
Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	7	126.265	18.0372	236.95	0.000
Subject Matter Knowledge	1	0.002	0.0021	0.03	0.867
Industry Experience	1	0.340	0.3401	4.47	0.036*
Teaching Skills	1	0.049	0.0490	0.64	0.423
Teaching Methods	1	0.278	0.2776	3.65	0.057
Openness to Feedback	1	0.016	0.0156	0.21	0.651
Professional Development	1	7.578	7.5776	99.54	0.000***
Critical Thinking	1	0.799	0.7987	10.49	0.001**
Error	245	18.651	0.0761		
Lack-of-Fit	104	15.211	0.1463	6.00	0.000***
Pure Error	141	3.440	0.0244		
Total	252	144.916			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.27590	87.13%	86.76%	85.90%

B. Regression Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	-0.203	0.143	-1.41	0.159	—
Subject Matter Knowledge	-0.029	0.172	-0.17	0.867	37.45
Industry Experience	0.256	0.121	2.11	0.036*	23.11
Teaching Skills	-0.117	0.146	-0.80	0.423	28.65
Teaching Methods	0.233	0.122	1.91	0.057	19.54
Openness to Feedback	-0.054	0.118	-0.45	0.651	16.90
Professional Development	1.133	0.114	9.98	0.000***	19.15
Critical Thinking	-0.430	0.133	-3.24	0.001**	23.18

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; DF = Degrees of Freedom; Adj SS = Adjusted Sum of Squares; Adj MS = Adjusted Mean Square; S = Standard Error of the Estimate; R-sq = Coefficient of Determination; R-sq(adj) = Adjusted R-squared; R-sq(pred) = Predicted R-squared; SE Coef = Standard Error of Coefficient; VIF = Variance Inflation Factor.

Table 4 shows the regression analysis of faculty expertise and professional practices on student participation. The regression analysis found that $F(7, 245) = 236.95$, $p < .001$ is significant. The model ($R^2 = .8713$) explains 87.13% of the variance in student participation. The summation of the faculty expertise and professional practices significantly impact students’ level of participation. However, the increased Variance Inflation Factor (VIF) has multicollinearity given the high interrelationship among the dimensions included in the model (Hair et al., 2022; Daoud, 2020)

Of the variables, Professional Development was the strongest positive predictor of student engagement ($\beta = 1.133$, $p < .001$), which indicates those who are constantly growing or engaging in their own professional development will enhance student engagement. Student Participation was significantly affected by Industry Experience ($\beta = 0.256$, $p = .036$), implying that faculty members with industrial

exposure may help students in delivering more relevant and engaging learning experiences. Critical Thinking, on the other hand, had a strong negative association with student participation ($\beta = -0.430$, $p = .001$). This finding suggests that students can become less participative when learning activities are cognitively demanding.

On the other hand, Subject Matter Knowledge, Teaching Skills, Teaching Method and Open to Feedback were not significant for student participation. A possible explanation for this is the overlap of predictors in the model. In general, the results prove that faculty professional development and industry experience will improve the participation of students. Moreover, critical thinking activities must be equally spaced for effective incorporation into learning in classrooms.

Table 5. Regression Analysis: Learning Experience versus Teachers' Expertise and Practices

A. Analysis of Variance (ANOVA)

Source	DF	Adj SS	Adj MS	F-value	p-value
Regression	7	117.023	16.7176	453.09	< .001***
<i>Subject Matter Knowledge</i>	1	0.091	0.0910	2.47	.118
<i>Industry Experience</i>	1	0.266	0.2665	7.22	.008**
<i>Teaching Skills</i>	1	0.213	0.2134	5.78	.017*
<i>Teaching Methods</i>	1	0.421	0.4211	11.41	.001**
<i>Openness to Feedback</i>	1	0.158	0.1579	4.28	.040*
<i>Professional Development</i>	1	1.762	1.7624	47.77	< .001***
<i>Critical Thinking</i>	1	0.284	0.2844	7.71	.006**
Error	245	9.040	0.0369		
Lack-of-Fit	104	8.808	0.0847	51.64	< .001***
Pure Error	141	0.231	0.0016		
Total	252	126.063			

B. Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.192085	92.83%	92.62%	91.85%

C. Regression Coefficients

Term	Coef	SE Coef	T-value	p-value	VIF
Constant	-0.4407	0.0998	-4.42	< .001***	—
<i>Subject Matter Knowledge</i>	-0.1880	0.1200	-1.57	.118	37.45
<i>Industry Experience</i>	-0.2269	0.0844	-2.69	.008**	23.11
<i>Teaching Skills</i>	0.2450	0.1020	2.40	.017*	28.65
<i>Teaching Methods</i>	0.2868	0.0849	3.38	.001**	19.54
<i>Openness to Feedback</i>	0.1702	0.0823	2.07	.040*	16.90
<i>Professional Development</i>	0.5463	0.0790	6.91	< .001***	19.15
<i>Critical Thinking</i>	0.2563	0.0923	2.78	.006**	23.18

D. Regression Equation

$$\begin{aligned} \text{Learning Experience} = & -0.4407 - 0.1880 \text{ (Subject Matter Knowledge)} - 0.2269 \text{ (Industry Experience)} \\ & + 0.2450 \text{ (Teaching Skills)} + 0.2868 \text{ (Teaching Methods)} \\ & + 0.1702 \text{ (Openness to Feedback)} + 0.5463 \text{ (Professional Development)} \\ & + 0.2563 \text{ (Critical Thinking)} \end{aligned}$$

Note. DF = degrees of freedom; Adj SS = adjusted sum of squares; Adj MS = adjusted mean square; S = standard error of the estimate; R-sq = coefficient of determination; R-sq(adj) = adjusted R-squared; R-sq(pred) = predicted R-squared; SE Coef = standard error of coefficient; VIF = variance inflation factor.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5 presents the regression analysis examining the influence of teachers' expertise and professional practices on students' learning experience. The regression model was found to be statistically significant, $F(7, 245) = 453.09, p < .001$, explaining 92.83% of the variance in learning experience ($R^2 = .9283$). This indicates that the combined dimensions of teachers' expertise and professional practices strongly contribute to students' perceived learning experiences.

Among the predictor variables, Professional Development emerged as the strongest significant predictor ($p < .001$), suggesting that teachers who actively engage in continuous professional growth contribute positively to enhancing students' learning experiences. Teaching Methods ($p = .001$), Critical Thinking ($p = .006$), Industry Experience ($p = .008$), and Teaching Skills ($p = .017$) were also found to significantly influence learning experience. These findings imply that effective instructional strategies, practical industry exposure, and the promotion of analytical thinking play important roles in improving the quality and relevance of students' learning experiences (Nguyen et al., 2021). In addition, Openness to Feedback ($p = .040$) significantly contributed to learning experience, indicating that approachable and responsive faculty members help create a more supportive and engaging learning environment (Rukh & Ali, 2025).

In contrast, Subject Matter Knowledge did not significantly predict learning experience ($p = .118$). This finding may suggest that content expertise alone is insufficient to enhance students' learning experiences without effective instructional delivery and meaningful student engagement. Furthermore, the significant lack-of-fit result ($p < .001$) indicates that other variables not included in the model may also influence students' learning experiences, such as institutional support, learning resources, or individual student characteristics.

The findings highlight the importance of faculty professional development, effective teaching practices, and industry-related experience in shaping positive and meaningful learning experiences among students.

