



Organizational Systems Thinking and Professional Learning Community of Faculty Members of a Public Higher Education Institution in Region 02

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ABSTRACT

This study determined the levels of organizational systems thinking (OST) and professional learning community (PLC) among faculty members. Specifically, it examined the profile of the respondents, their levels of organizational systems thinking and professional learning community.

The researcher utilized mixed research design and the study was conducted at a public higher education institution in Region 02, Philippines. There were two hundred and ten (210) respondents of this study who were regular faculty members of and have served five or more years in the university. The study used random-proportional sampling. For the qualitative part of the study, Campus Executive Officers (CEOs) and college deans were the study participants.

Descriptive statistics (frequency count, rank, percentage, and mean) was used to analyze the respondents' profile and their level of OST and PLC. Likewise, analysis of variance was used in examining the differences of OST and PLC. All analyses were tested at 0.05 level of significance using IBM SPSS. For the qualitative part, sequential explanatory design was utilized to analyze the factors explaining the quantitative result of the study through interview with the CEOs and select deans of different colleges in the campuses.

This study found out that the OST of the respondents is very high as they see the elements of the entire university as a holistic system rather than isolated parts. The PLC of the respondents is high as they work collaboratively to achieve better results for the students that they serve. It was found out that the OST of the respondents is the same across campuses of the university. Likewise, the PLC of the respondents do not differ irrespective of their campus assignment. Analysis of this study also showed the respondents' age, sex, academic rank, highest educational attainment, and length of service are not associated with their level of OST and PLC.

Keywords: Professional Learning Community, Organizational Systems Thinking, Higher Education

INTRODUCTION

Building learning communities requires a shift from the paradigm of schools as bureaucracies to a vision of schools as communities. Faculty members in learning community work in teams by reflecting and sharing their professional practices. As educators collaboratively engage in conversation about teaching and learning, they gain new knowledge and discover original ways to resolve instructional issues. In the process, they develop a shared vision for their organization and strengthen their ability to achieve it.

The organizational culture sets the Organizational Systems Thinking (OST) and the Professional Learning Community (PLC) of its employees. These two theoretical models help in determining the level of growth and/or development of an organization. OST is a discipline for seeing wholes or interrelationship of things that shows patterns of change rather than static snapshots.

Also, it is a holistic approach that focuses on the way that a system's constituent parts interrelate and how systems work overtime and within the context of larger systems (Aronson, 1996). The value of OST in organizational development is seen in its contribution to problem identification and context assessment when designing programs. It can also be used at the operational level to essentially create the improvements needed in the entire organization.

One of the mechanisms to strengthen OST is the PLC. In the academic sector, the concept of PLC has been modified from the learning organization concept used in the business sector (Vescio et al., 2008; Antinluoma et al., 2018) and in organizational theory (Leclerc, Martin; Moreau, Andre; Dumouchel & Francois, 2012), starting from concepts of collegiality and collaboration that finally developed into PLC (Lomos et al., 2011; Antinluoma et al., 2018). Through PLC, educators engage in collaborative learning where everyone sees oneself as an integral part of an overall welfare thus, encouraging each other to contribute to improved organizational performance and development. In the recent past, the concept of PLC has gained increasing attention in the

English-speaking world as a promising model and strategy to improve teaching quality and student learning outcomes (Stoll et al., 2006; Hord, 1997; Hord, 1997)

Any attempt at creating a professional learning community (PLC) must start from organizational systems thinking (OST) (Appelbaum et al., 2015; Senge, 1990, Bui & Baruch, 2010). This means that OST is an antecedent to PLC (Bui & Baruch, 2010). Senge (1990), claimed that OST is the cornerstone of PLC because it integrates how systems work over time.

In the educational setting, school officials are in a right track in developing PLCs if and only if they follow the wisdom of OST (Wells, Caryn; Keane, 2008). This is because OST requires within and between teams, the creation of a shared values and vision, as teams are the core learning units in an organization (Mulder, 2018).

Similarly, through PLC, teachers create a space where they can engage in useful conversations to help them perform well in their functions inside and outside their classrooms (Capili-Balbalin, 2017). Interestingly, the dimensions of PLC that help in organizational performance include, a) supportive and shared leadership; b) shared vision and mission; c) collegial trust; d) shared practices. Congruently, these factors are essential to the organization's formation and sustainability of PLCs (Pang & Wang, 2016).

Most of the studies are similar with the current study as they used the same instruments of OST and PLC. Majority of the respondents in OST studies were medical students and practitioners. Very few studies on OST was situated in the educational sector. As a matter of fact, the studies on OST are generally conducted in industries. Notably, OST was popularly used in Western and Arab countries and very few in the Asian and African countries.

On the other hand, the use of PLC as a construct was generally done in the academe. However, most of them are in the elementary and secondary education. There were little studies using PLC in higher education institutions. Interestingly, the PLC as a western construct was rarely used in non-western countries. This is attributed to the fact that it began in USA.

Lastly, the relationship of profile variables to OST and PLC was not very well explored by previous studies. Most of the variables they used were on sex and age but not on highest educational attainment, academic rank and years of service which were included in the study.

This study has been conceptualized to examine the levels of organizational systems thinking and professional learning community of the faculty members of a public higher education institution. This is with the hope to determine important points that the said institution has missed in adhering with the mandates of the government for a better service to their clientele. Significantly, the study's findings will be a foothold to improve its organizational outcomes and contribute to regional and national development.

