Repertoire of Language Needs for Effective People Engagement Culture: A Social Technology on Transformative Communication Climate

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ABSTRACT:

The human interface mediates between input and output processes while the system's algorithm performs the calculation. This principle inspired state-funded institutions in the Philippines to harness their potential and transform into people-centric organizations, with the social interaction abilities of frontline employees as a key factor. This transformation creates a positive communication climate through leadership commitment, community engagement, workforce development, individual engagement, socio-cultural context, language services, and health literacy. These elements create a high communication climate that naturally occurs in an environment where employees possess high language skills, without disparities, regardless of representation, role, or rank. Recognizing the pivotal role of language, its cognition and interpretation, as well as the communication landscape that shapes the communication atmosphere, a sample of 155 randomly selected frontline employees thoroughly analyzed and evaluated the system. A three-phased mixed-methods design profiled, audited, and designed to address the language needs of the university, and three sets of questionnaires were used to collect the quantitative and qualitative data employing researcher-made, standardized, and adapted questionnaires. Subsequently, a focus group confirmed the significant collective behaviors at the university. It is a combination of specific and open responses that were coded and transcribed, which determined the positive correlation using *Pearson's r* test and predicted the values of variables that affect confirming relationships with the other variables. Moreover, an independent **T-test** run recorded no significant difference in gender, age, education, or position in language skills and communication climate across units consistently. As a result, the study concluded that since the communication climate in state universities is high, the language skills are also high, except during information

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collection and performance evaluation; hence, people create a positive communication ability brought about by interaction among the people on the campus and outside through their language skills, which is an ideal atmosphere that forms good habits. However, since two of the variables were identified as negative, solutions must be employed to neutralize behaviors, such as standardizing the information collection methods, uniform coding systems for mapping demographics and their communication needs, regular monitoring of performance, and appropriate adjustments relative to evaluations about each of the prior content areas using structure, process, and outcomes measures. In contrast, the perceived language skills of the employees do not accurately describe their proficiencies, but rather the language used to perform work-related functions, which is commonly non-standardized and non-authentic. Notably, the current positive atmosphere must be sustained through social technology, a culture-specific data analytics that integrates systems, to predict language patterns for interaction. Thus, state universities must use data analytics that use high language skills and create a consistent positive atmosphere.

Keywords: Neurolinguistics, Independent T-test, Information Processing Approach, Quality Education, Peace and Strong Institutions

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Introduction

The cognitive theory determines the intellectual capacities and limitations in language use, while the communication landscape reveals the social discourse that constitutes a communicative repertoire. It defines the emotional atmosphere that reveals social relationships and interactional patterns commonly used to perform roles and functions within an organization, with a specific function being the ability to express intent and engagement for the attainment goal. Typically, the purpose is an interaction that carries out tasks and delivers results, observably influenced by cognitive processes and interpretation processes that produce behavior, which describes its communication climate. Neurolinguists have explained the causality of cognition [19] and processing information [18] and their capability to shape behavior language as well as the role of positive environment to create it. The environment develops an emotional atmosphere or tone when people talk to each other can be positive, negative, competitive, cooperative, or transformative, depending on the situation in which it plays a key role in communication [1].

Moreover, in 2006, the Council of Europe identified five communication climate principles: words, actions, inactions, social needs, and relational needs. These relational subtexts describe different levels of the environment that identify specific language needs or linguistic resources for a particular task. Hence, language is emphasized as it creates a productive communication environment that can affect confirming attitudes regardless of hierarchy [2], thus predicting disconfirming behaviors stemming from unfamiliar interactions that suggest an unsupportive atmosphere [3]. As such, events are driven by orientation, which one seems to overlook while interacting with one another, and knowing how communication climates vary behavior as they manifest in our communication, that may either be constructive or destructive.

Another relevant component is the language system of communication that the community uses that is either informative, which means it gives facts or data; directive, which tells you what to do; or expressive, which means it gives your opinion. The use of language is characterized by tone and style, which determine the

appropriateness of expression, whether transactional, interactional, or relational, and its effectiveness in terms of purpose. Likewise, directness in expression is often informal, while indirectness in expression is formal. Halliday's Functions of Language can be used for social purposes in communication [4]. The authors argue that three systems interpret a language simultaneously in our engagement: the field, the tenor, and the mode. A field or topic is what the community thinks is important to talk or write about. The tenor, or interpersonal, is what the community chooses as words to make the speaker seem authoritative and to make the audience seem like colleagues, novices, or enemies. The third is the language choices that make the text sound formal and written or informal and spoken.