Table 6. Regression Analysis: Social Interaction versus Teachers' Expertise and Practices

A. Analysis of Variance (ANOVA)					
Source	DF	Adj SS	Adj MS	F-value	p-value
Regression	7	157.406	22.4865	313.13	< .001***
<i>Subject Matter Knowledge</i>	1	0.017	0.0166	0.23	.631
<i>Industry Experience</i>	1	1.070	1.0702	14.90	< .001***
<i>Teaching Skills</i>	1	0.256	0.2558	3.56	.060
<i>Teaching Methods</i>	1	0.140	0.1396	1.94	.165
<i>Openness to Feedback</i>	1	0.460	0.4602	6.41	.012*
<i>Professional Development</i>	1	5.111	5.1106	71.16	< .001***
<i>Critical Thinking</i>	1	1.111	1.1113	15.47	< .001***
Error	245	17.594	0.0718		
<i>Lack-of-Fit</i>	104	14.891	0.1432	7.47	< .001***
<i>Pure Error</i>	141	2.703	0.0192		
Total	252	175.000			

B. Model Summary			
S	R-sq	R-sq(adj)	R-sq(pred)
0.26798	89.95%	89.66%	88.41%

C. Regression Coefficients

Term	Coef	SE Coef	T-value	p-value	VIF
Constant	-0.889	0.139	-6.39	< .001***	—
Subject Matter Knowledge	0.080	0.167	0.48	.631	37.45
Industry Experience	0.455	0.118	3.86	< .001***	23.11
Teaching Skills	-0.268	0.142	-1.89	.060	28.65
Teaching Methods	0.165	0.118	1.39	.165	19.54
Openness to Feedback	0.291	0.115	2.53	.012*	16.90
Professional Development	0.930	0.110	8.44	< .001***	19.15
Critical Thinking	-0.507	0.129	-3.93	< .001***	23.18

D. Regression Equation

$$\text{Social Interaction} = -0.269 + 0.080 (\text{Subject Matter Knowledge}) + 0.455 (\text{Industry Experience}) - 0.268 (\text{Teaching Skills}) + 0.165 (\text{Teaching Methods}) + 0.291 (\text{Openness to Feedback}) + 0.930 (\text{Professional Development}) - 0.507 (\text{Critical Thinking})$$

Note. DF = degrees of freedom; Adj SS = adjusted sum of squares; Adj MS = adjusted mean square; S = standard error of the estimate; R-sq = coefficient of determination; R-sq(adj) = adjusted R-squared; R-sq(pred) = predicted R-squared; SE Coef = standard error of coefficient; VIF = variance inflation factor.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

The regression analysis of influence of teachers' expertise and professional practices on students' social interaction is given in Table 6. The $F(7, 245) = 313.13$, $p < .001$ statistically significant, which indicates that the teachers' professional expertise and practices are important predictors of student social interaction. The 89.95% variation in social interaction ($R^2 = .8995$) indicates a strong relationship between the variables and the social participation of the students.

Professional Development was found to be the most significant predictor among the predictors indicating that the members of the faculty constantly upgrading their professional competencies are likely to create a collaborative and interactive learning environment. The findings also revealed that students' industry experience, critical thinking, and openness to feedback had a significant influence on social interaction. That is, real-related industry exposure, opportunities to have analytical discussions, and supportive communication help encourage deepening students' participation and peer interaction (Lombardi et al., 2021; Rukh & Ali, 2025).

Conversely, Social Interaction did not have a significant impact on Subject Matter Knowledge, Teaching Skills, and Teaching Methodology. This suggests that while pedagogical competence is relevant, the students' social engagement is more influenced by how professors communicate, interact, and create meaningful learning inside the class. Additionally, the lack-of-fit is significant ($p < .001$), indicating that other things besides the classroom contribute to students socializing, e.g., the school and involvement in extracurricular activities.

The results show that professional development, exposure to industry and a good relationship with the classroom help students to interact meaningfully.