Considering the arguments above, the general objective of this study is to determine the levels of organizational systems thinking and professional learning community among faculty members and their relationship to the organizational performance of Cagayan State University (CSU). The following research questions were addressed:

1. What is the profile of the respondents in terms of the following:
 - a. Sex
 - b. Age
 - c. Highest Educational Attainment
 - d. Length of Service
 - e. Academic Rank
2. What is the level of organizational systems thinking of the respondents as revealed by the Systems Thinking Scale (STS)?
3. What is the level of professional learning community of the respondents as revealed by the Professional Learning Community Assessment Questionnaire (PLCA)?
4. Is there a significant relationship between the respondents' profile and the following variables?
 - a. Level of organizational systems thinking; and
 - b. Level of professional learning community.

METHODS

Research Design

A mixed research design was utilized to answer the objectives of the study. "The mixed-methods sequential explanatory design consists of two distinct phases: quantitative followed by qualitative" (Ivankova et al., 2006). In this design, the quantitative data is collected and analyzed first. Then the qualitative data are collected and analyzed to help explain, or elaborate on, the quantitative results obtained in the first phase. "The second, qualitative, phase builds on the first, quantitative, phase, and the two phases are connected in the intermediate stage in the study" (Ivankova, et, al, 2006).

The quantitative part constitutes the descriptive and inferential analysis of this study. The descriptive part examined the levels of organizational systems thinking and professional learning community of the faculty

members. On the other hand, the associational part of the study investigated the differences and relationship of the levels of OST and PLC.

The qualitative part utilized sequential explanatory design as the researcher uncovered the factors explaining the result of the study. This was done through interview with the Campus Executive Officers and select deans of different colleges in the campuses.

Respondents/Participants and Sampling Procedures

The respondents of this study were the regular faculty members of one of the public Higher Education Institution (HEI) in Region 02, who have rendered five (5) years or more services to the university. The five-year inclusion criterion is to ensure that they have more or less been exposed to the university especially in its operations and other professional development undertakings. There were 210 sample respondents in this study. The respondents were selected using stratified random sampling. For the study participants, there were eight (8) Campus Executive Officers and seven (7) college deans who answered the structured questionnaire.

Research Instruments

Three instruments were used in the study. In measuring the organizational systems thinking skill, the Systems Thinking Scale (STS) developed by Moore, et al. (2010) was utilized. The STS is a 20-item questionnaire which is useful for assessing not only the level of current organizational functioning, but also the general direction (better or worse) of the company's functioning. Items 1-20 of the questionnaire seeks to elicit the agreement or disagreement of the respondents from 1, disagree to 5, strongly agree.

Developers, Moore, Dolansky, Singh, Palmieri and Alemi conducted several tests for the Reliability and validity of Systems Thinking Scale (STS). Test-retest reliability assessment (n=36) showed a correlation of 0.74; internal consistency testing (n=342). Using Cronbach's Alpha, it has a coefficient of 0.89. While discriminate validity was tested with 3 groups of healthcare professions students (n=102) who received high, low or no dose levels of systems thinking education related to process improvement (Dolansky et al., 2020).

In measuring the Professional Learning Community (PLC), the Professional Learning Community Assessment – Revised (PLCA-Revised) developed by Olivier, et.al. (2010) was utilized. The PLCA-R assesses six dimensions of PLCs which are: shared and supportive leadership; shared values and vision; collective learning and application; shared personal practice; supportive condition – relationships; and supportive condition – structures. This instrument has 52 items of which faculty members were asked to respond to each item using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). It can be administered on multiple occasions to track PLC development and progress over time. Some of the texts from the original PLCA-R questionnaire were contextualized to suit to the experiences and environment of the respondents. For instance, all the “staff” texts of the original PLCA-R copy were changed to “faculty” with the permission of the authors.

The internal consistency of PLCA-R was measured using Cronbach's alpha when the questionnaire was piloted in using 1,209 respondents by the developers (Blitz & Schulman, 2016). Further, the reliability of the total score in the questionnaire was found to be acceptable (.97). Reliability coefficients were also measured for each factored subscale as follows: Shared and Supportive Leadership (.94), Shared Values and Vision (.92), Collective Learning and Application (.91), Shared Personal Practice (.87), Supportive Conditions-Relationships (.82), Supportive Conditions-Structures (.88) (Blitz & Schulman, 2016).

Finally, a structured questionnaire was crafted to be answered by the Campus Executive Officers together with the select deans. This questionnaire elicited the factors and explanations of the quantitative data.

Data Gathering Procedures

The researcher requested permission from the HEI's University President to conduct the study. Thereafter, letter of permission was forwarded to the Campus Executive Officers (CEOs) seeking for the approval to float the questionnaires to the faculty members. The faculty roster of the campus was used to randomly sample the faculty members to be the respondents of the study. The researcher administered the questionnaires through google form. The form also elicited the respondents' free and prior informed consent before proceeding to the questionnaire. Even though surveys were conducted online, guides and instructions were given to campus representatives on the proper handling of the questions being distributed.

For the qualitative part, the structured questionnaire was forwarded to the CEOs and deans of the different colleges. The study participants were interviewed either personally, through google meet and through Facebook messenger.