It is also important to consider that the communication climate has multiple layers that differentiate the moods in a community. It is important because it determines people's behavior through the language they use to perform. It comes in varying degrees because people work horizontally and democratically to reach their goals. At the same time, a community has roles and responsibilities to fulfill. It has expectations that people must meet through regulation. Further, communication is a learned activity that connects one person to another to fulfill a specific need or purpose directed to the other party [5]. Given its inherent social aspect, communication has an overarching role in influencing the interpersonal, group, and mass relationships between and among speakers, and the role of communication, especially in organizations, in maintaining various role-based dynamics specific to individual institutions that lead to developing distinct cultures that revolve around these interactions [6]. Certain languages, rites and rituals, and traditions are built by members of the organization, which can be perceived positively or negatively by fellow workmates. The contexts and circumstances that each participant of an organization brings into the overall atmosphere of interactions can predict or form an overall mood called the communication climate [7].

This study identified the significant language needs of employees. In particular, the language skills and their levels were audited, significantly describing the university's communication landscape. The study also designed the communication landscape to create a culture of interaction. Lastly, the study described the differences between the variables and how they affect each other. Generally, the study aims to design a transformative communication landscape for Bulacan State University for effective people engagement. Specifically, the following items were described: respondents' profiles, employees' language skills, levels of employees' language skills, available channels, communication activities, communication skills applied at work, communication needs, language needs, selective coded themes, state universities' communication landscape designed to increase people's engagement, correlation of the variables, and the relationships of the variables affecting positively or negatively.

Method

The descriptive research design gave a broader view of this exploratory mixed-method design, which involved a sequential data collection approach wherein information from a previous phase explores the subsequent stage of the study, with qualitative data supporting the prior quantitative data [8]. The three-part data collection process concurred with the three-step validation using the statistical treatment, where the variables involved in the study, communication climate and language skills, were treated with a mix of quantitative and qualitative approaches to give a wider view of the topic. In the quantitative phase, the descriptive research design gave a thorough review of the study, which aimed at describing instances of data as they occur in nature without any intervention or manipulation from the researchers to explore multiple variables [9]. In contrast, determining the communication climate and language skills involved assessments of its different aspects as evaluated by respondents in their respective workplaces, all of which were quantified.

Afterward, qualitative data were gathered from informants through focus group discussions (FGD) whose key themes during the discussion explored the implications of the quantitative results. Further, a phenomenological approach was used for the qualitative aspect of the study. Phenomenological research is used to understand human experiences common to a certain population to find the essential meaning attributed to the phenomenon [10]. The lived experiences of the informants provided an in-depth understanding of the patterns discovered in the quantitative data. Both approaches, therefore, under the exploratory mixed-method design, fit well with the researchers' intentions with communication climate and language skills for designing an effective communication climate for university employees.

Likewise, the combination of the researcher-made, standardized, and adapted questionnaires gathered important data. The profile consists of five (5) items: name or code, position, gender, age, and education. The communication audit questionnaire had 12 items, namely client, data collected from clients, questions clients asked, questions asked from clients, indicators of completeness of data collected, plans for collecting data, monitoring procedures, methods for collecting data, resources for collecting data, methods for storing data, methods for disposing of data, and methods for reporting data. Subsequently followed by the collection of the perceived self-assessed proficiency in different language skills of the employees based on the Common European Framework (CEFR) competencies [11] and the perceived communication climate in the university based on the Communication Climate Assessment Toolkit (C-CAT) [12] , which were rated using a 5-point Likert The CEFR self-assessment questionnaire consisted of five (5) language skills dimensions, namely listening, reading, interaction, spoken production, and written production, having six (6), six (6), five (5), four (4), and six (6) items each dimension respectively. The C-CAT instrument consisted of nine items, namely leadership commitment, information collection, community engagement, workforce development, individual engagement, socio-cultural context, language services, health literacy, and performance evaluation with five (5), six (6), two (2), two (2), four (4), three (3), three (3), two (2), and four (4) items respectively.

Initially, the profiling of the respondents was employed using a combination of fill-in, specific, and closed items. Subsequently, the perceived self-assessed proficiency in different language skills of the employees based on the CEFR competencies and the perceived communication climate in the university based on the C-CAT were collected, which were rated using a 5-point Likert scale. Using three different types of instruments, the profile of the respondents, the communication audit, the language needs, and the perceived language skills needed to perform the job, and the communication climate in the university were all collected and described respectively. As designing the communication landscape of the university is necessary, the 155 respondents evaluated the current climate condition of the university. The respondents are non-academic and academic personnel from the five campuses of the university who were purposely selected to participate in the study by their unit heads. The purposive sampling method is the deliberate selection of respondents or informants based on possible expertise that they can offer [13]. The arbitrary aspect of the technique allowed for the freedom of how the sample will be composed to provide diverse responses. As such, the researchers purposely chose staff, associate deans, program heads, or faculty members in each unit typically identified as the frontlines to be part of the sample. Their everyday encounters with different clients and stakeholders were relevant contexts that yielded relevant information about practices and habits that contribute to the formation of their offices and faculties' communication climate and language skills.