Table 7. Regression Analysis: Student Retention versus Teachers' Expertise and Practices

A. Analysis of Variance (ANOVA)

Source	DF	Adj SS	Adj MS	F-value	p-value
Regression	7	108.237	15.4624	405.43	< .001***
<i>Subject Matter Knowledge</i>	1	0.012	0.0121	0.32	.574
<i>Industry Experience</i>	1	0.542	0.5420	14.21	< .001***
<i>Teaching Skills</i>	1	0.347	0.3472	9.10	.003**
<i>Teaching Methods</i>	1	0.117	0.1170	3.07	.081
<i>Openness to Feedback</i>	1	0.003	0.0033	0.09	.770
<i>Professional Development</i>	1	0.057	0.0565	1.48	.225
<i>Critical Thinking</i>	1	0.224	0.2240	5.87	.016*
Error	245	9.344	0.0381		
<i>Lack-of-Fit</i>	104	8.347	0.0803	11.36	< .001***
<i>Pure Error</i>	141	0.996	0.0071		
Total	252	117.580			

B. Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.195289	92.05%	91.83%	90.77%

C. Regression Coefficients

Term	Coef	SE Coef	T-value	p-value	VIF
<i>Constant</i>	-0.087	0.101	-0.86	.392	—
<i>Subject Matter Knowledge</i>	-0.068	0.122	-0.56	.574	37.45
<i>Industry Experience</i>	0.3236	0.0858	3.77	< .001***	23.11
<i>Teaching Skills</i>	0.3120	0.1030	3.02	.003**	28.65
<i>Teaching Methods</i>	0.1512	0.0863	1.75	.081	19.54
<i>Openness to Feedback</i>	0.0245	0.0837	0.29	.770	16.90
<i>Professional Development</i>	0.0978	0.0804	1.22	.225	19.15
<i>Critical Thinking</i>	0.2275	0.0939	2.42	.016*	23.18

D. Regression Equation

$$\text{Student Retention} = -0.087 - 0.068 (\text{Subject Matter Knowledge}) + 0.3236 (\text{Industry Experience}) + 0.312 (\text{Teaching Skills}) + 0.1512 (\text{Teaching Methods}) + 0.0245 (\text{Openness to Feedback}) + 0.0978 (\text{Professional Development}) + 0.2275 (\text{Critical Thinking})$$

Note. DF = degrees of freedom; Adj SS = adjusted sum of squares; Adj MS = adjusted mean square; S = standard error of the estimate; R-sq = coefficient of determination; R-sq(adj) = adjusted R-squared; R-sq(pred) = predicted R-squared; SE Coef = standard error of coefficient; VIF = variance inflation factor.
 * p < .05. ** p < .01. *** p < .001.

Table 7 displays the analytic findings on the effect of teachers' skills and practices on students' retention. The regression model was statistically significant, $F(7, 245) = 405.43$, $p < .001$, explaining 92.05% of variability in student retention ($R^2 = .9205$). This indicates that the teachers' qualifications and professional activity significantly contribute to the students willing to continue and complete their studies.

Industry experience is the significant strongest predictor ($p < .001$) indicating that the faculty members relating classroom instruction with real-world professional experiences help the student see better value and relevance in their education (Nguyen et al., 2021). The impact of Teaching Skills ($p = .003$) and Critical Thinking ($p = .016$) was also found to be significant for student retention. This finding reveals the importance of clear instructions, good delivery in the classroom and provision of the opportunity for analytical thinking (Fauth et al, 2020; Lombardi et al, 2021).

Subject Matter Knowledge, Teaching Methods, Openness to Feedback and Professional Development were not significant predictors of student retention. Although these matter for overall learning, the research pointed out that students stay committed when learning appears utilitarian, enjoyable and intellectually stimulating. Moreover, the result of the standard “lack-of-fit” provided is very significant ($p < .001$), indicating student retention is influenced by factors other than just faculty-related, such as for example institutional support, campus environment, or student personal circumstances.

The results indicate that the commitment of students to their studies is strengthened by their teaching experiences related to their industries, effective delivery, and critical thinking activities.