Statistical Tools and Treatment

Descriptive statistics such as frequency, percentage and mean, were used to analyze the levels of organizational systems thinking and professional learning community. The test of relationships was examined using Pearson Product Moment Correlation. Lastly, the qualitative data were used in strengthening the findings derived from

the quantitative data. The best and appropriate answers or explanations were drawn to support the quantitative analysis.

Table 2 shows the scale and description used to analyze the levels of OST and PLC.

Table 2: Scoring Range of 5-Point Likert Scale of the Survey

Value	Response	Range	Interpretation for OST and PLC
1	Strongly Disagree	1.00 – 1.79	Very Low
2	Disagree	1.80 – 2.59	Low
3	Neither Agree or Disagree	2.60 – 3.39	Moderate
4	Agree	3.40 – 4.19	High
5	Strongly Agree	4.20 – 5.00	Very High

FINDINGS

Profile of the Respondents

Table 3 illustrates the profile of the respondents. With respect to sex, female (124 or 59%) respondents constitutes a greater proportion than male (86 or 41%). As to highest educational attainment, majority of the respondents are holders of masteral degree (106 or 50.5%), followed by doctoral degree (92 or 43.8%) and bachelor's degree (12 or 5.7%). With regard to age group, most of the respondents have an age ranging from 40-49 (68 or 32.4%), followed by 30-39 (62 or 29.5%). As regards length of service, majority of the respondents have served the institution for 5-9 years (103 or 49%) followed by 10-15 years (49 or 23.3%). Finally, with respect to academic rank, majority of the respondents are holders of Instructor Position (104 or 49%) followed by Assistant Professor (51 or 24.3%).

Table 3: Profile of the respondents

Category	Frequency (n = 210)	Percent (%)
Sex		
Male	86	41.0
Female	124	59.0
Age		
20 – 29	45	21.4
30 – 39	62	29.5
40 – 49	68	32.4
50 & above	35	16.7
Highest Educational Attainment		
BS/AB	12	5.7
MA/MS	106	50.5
PhD/EdD/DPA	92	43.8
Academic Rank		
Instructor 1	88	41.9
Instructor 2	5	2.4
Instructor 3	10	4.8
Assistant Professor 1	12	5.7
Assistant Professor 2	9	4.3
Assistant Professor 3	10	4.8
Assistant Professor 4	20	9.5
Associate Professor 1	10	4.8
Associate Professor 2	9	4.3
Associate Professor 3	11	5.2
Associate Professor 4	8	3.8
Associate Professor 5	12	5.7
Professor 1	3	1.4
Professor 2	1	.5
Professor 3	2	1.0

Years of Service in the Institution		
5 – 10	103	49.0
11 – 15	49	23.3
16 – 20	11	5.2
21 – 25	22	10.5
26 & more	25	11.9

Level of Organizational Systems Thinking of the Respondents

Table 4 shows that the level of organizational systems thinking of the respondents is very high ($\bar{x}=4.27$). The very high OST of the respondents indicate that they have holistic perspective about organizational change, and they see interrelationships of various offices, and events as agent of change rather than static and isolated snapshots. In short, the respondents understand that they cannot just do one thing, but everything is connected to everything else. Such very high OST is articulated by one of the Campus Executive Officers (CEOs) in this statement: The OST is high in the university because decision is a consensus of Executive Committee (ExeCom) and Management Committee (ManCom). All the heads of offices/sections are allowed to present their proposals and recommendations, needs and issues as well as their outputs. This is where the CEO draws decisions in prioritizing projects to be implemented. In turn, it is also presented in the University ExeCom/ManCom and academic councils and meetings for approval of the president and to the Board of Regents (CEO -1).

The finding is similar to Ateskan & Lane's(2018) study which revealed a very high result. On the other hand, the study's result is contrary to Shukla's(2018) finding on modeling systems thinking in action among higher education leaders. Her respondents were found practicing systems thinking but not in the highest level unlike in the present study.

The statement that obtained the highest mean ($\bar{x}=4.46$) is "I consider the relationships among co-workers in the work unit". This finding implies that the faculty members see the relationship among their co-workers as a primary consideration in shaping the behavior of the whole university. A good relationship among co-workers creates teamwork and productivity in the organization.

Conversely, the statement that obtained the lowest mean ($\bar{x}=3.99$) but still with a descriptive value of high is "I seek everyone's view of the situation". This finding implies that faculty members respect the views of various people in the organization and that everyone's view matters especially when deciding on crucial issues in the university. According to one College Dean "We have established the practice in the college that important matters have to be discussed in consensus. When I am not confident in doing something or when the faculty members feel that they need assistance, they would always seek the help of their colleagues. We give primary importance to collegial decisions rather than personal agenda in our college (CD-3).