Afterward, an FGD using specific and open-response questions recorded data that were viewed from the perspectives of the key informants. The participants were volunteers who

gave unbiased views on the existing practices the study was looking for. Initially, a consent form containing structured and unstructured questionnaires was presented to the participants. Each participant was given an orientation on how the FGD will run. Since the participants were given the proper briefing on how the FGD is expected to be facilitated, each participant is provided with a copy of the consent form that underscores the right to withdraw at any time. Importantly, the FGD solicited first-hand experiences from the key informants. The NVIVO software transcribed the narratives, which were assigned codes and pseudonyms to protect the confidentiality of the responses. Also, the study results will be stored temporarily in the Google Drive assigned for this project to be shared with the Research Management Office as its monitoring unit.

Meanwhile, to examine the data, the researcher utilized descriptive statistics. Descriptive statistics summarized and organized quantitative data that described the relationship between variables through measures of frequency, central tendency, dispersion/variation, and position [14]. This analysis method presented a way to discover trends and patterns in the responses in communication climate elements and language skills. The frequency distribution, modes, and mean scores were recorded to give value to the collected data. The interpretation of mean scores varied as: 1.00- 1.80 - very low, 1.81-2.60- low, 2.61-3.40- middle, 3.41.-4.20- high, and 4.21-5.00- very high. To test the statistical significance of the data, a test on the correlation of the variables was performed. After that, the significant difference between each variable described the confirming or disconfirming effects of language skills on people's interactions. In contrast, the study is limited to identifying the language skills used to perform work-related duties, and it does not measure the proficiency skills of the respondents; hence, the self-assessed language skills do not reflect the proficiency level of the respondents.

In addition, thematic analysis was applied to the qualitative data from the focus group discussion. This method identified, analyzed, and interpreted features from unquantified data sources whose codes can be arranged to point toward a central idea or theme [15]. The flexibility in meaning generation gave the researchers enough methodological tools to process the discussion. Themes, descriptions, and codes gathered from the informants were tabulated and elucidated to explore the implications of the descriptive results.

Results, Analysis, and Discussion

As a result, the study reported the actual results in the quantitative and qualitative data on the demographics, statistical findings, and interpretations, where the analysis for each table shows the description of the results based on the intentions of the study. The relationship of the variables was described based on the statistical significance of the data when compared with other variables.

Table 1 presents the frequency distribution and percentage of the profile of the respondents.

As presented in the table below, the profiles of respondents by frequency are shown, which states

Table 1. Frequency Distribution and Percentage of the Profile of Respondents (N = 155)

Profile	Frequency	Percentage
Position		
Academic Personnel	73	47.1
Nonacademic Personnel	82	52.9
Gender		
Male	49	31.6
Female	106	68.4
Age Group		

20-29 years	55	35.4
30-39 years	51	32.9
40-49 years	36	23.2
50-59 years	12	7.7
60 and above	1	.6
Education		
Bachelor's	90	58.1
Master's	54	34.8
Doctorate	11	7.1

that regarding position, the respondents comprised 73 academic (47.1%) and 82 non-academic personnel (52.9%). There is an almost equal distribution between the two positions. Next, regarding gender, 49 males (31.6%) and 106 females (68.4%) were present. Most respondents identified as female, while the males represented the lesser number. In terms of age group, 55 respondents were listed as 20-29 years of age (35.4%), 51 respondents as 30-39 years of age (32.9%), 36 respondents as 40-49 years of age (23.2%), 12 respondents as 50-59 years of age (7.7%) and 1 respondent as 60 years and above (0.6%). Younger adults represented the sample more than their older counterparts. Lastly, in terms of education, 90 respondents earned at most a bachelor's degree (58.1%), 54 respondents a master's degree (34.8%), and 11 respondents a doctorate (7.1%). It can be interpreted that all respondents have at least finished tertiary education, with half of them pursuing graduate school studies. Each profile added up to 155 respondents (100%).