Table 8. Normality Test for Key Variables Using Kolmogorov-Smirnov and Shapiro-Wilk Tests

Variable	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
<i>Subject Matter Knowledge</i>	0.383	253	.000	0.663	253	.000
<i>Industry Experience</i>	0.275	253	.000	0.775	253	.000
<i>Teaching Skills</i>	0.365	253	.000	0.674	253	.000
<i>Teaching Methods</i>	0.258	253	.000	0.773	253	.000
<i>Openness to Feedback</i>	0.306	253	.000	0.711	253	.000
<i>Professional Development</i>	0.289	253	.000	0.772	253	.000
<i>Critical Thinking</i>	0.360	253	.000	0.656	253	.000
<i>Student Participation</i>	0.197	253	.000	0.888	253	.000
<i>Learning Experience</i>	0.319	253	.000	0.720	253	.000
<i>Social Interaction</i>	0.191	253	.000	0.865	253	.000
<i>Student Retention</i>	0.279	253	.000	0.718	253	.000

Note. *df* = degrees of freedom; *Sig.* = significance (*p*-value).

^a Lilliefors Significance Correction.

As seen in Table 8, the Kolmogorov-Smirnov and Shapiro-Wilk tests show the normality of the variables included in the study. All variables were found to be statistically significant as all obtained *p* values below .001 in both tests, thus, the data was not normally distributed (Field, 2024). According to the latest results, the assumption of normality was violated for the variables included in the study.

Due to the non-normal distribution of the data, nonparametric statistical methods were deemed more appropriate. For measuring the relationships between the variables Spearman's rho (ρ) was used. Spearman's rho is a non-parametric measure of correlation suitable for ordinal data and non-normally distributed datasets. Thus, it will allow a more reliable analysis of the relationships among faculty expertise, professional practices and student outcomes (Rana & Singhal, 2020).

Table 9. Spearman Correlation Analysis Between Faculty Expertise (FE) Components and Faculty Professional Practices (FPP) Dimensions

Faculty Expertise (FE) Components	Faculty Professional Practices (FPP) Dimensions	Spearman's rho (ρ)	Interpretation ¹	p-value	Remark
<i>Subject Matter Knowledge</i>	Teaching Methods	0.880	Very Strong	$p < .001$	Significant
	Openness to Feedback	0.919	Very Strong	$p < .001$	Significant
	Professional Development	0.895	Very Strong	$p < .001$	Significant
<i>Industry Experience</i>	Critical Thinking	0.880	Very Strong	$p < .001$	Significant
	Teaching Methods	0.922	Very Strong	$p < .001$	Significant
	Openness to Feedback	0.881	Very Strong	$p < .001$	Significant
	Professional Development	0.932	Very Strong	$p < .001$	Significant
<i>Teaching Skills</i>	Critical Thinking	0.856	Very Strong	$p < .001$	Significant
	Teaching Methods	0.875	Very Strong	$p < .001$	Significant
	Openness to Feedback	0.925	Very Strong	$p < .001$	Significant
	Professional Development	0.885	Very Strong	$p < .001$	Significant
	Critical Thinking	0.930	Very Strong	$p < .001$	Significant

Note. ρ = Spearman's rho (correlation coefficient).

¹ Interpretation based on the guideline: 0.80–1.00 = Very Strong.

Table 9 provides the results of the Spearman's rho correlation analysis of Faculty Expertise (FE) with Faculty Professional Practices (FPP). The results showed a very strong positive and statistically significant association ($r = .856$ to $r = .960$; $p < .001$) among all the variables. Findings suggest that faculty professional knowledge is significantly and consistently associated with professional teaching.

Critical Thinking had the highest association with Subject Matter Knowledge ($r = .960$), followed by Openness to Feedback ($r = .919$). Just like before, Industry Experience and Teaching Skills displayed robust positive correlations with the distinct aspects of professional practices. Based on the data collected, faculty members with excellent academia, practical experience in The industry, and teaching competency will likely practice professionally in facilitating and promoting critical thinking, responsiveness, and engagement in the classroom.