Table 4: Organizational systems thinking of the Respondents

Statements	Mean (\bar{x})	Interpretation
1. I seek everyone's view of the situation.	3.99	High
2. I look beyond a specific event to determine the cause of the problem.	4.28	Very High
3. I think understanding how the chain of events occur is crucial.	4.27	Very High
4. I include people in my work unit to find a solution.	4.35	Very High
5. I think recurring patterns are more important than any one specific event.	4.09	High
6. I think of the problem at hand as a series of connected issues.	4.19	High
7. I consider the cause and effect that is occurring in a situation.	4.35	Very High
8. I consider the relationships among co-workers in the work unit.	4.46	Very High
9. I think that systems are constantly changing.	4.26	Very High
10. I propose solutions that affect the work environment, not specific individuals.	4.21	Very High
11. I keep in mind that proposed changes can affect the whole system.	4.30	Very High
12. I think more than one or two people are needed to have success.	4.31	Very High
13. I keep the mission and purpose of the organization in mind.	4.41	Very High
14. I think small changes can produce important results.	4.43	Very High
15. I consider how multiple changes affect each other.	4.43	Very High
16. I think about how different employees might be affected by the improvement.	4.35	Very High
17. I try strategies that do not rely on people's memory.	4.12	High

18. I recognize system problems are influenced by past events.	4.16	High
19. I consider the past history and culture of the work unit.	4.14	High
20. I consider that the same action can have different effects over time, depending on the state of the system.	4.26	Very High
Overall Weighted Mean	4.27	Very High

Level of Professional Learning Community of the Respondents along Supportive Leadership

Table 5 shows that the respondents' PLC along shared and supportive leadership is high ($\bar{x}=4.14$). This means that shared and supportive leadership in CSU is seen as part of the collaborative work. With the presence of collaborative work, it may suggest that there is interaction between and among leaders and faculty members of the university in pursuit for an improvement in the organization. This may be attributed to the conduct of academic council meeting from college to university which provides opportunity for the faculty members and university officials to discuss essential and critical issues, as well as organizational goals. The shared governance through the academic council is one great platform for the university management to make the faculty members own the policies that are approved during the council meeting. As one CEO mentioned: "The academic council meeting is one good practice of the university to involve the faculty members in key decision making. We have three levels of academic council and the engagement of the faculty members in these meetings become their avenue to ventilate their problems, issues and concerns as well as in criticisms to policies adopted in the university."(CEO-3). The high PLC on shared and supportive leadership supports the finding of Stewart & Dillard, (2017) that teachers who have a concept on shared leadership fosters a multitude of interactions that build capacity for change particularly because these changes promote increased student learning".

The result of this study is similar to that of Carter & McCann (2017); Al-Mahdy & Sywelem, (2016). In their study, supportive leadership was rated high by their respondents.

The statement with the highest mean ($x=4.27$) is "The dean is proactive and addresses areas where support is needed". This finding means that faculty members believed that the dean, who basically managed them, directly listens to them, and utilizes the data sources in making instructional decisions which supports their needs. The yearly submission of Office Performance Commitment Report (OPCR) as well as targeting and monitoring of the performance of the different offices make the deans to plan ahead and conduct catch up plan to address deviations in realizing the targets. In the words a college dean: We are required to submit OPCR that contains our targets for each year. With this report, we tend to be proactive and address the requirements for quality assurance. Before finalizing the report, I present it before the faculty members. It is during the presentation that their support along instruction, research, extension and production is obtained." (CD-5)

The statement with lowest weighted mean of 3.96 but still with a descriptive value of high is "Faculty members have accessibility to key information". Such finding implies that faculty members are given the opportunity to avail of the information they need. It also suggests that the university observes transparency in its governance. For example, faculty members can readily obtain key information from various middle and top-level officials when they conduct research and accreditation. This situation is well elucidated by one college dean in this statement: "The university observes transparency in terms of its documents. All employees are free to come to different offices to obtain the data they need for their research and accreditation. While we observe transparency, we nonetheless require them to observe data privacy." - (CD-1).

Table 5: Professional Learning Community of the Respondents along Shared and Supportive Leadership

Statements	Mean (\bar{x})	Interpretation
Shared and Supportive Leadership		
1. Faculty members are consistently involved in discussing and making decisions about most school issues.	3.98	High
2. The dean incorporates advice from faculty members to make decisions.	4.24	Very High
3. Faculty members have accessibility to key information.	3.96	High
4. The dean is proactive and addresses areas where support is needed.	4.27	Very High
5. Opportunities are provided for faculty members to initiate change.	4.11	High
6. The dean shares responsibility and rewards for innovative actions.	4.19	High
7. The dean participates democratically with faculty members sharing power and authority.	4.25	Very High
8. Leadership is promoted and nurtured among the faculty members.	4.16	High
9. Decision-making takes place through committees and communication across grade and subject areas.	4.19	High

10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.	3.98	High
11. Faculty members are multiple sources of data to make decisions about teaching and learning.	4.25	Very High
Category Mean	4.14	High

Level of Professional Learning Community of the Respondents along Shared Values and Vision

Table 6 reveals that the PLC shared values and vision of the respondents is very high ($\bar{x} = 4.20$). The very high result on shared values and visions depicts how faculty members value each other as they work together for a common goal. When asked about the reason for the very high shared values and vision of the respondents, one CEO has this to say: “The shared values and vision among faculty members is high because the middle level management discuss it with them. In fact, we conduct orientation program whenever there’s a change in vision, goals, and core values of the university as this is required during AACUP accreditation. But personally, I think faculty members have shared values and vision because they see themselves united. Irrespective of changes in CSU presidency, they need to work for the good of the university. Their loyalty is not on who sits as the president but for the institution which they consider as their “bread and butter”- (CD-4).

The result of the study is in congruent with the study of Al-Mahdy & Sywelem (2016) who stated that “having shared vision enables individuals to work productively as a group toward a common goal”. Further, the result of this study is also analogous to the observations of Hord and Sommers (2008, as cited by Teague, 2012) who posited that “values and beliefs guide the behavior of individuals no matter where they work or in what endeavor”.

Among the statements along shared values and vision, the statement that incurred the highest weighted mean ($\bar{x}=4.32$) is “Policies and programs are aligned to the school’s vision”. This data suggests that there is constructive alignment between the vision and the policies and programs of the university. Such is reflected in the organizational performance set by the university relative to the SUC levelling and PBB. The various programs, activities and projects of the university as congruent with the state of life that it intends to achieve. The constructive alignment between these concerns are always examined during the conduct of strategic planning. The targets of the university in its four-fold functions are always attuned to its vision. In relation to this explanation, a CEO expressed these thoughts: “I think it is very basic in all organizations to see that its programs, projects and policies are attuned with its vision. In the case of CSU, the alignment of these things is framed during the crafting of Strategic Plan. It is this document that ensures that all activities of students, faculty members, and university officials are contributory to the realization of the vision set by management. As practiced, the making of the university vision is top-bottom and bottom-top. In effect, there is guarantee that everyone in the university provides quality and responsive education. – (CEO-6). This finding is similar to Teague's (2012) result in which the high regard of the respondents in this statement indicates adherence to the school’s value statements which is to deliver quality and excellent services to its clientele. Accordingly, the school improvement is being ensured when school’s value statements outline what the community members are committed (Ciurysek et al., 2012 as mentioned by Al-Mahdy & Sywelem, 2016b).

The lowest rated statement with weighted mean at 4.08 but still with high descriptive value is “Data are used to prioritize actions to reach a shared vision”. This finding suggests that decisions and actions in the university are data-driven and research generated. It also means that prioritization of actions is conducted such that the most essential ones are given focus. In narrative of one CEO, he said: “For the shared vision of the university to be realized, the university officials always consider relevant, complete, and timely data. For example, I remember the president in one ManCom meeting wherein she held in abeyance the decision for one agenda item because she wants a complete data before giving her action on the matter. I recalled her saying that she can always stand on an action she takes for as long as her decision is backed up with data.” – (CEO 5)

Table 6: Professional Learning Community of the Respondents along Shared Values and Vision

Statement	Mean (\bar{x})	Interpretation
Shared Values and Vision		
1. A collaborative process exists for developing a shared sense of values among faculty members.	4.19	High
2. Shared values support norms of behavior that guide decisions about teaching and learning.	4.24	Very High
3. Faculty members share visions for school improvement that have an undeviating focus on student learning.	4.17	High
4. Decisions are made in alignment with the school’s values and vision.	4.31	Very High
5. A collaborative process exists for developing a shared vision	4.22	Very High

among faculty members.		
6. School goals focus on student learning beyond test scores and grades.	4.17	High
7. Policies and programs are aligned to the school's vision.	4.32	Very High
8. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.	4.11	High
9. Data are used to prioritize actions to reach a shared vision.	4.08	High
Category Mean	4.20	Very High

Level of Professional Learning Community of the Respondents along Collective Learning and Application

Table 7 shows the assessment of the respondents along collective learning and application. It reveals that collective learning and application among the faculty members is high with a mean of 4.17. This result denotes that there is a process of continuous learning and collaboration within the community of educators in CSU. It also implies that capacity for dialogue among the faculty members is fostered as a way of seeking new knowledge and apply the learning to solutions that address students' needs. This is evident in the different outputs of the faculty members that high quality education is being served to their clientele like high board exam ratings, and numerous awards and commendations in research and wide implementation of extension services. The high collective learning and application of the respondents is explained by a college dean in this fashion: "Collective learning is evident among faculty members of the university because we give them various opportunities to do this. For instance, the making of course syllabi is a collective undertaking of faculty members who teach the same specialization. Instructional materials such as modules and books are also encouraged to be written through collaboration. This is on top of the fact that many researches are now conducted collaboratively by faculty members that they are interdisciplinary in nature." – (CD-3)

Result of this study is comparable to the study of Ismail & Al-hendawi (2015) when they found out that collective learning and application is in the "high" level in terms of the degree of existence of PLCA-R dimensions as rated by their respondents.

Among the indicators of collective learning and application, the statement with the highest weighted mean is "Faculty members are committed to programs that enhance learning" (\bar{x} = 4.26, "very high"). This data implies the high commitment of the faculty members in enhancing the learning of their students. Perhaps, such commitment is reflected in the good result of the board examinations and national competency (NC) undertaken by the students as well as their favorable performance in inter-school competitions at the local, regional and national levels. Also, the good employment of the students is also a reflection of the faculty members' ability to develop learners who are marketable in the industries. One college dean expounds this concept in the following words: "The commitment of faculty members to the learning of their students is mirrored in the high percentage of passers in the different board examinations. For me, CSU education has proven its value with the presence of topnotchers and high institutional passing rate relative to national passing rate. I believe our graduates are competitive too because we beat other institutions during competitions. Most importantly, the fact that our graduates are employable is an indicator that the faculty members have done a great job in the formation of their students." – (CD-6).