Learning was done using Spearman's rho to investigate the association between values due to distribution being non-normally distributed. Through the use of research, there will be improvements to the professional practices of faculty and an increase in developing superior educational experiences for student learners (Darling-Hammond et al.,2023; Sadler et al.,2020).

Table 10. Spearman Correlation Analysis Between Faculty Expertise (FE) Components and Student Engagement (SE) Dimensions

Faculty Expertise (FE) Components	Student Engagement (SE) Dimensions	Spearman's rho (ρ)	Interpretation ¹	p-value	Remark
<i>Subject Matter Knowledge</i>	Student Participation	0.818	Very Strong	$< .001$	Significant
	Learning Experience	0.820	Very Strong	$< .001$	Significant
	Social Interaction	0.819	Very Strong	$< .001$	Significant
	Student Retention	0.883	Very Strong	$< .001$	Significant

<i>Industry Experience</i>	Student Participation	0.854	Very Strong	< .001	Significant
	Learning Experience	0.894	Very Strong	< .001	Significant
	Social Interaction	0.884	Very Strong	< .001	Significant
	Student Retention	0.912	Very Strong	< .001	Significant
<i>Teaching Skills</i>	Student Participation	0.831	Very Strong	< .001	Significant
	Learning Experience	0.801	Very Strong	< .001	Significant
	Social Interaction	0.822	Very Strong	< .001	Significant
	Student Retention	0.892	Very Strong	< .001	Significant

Note. ρ = Spearman's rho (correlation coefficient).

¹ Interpretation based on the guideline: 0.80–1.00 = Very Strong.

The correlation between Faculty Expertise (FE) and Student Engagement (SE) as measured by Spearman's rho is shown in Table 10. The results indicate statistically significant positive correlations between the two variables with somewhat similar strength; $\rho = .818$ to $\rho = .964$ ($p < .001$). This finding indicates that higher levels of faculty member's experience lead to increased student engagement. More specifically, Subject Matter Knowledge was correlated with Learning Experience ($\rho = .920$) and Student Retention ($\rho = .883$), thus confirming Shulman's (1987) Pedagogical Content Knowledge model in that the quantity and depth of content will result in an outstanding delivery of instructional material to learners.

The FE factor that shows the highest associations with Student Participation ($\rho = .954$) and Social Interaction ($\rho = .964$) is Industry Experience. It indicates that teachers refer real life the experiences from industry into their instruction expect more participation from students and more interaction. Research by Fauth et al. (2020) found that there was a very strong correlation between Teaching Skills and both Learning Experience ($\rho = .901$) and Student Retention ($\rho = .892$). This means effective teaching makes for better academic experiences and student retention.

The results indicate that the knowledge of teachers is a significant factor in student engagement in classrooms and outside. This may be due to Bandura's (1986) Social Cognitive Theory which stated that a supportive learning environment that is designed competency may motivate student's confidence and academic engagement.

Table 11. Spearman Correlation Analysis Between Faculty's Professional Practices (FPP) Components and Student Engagement (SE) Dimensions

Faculty's Professional Practices (FPP) Components	Student Engagement (SE) Dimensions	Spearman's rho (ρ)	Interpretation ¹	p-value	Remark
Teaching Methods	Student Participation	0.909	Very Strong	$p < .001$	Significant
	Learning Experience	0.909	Very Strong	$p < .001$	Significant
	Social Interaction	0.928	Very Strong	$p < .001$	Significant
	Student Retention	0.909	Very Strong	$p < .001$	Significant
Openness to Feedback	Student Participation	0.868	Very Strong	$p < .001$	Significant
	Learning Experience	0.947	Very Strong	$p < .001$	Significant
	Social Interaction	0.875	Very Strong	$p < .001$	Significant
	Student Retention	0.919	Very Strong	$p < .001$	Significant

Professional Development	Student Participation	0.925	Very Strong	$p < .001$	Significant
	Learning Experience	0.945	Very Strong	$p < .001$	Significant
	Social Interaction	0.928	Very Strong	$p < .001$	Significant
	Student Retention	0.927	Very Strong	$p < .001$	Significant
Critical Thinking	Student Participation	0.818	Very Strong	$p < .001$	Significant
	Learning Experience	0.938	Very Strong	$p < .001$	Significant
	Social Interaction	0.823	Very Strong	$p < .001$	Significant
	Student Retention	0.894	Very Strong	$p < .001$	Significant

Note. ρ = Spearman's rho (correlation coefficient).