On the other hand, the statement with the lowest weighted mean is "Faculty members collaboratively analyze student work to improve teaching and learning." (\bar{x} = 4.11 - high). Although it is the lowest among the statements, it has still a high descriptive value. Such data connotes that faculty members are one in enhancing teaching and learning. This data also affirms the previous finding that the faculty members are working collaboratively in the making of instructional materials as well as research and extension undertakings. One CEO revealed the reason for this finding in these statements: "One evidence that the faculty members are collaboratively working in analyzing student work is the subject on Course Audit. This course is a form of review to prepare students to take board examination. The mechanism for such review class is that all teachers would lecture on a specific subject depending on their field of specialization. In this process, the faculty members share their review materials with one another to substantiate lessons acquired by the students for the past semesters. Aside this, team teaching and mentoring is practiced between the senior and junior faculty members. In this way, the rookie teacher is shared with methodologies and materials to improve his/her teaching. Significantly, there are also researches conducted by the faculty members examining the results of the board examination and determine specific competencies which were not taught or covered in the course syllabi." – (CEO-1)

Table 7: Professional Learning Community of the Respondents along Collective Learning and Application

Statements	Mean (\bar{x})	Interpretation
Collective Learning and Application		
1. Faculty members work together to seek knowledge, skills and strategies and apply this new learning to their work.	4.20	Very High
2. Collegial relationships exist among faculty members that reflect commitment to school improvement efforts.	4.20	Very High
3. Faculty members plan and work together to search for solutions to address diverse students' needs.	4.18	High
4. A variety of opportunities and structures exist for collective learning through open dialogue.	4.13	High
5. Faculty members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.	4.17	High
6. Professional development focuses on teaching and learning.	4.19	High
7. Faculty members and stakeholders learn together and apply new knowledge to solve problems.	4.16	High
8. Faculty members are committed to programs that enhance learning.	4.26	Very High
9. Faculty members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.	4.15	High
10. Faculty members collaboratively analyze student work to improve teaching and learning.	4.11	High
Category Mean	4.17	High

Level of Professional Learning Community of the Respondents along Shared Personal Practice

Table 8 illustrates that the respondents rated the shared personal practice “high” (\bar{x} =4.08). This result implies that there is a review of teachers’ behavior by colleagues and feedback as well assistance activity to support individual and community improvement. When asked about how shared personal practice is done in the university, the CEOs and college deans are one in saying that this is evident on many occasions like accreditations, curricular enhancement, research and extension undertakings as well design of instructional materials for the students and other clientele. Specifically, here’s the narration of a college dean relative to this matter: “I am confident that the faculty members have high shared personal practice because there are numerous evidences showing such practice. One is accreditation in which they work together in making their academic programs compliant to the standards set by AACUP. The same shared personal practice is reflected in the faculty members engagement during curriculum enhancement, module, and book writing development as well as research and extension activities. The fact that we pass the accreditation standards and that instructional materials are produced is a good index that faculty members gel together in making all things work for the university as they endeavor to work on this own professional development.” – CD – 5).

Looking into the indicators of shared personal practice, the statement “Faculty members informally share ideas and suggestions for improving student learning” (\bar{x} =4.23 - very high) incurred the highest mean. This finding denotes that do not only formally share their ideas during academic council meetings, curriculum enhancement, and the like. They definitely share their ideas and suggestions informally through team teaching and casual conversations. Their stay in the faculty room may be a good avenue for them to discuss matters to be addressed relative to learning outcomes. Also, the presence of group chat for between and among fields of specialization may be a good platform to brew innovative ideas that may address issues and problems of their students towards higher academic performance.

Meanwhile, the statement with the lowest weighted mean but still with high descriptive value is “Faculty members regularly share student’s work to guide overall school improvement” (\bar{x} =3.96). This data implies that assessment of students’ works is shared during formal and informal meetings for discussion and possible resolution. On such occasion, the data shared become a baseline for developing interventions and new undertakings to improve how things are done in the university. This may be in the form of instruction, research, and extension engagements of the students and faculty members.

Table 8: Professional Learning Community of the Respondents along Shared Personal Practice

Statements	Mean (\bar{x})	Interpretation
Shared Personal Practice		
1. Opportunities exist for staff members to observe peers and offer encouragement.	4.05	High
2. Faculty members provide feedback to peers related to instructional practices.	4.03	High
3. Faculty members informally share ideas and suggestions for improving student learning.	4.23	Very High
4. Faculty members collaboratively review student work to share and improve instructional practices.	4.10	High
5. Opportunities exist for coaching and mentoring.	4.03	High
6. Individuals and teams have the opportunity to apply learning and share the results of their practices.	4.13	High
7. Faculty members regularly share student's work to guide overall school improvement.	3.96	High
Category Mean	4.08	High

Level of Professional Learning Community of the Respondents along Supportive Condition for Relationships

Table 9 shows that the supportive conditions on relationships were found to be at high level in CSU with a mean of 4.07. This data means that trust and respect as relational factor has evolved between faculty members. This is in alignment to the characterization of the elements involved in relational supportive conditions in a PLC. According to one CEO, the faculty members are supportive to one another because they came to same college, campus and university. The supportive character of the faculty members is shown in their ability to help each other prepare their NBC documents. It is also seen when they share their handouts obtained from the seminars and trainings that they obtained. This is usually done during the echo seminar wherein those who were sent to trainings and seminars are directed to share whatever they have learned from such undertaking. Also, this finding corroborates the earlier data that faculty members collaborate during accreditation, curricular enhancement, instructional materials development as well as research and extension activities. All these undertakings glue the faculty members together leading to greater personal and professional productivity and self-esteem. Such finding relates with that of Hipp & Huffman (2003) in their study who concluded that supportive conditions on relationships and structures are the “glue that is critical to hold the other dimensions together”. It also affirms the observation of Teague (2012) who stated that relational conditions are exemplified by trust, respect, caring relationships, recognition, celebration, risk taking, and reflective dialogue. Thus, this dimension is very much important in PLC.

Among the indicators of supportive conditions for relationships, the statement which was rated very high by the faculty respondents is “Caring relationships exist among faculty members and students that are built on trust and respect” with a mean of 4.20. The existence of caring relationship marked by trust and respect among faculty members and students is evidenced by the mentoring given by the senior to the junior faculty. It is also reflected by the absence or little conflict between and among faculty members and students in various colleges and campuses. If conflict may arise, they find means and ways to settle them immediately so as to build better relationship. One CEO has this to say about this matter: “Trust and respect are visible among faculty members and students in my campus. For several years of my stint as CEO, there were very few instances in which I settled conflicts between and among teachers and students. If there is any, they settle it among themselves or if they are brought before my attention, they arrive at good negotiations or comprises just to settle their disputes. For me, this is one reason why we are productive in the campus and that we have high performance in PBB and other quality assurance measures prescribed by the university” – (CEO-5). The presence of supportive conditions for relationship affirms the study of Stamper (2015) who revealed that faculty members who demonstrate communal thought are able to breed feeling of openness and sharing. Further, he stressed that the importance of trust and respect is indispensable to ensure that the workplace is productive and successful.

Table 9: Professional Learning Community of the Respondents along Supportive Conditions on Relationships

Statements	Mean (\bar{x})	Interpretation
Supportive Conditions – Relationships		
1. Caring relationships exist among faculty members and students that are built on trust and respect.	4.20	Very High
2. A culture of trust and respect exists for taking risks.	4.09	High
3. Outstanding achievement is recognized and celebrated regularly in school.	3.97	High
4. Faculty members and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.	3.99	High
5. Relationships among faculty members support honest and respectful examination of data to enhance teaching and learning.	4.11	High
Category Mean	4.07	High

Level of Professional Learning Community of the Respondents along Supportive Condition on Structures

Table 10 reveals that there is high regard of the faculty members on supportive conditions on structures with a weighted mean of 4.0. This finding is a manifestation that faculty members are willing to share their time and resources to their colleagues. The sharing of time and resources are reflective of their unity despite of their differences. Such practice is shown during programs, competitions and other similar undertakings. For instance, faculty members are able to share any amount to augment funds of students and faculty members who participate in competitions as well as during intramurals. To have a successful program, they also find time watching the activities as a show of their moral support to students and their colleagues. One CEO further explained this reason in the following words: “What I saw among faculty members specifically in my campus is their unity as shown in the resource sharing activities that they do. I remember, a lot of faculty members donated a certain amount to push through a certain program because they find it valuable. The same happened when we joined a national competition in which the funds for such was not enough. I saw numerous teachers giving amount to students who could not afford to join the competition because of financial concern.

Among the statements along supportive conditions for structures, the statement “Resource people provide expertise and support continuous learning” with a mean of 4.10 (High). The finding illustrates that senior faculty members are able to share their expertise in instruction, research, and extension to the younger ones. A good example of this is during the conduct of in-house review wherein experts in research and extension help young colleagues in refining their proposals for possible funding. During seminars and workshops conducted by the university, organizers would always group senior and junior faculty members for possible mentoring.

On the other hand, the statement with the lowest mean at 3.86 but still with high descriptive value is “Fiscal resources are available for professional development”. The high level obtained by the respondents in this statement implies that they are assured of fiscal resources allocated by the university for their continuing professional development. A good proof for this is the number of seminar and trainings availed by the faculty members each year. Moreover, scholarship programs are also provided to them as a way of enhancing their competence in their field of specialization. Cash incentives are also given to those who produce research and extension projects that are utilized for instruction, research, extension and production. Availment of these cash incentives are enshrined in the research and faculty manual of the university.

Table 10: Professional Learning Community of the Respondents along Supportive Conditions on Structures

Statements	Mean (\bar{x})	Interpretation
Supportive Conditions – Structures		
1. Time is provided to facilitate collaborative work.	4.00	High
2. The school schedule promotes collective learning and shared practice.	4.05	High
3. Fiscal resources are available for professional development.	3.86	High
4. Appropriate technology and instructional materials are available to staff.	3.92	High
5. Resource people provide expertise and support continuous learning.	4.10	High
6. The school facility is clean, attractive, and inviting.	4.03	High

7. The proximity of year level and department personnel allows for ease in collaborating with colleagues.	4.04	High
8. Communication systems promote a flow of information among faculty members.	4.06	High
9. Communication systems promote a flow of information across the entire university community including central office personnel, parents, and community members.	4.02	High
10. Data are organized and made available to provide easy access to faculty members.	3.93	High
Category Mean	4.00	High