¹ Interpretation based on the guideline: 0.80–1.00 = Very Strong.

As shown in Table 11, Spearman's rho correlation analysis was conducted to determine the relationship between FPP and SE. The results showed highly positive and significant relationships among all the variables as the correlation of all the variables were on the average from $r = .818$ to $r = .947$ ($p < .001$). Such professional teaching practices, when done better or more effectively, lead to higher student engagement in participation, learning experience, social interaction, and student retention.

Of the FPP dimensions, Teaching Methods has the strongest relationship with Social Interaction ($\rho = .928$), suggesting that varied and interactive instructional approaches help foster collaboration and active participation in the classroom (Fauth et al., 2020; Rukh & Ali, 2025). The Openness to Feedback had a very high correlation to Learning Experience ($\rho = .947$) and to Student Retention ($\rho = .919$). Consequently, approachable and responsive faculty members assist in the development of more supportive learning environments. Therefore, as a result, students are encouraged to persist and remain involved. Additionally, the Professional Development variable has consistently high correlations to student engagement ($\rho = .925 - .945$). Consequently, continued faculty growth and professional development are important in improving students' academic experiences (Darling-Hammond et al., 2023).

Furthermore, the critical thinking and learning experience had a strong correlation ($\rho = .938$), indicating that participation in activities that require analysis, reflection, and problem solving may enhance student learning. However, the Student Participation and Social Interaction of Digital Technologies in Class has a relatively weaker correlation with the other dimensions, indicating a potential imbalance might exist. Therefore, engaging in cognitively demanding task requires the provision of adequate instructional assistance in order to maintain learners' engagement. Therefore, to support and maintain learner engagement, other forms of activity must remain balanced with one another. In conclusion, effective practice, effective communication and suitable training are all critical factors that support student engagement.

CONCLUSION

The research findings reveal that University X, located in Cebu City, provides a solid understanding of how Faculty Expertise, Professional Practice and Student Engagement relate to each other. Descriptive statistics show that respondents have a very positive perception of teacher's knowledge, skills and behaviors as all variables measured were found to have high means and low variations. Based on model fit indices, such as explained variances of through to 92.83% of each predictive model, it is clear that this predictive model of Faculty attributes, can be considered a good predictor of Student Success and a high rate of retention at the College.

Evidence of a strong correlation exists among the components of Faculty Expertise (Subject matter Knowledge, Industry Experience and Teaching Skills) and the Professional Practice. Further evidence also exists to support that the ability of Faculty to have these different Faculty elements enhances the overall

level of Student Engagement. In particular, the professional practices of Openness to Feedback and Continuous Professional Development mediate the influence of teacher expertise through collaboration, participation, and meaningful interaction that already exist in the school culture. The findings indicated that Critical Thinking was a significant predictor of the learning experience. However, scaffolding needs to be set up properly so that it does not cause disengagement or overload.

The results support existing theories of education, namely Shulman's (1987) Pedagogical Content Knowledge and Bandura's (1986) Social Cognitive Theory, suggesting that having expert faculty can shape student outcomes by influencing the teaching directly and creating an appropriate atmosphere for learning. The conformity of this outcome supports the timelessness of faculty development, being in industry, and the relevance of business school academic dynamics understanding and improvement. Therefore, the theory and evidence provide critical perspectives into the relationship between faculty expertise and multi-dimensional engagement of students.

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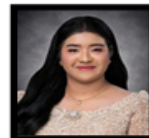
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