Summary Table on the Professional Learning Community of the Respondents

Table 11 reflects the summary of the respondents’ assessment on the different dimensions of PLC. Among the five dimensions, shared values and visions registered the highest grand mean at 4.20 with a descriptive value of “very high”. The very high shared values and visions of the faculty members shows that they support the norms of behavior and guide decisions about teaching and learning in the school. According to Hipp & Huffman (2003), this is specifically exemplified in their unwavering focus on student learning. The consistent focus of the faculty members on student learning is very well manifested in the generally good performance of the university in board examinations across academic programs. It may also be evidenced by the generally good employability of the graduates of the university across programs and campuses based on graduate tracer studies conducted among its graduates. One college dean presents this idea in the following words: “The shared values and vision of an institution is reflected the kind of graduates it produces. If the faculty members are able to graduate students who are imbued with the competencies defined in its institutional graduate attributes and program outcomes, then they manifest shared values and vision. In our university, there are substantial evidences that we share the same values and vision because we have been successful through the years in making them pass the board examinations and employ them based on the needs of the industry. Moreover, passing the accreditation is also a good indicator that faculty members contribute to the realization of shared values and vision of the university.” – (CD-2).

The result of this study on the level of PLC is similar to that of Abdallah et al., (2021) and Stamper (2015) who found out that the respondents who participated in their study have a high level of PLC skills.

Table 11: Summary Table on the Professional Learning Community of the Respondents

DIMENSIONS OF PLC	Category Mean \bar{x}	Statistical Description	Interpretation
Shared and Supportive Leadership	4.14	Agree	High
Shared Values and Vision	4.20	Strongly Agree	Very High
Collective Learning and Application	4.17	Agree	High
Shared Personal Practice	4.08	Agree	High
Supportive Conditions – Relationships	4.07	Agree	High
Supportive Conditions – Structures	4.00	Agree	High
Overall Weighted Mean	4.11	Agree	High

Relationship between the Respondents’ Profile and Organizational Systems Thinking

Table 18 shows that the respondents’ profile and organizational systems thinking are not significantly correlated. Thus, the null hypothesis of the study is accepted. This finding implies that academic rank, sex, age, highest educational attainment and length of service do not influence OST.

Such result is similar to the study of Listyawardani & Hariastuti (2016). They found out that profiles of respondents (age, sex and length of service) and systems thinking scale too, are not correlated.

Correspondingly, Shoid & Kassim (2012) had also a similar finding in their study on OST and Shared Vision and Mission as Determinants of Organizational Learning Capabilities (OLC) in Academic Library. They found that there is no evidence that perceptions on OST are associated with the respondents’ background or profile such as gender, academic rank and educational level.

As gleaned from the opinion of one College dean: “I believe that the faculty members’ academic rank and highest education is not associated with OST because of the same exposure, experiences and practices done across campuses of the University. Whether you are male or female, young or old or Instructor or Professor in the university, each one does the same think as faculty members. As such, they see themselves as one sector that is capable of recognizing the unifying elements of the university especially when they perform their duties and responsibilities along instruction, research and extension which are the core functions of the faculty members.”

Table 12: Relationship between organizational systems thinking of the respondents and their profile variables

Variables	r - value	Prob.	Decision
OST			
Academic Rank	-0.078	0.261	Accept Ho
Sex	-0.030	0.662	Accept Ho
Age	-0.024	0.733	Accept Ho
Higher Education	-0.045	0.519	Accept Ho
Length of Service	0.020	0.774	Accept Ho

Relationship between the Respondents' Profile and Professional Learning Community

Table 13 reveals that there is no significant relationship between the respondents' profile and PLC. As all probability values are greater than 0.05 or $p > 0.05$, the null hypothesis of the study is accepted. The finding implies that PLC is not in any way associated with the respondents' academic rank, sex, age, highest educational attainment and length of service.

The lack of association between PLC and age is confirmed by Porter (2011) and (Brucker, 2013) who concluded that composite age groups do not show significant relationship in the PLC. On the other hand, the findings that sex is not related to PLC corroborate the finding of East (2015), Karuppanan, et al (2018) and Holms (2012) as they found out that there were no statistically significant association in the PLC of the respondents based on sex. Significantly, the lack of relationship between PLC and length of service strengthens the finding of Porter (2011) revealing that PLC of teachers is influenced by their teaching experience.

Lastly, the absence of association between PLC and educational attainment is contrary to the study of Abdallah et al., (2021) revealing that employees' PLC is impacted by their highest educational attainment.

Table 13: Relationship between the professional learning community of the respondents and their profile variables

Variables	r - value	Prob.	Decision
PLC			
Academic Rank	-0.002	0.976	Accept Ho
Sex	0.017	0.810	Accept Ho
Age	0.000	0.998	Accept Ho
Highest Educational Attainment	0.011	0.872	Accept Ho
Length of Service	-0.017	0.803	Accept Ho

CONCLUSIONS AND RECOMMENDATIONS

The faculty members perceive the university as a system composed of different layers and divisions and in these strata, they recognize their roles as composite members where they singly or collectively contribute to the accomplishment of the major final outputs along advanced and higher education as well as research and technical advisory and extension services. Thus, the university should sustain the high organizational systems thinking and professional learning community of the faculty through supportive leadership, continued teamwork and shared values and vision. Remarkably, the faculty members' age, sex, academic rank, highest educational attainment, and length of service do not influence their level of organizational systems thinking and professional learning community.

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