Table 2. Pearson's r Correlation of Communication Skills and Language Skills (N=155)

Items	Pearson's r	df	P-value	T-test	Sig **.05 α**	Decision
Leadership Commitment (LC)	0.24**	153	**0.003**	-	Significant	Accept
Information Collection (IC)	0.141	153	0.08	-	Not significant	Reject
Community Engagement (CE)	0.238**	153	**0.003**	-	Significant	Accept
Workforce Development (WD)	0.188*	153	**0.019**	-	Significant	Accept
Individual Engagement (IE)	0.17*	153	**0.034**	-	Significant	Accept
Socio-Cultural Context (S-CC)	0.239**	153	**0.003**	-	Significant	Accept
Language Services (LS)	0.16*	153	**0.046**	-	Significant	Accept
Health Literacy (HL)	0.198*	153	**0.014**	-	Significant	Accept
Performance Evaluation (PE)	0.136	153	0.092	-	Not Significant	Reject

Language skills (LangS) and gender (G)	0.514	153	-	0.655	Not Significant	Reject
Language skills (LangS) and age difference (AD)	0.125	153	-	1.54	Not Significant	Reject

Table 2 presents Pearson's correlation of communication and language skills which showed significant correlation on all the variables but not on information collection and performance evaluation. As presented in the table above, statistics proved that at Sig **.05 ∝** there is a positive correlation among the variables, namely leadership commitment, community engagement, workforce development, individual engagement, sociocultural context, language services, health literacy at **0.003, 0.003, 0.019, 0.034, 0.003, 0.046,** and **0.014** respectively. It means that the impact of communication and language skills on the communication climate of the university changes depending on the actual level of the demonstrated behavior. However, when the independent T-test was applied, a negative correlation was found between and among gender, age, education, and position. It may be interpreted that regardless of the later variables, using language in performing language-related duties is not significant as the people carry out tasks effectively. On the contrary, results showed divergences in the standardized qualitative and quantitative collection methods, uniform coding systems for demographics, and uniform coding systems for gathering valid; reliable communication needs to serve its population properly, regular monitoring of performance related to structure, process, outcome measures, and make appropriate adjustments based these evaluations. What can be subsumed is that since the study has proved that high language skills could create a highly positive communication landscape for the university, then it is a must that the skills are enhanced to maintain an ideal communication climate to achieve goals. Nevertheless, since anyone in the university performed their duties well regardless of position, a "user-centric" [16] evolutionary [17] intelligent system of processing data ensures consistency in the process as work-related activities in the university are data-driven so they are critical; hence, it is customer-centered.

Focus Group Discussion

The study organized a group of key informants to facilitate the focus group discussion. The participants are employees, academic and non-academic personnel at the university, who did not participate in the survey that collected the study's quantitative data. The voluntary participation of the participants was given the highest priority. The consent form was solicited through an informed consent form completed before the focus group discussion. When the consent of the participants was collected, they were given background information on the study's intentions, the guide questions, and the study's objectives. Immediately after, the guide questions similar to the study's objectives but structured differently and indirectly were given to encourage a discussion. To ensure a smooth flow of the interaction, the researchers facilitated an uninterrupted discussion. The key informants shared views on their experiences and insights regarding each topic, and the transcripts collected from the focus groups were given an interpretation based on the recurring patterns that establish connections among responses to identify themes for the selective coding, and then they were compared.

Table 3. Coded Transcripts of the Focus Group Discussion

Themes	Description	Codes	Raw Words/Phrases
Formal Communication Training	Importance of formal training for effective use of communication channels.	Formal training, social media use, email proficiency.	"formal training," "efektibong pagpapahayag," "communication channels"
Clear and Open Communication Lines	Essential to maintain clear, accessible communication tools and processes.	Open lines, email, messengers, accessible communication.	"maayos at bukas na linya ng komunikasyon," "emails at messengers"
Employee Responsiveness and Engagement	Necessity for employees to be active and responsive in organizational activities.	Employee participation, survey responsiveness, campus activities.	"pagbisita at pagiging responsive," "surveys at aktibidad sa campus"
Appropriate Communication Approach	Using suitable methods to handle concerns and questions effectively.	Appropriate handling, workplace concerns, question management.	"tamang approach," "pag-handle ng concerns at questions"
Encouraging Confidence in Communication	Building confidence to overcome barriers in workplace communication.	Communication confidence, addressing insecurities.	"confidence sa pakikipag-communicate," "kulang sa kumpiyansa"
Denotative Tone in Formal Settings	Importance of precise language to avoid ambiguity.	Denotative tone, avoiding ambiguity, formal settings.	"denotative tone," "maiwasan ang ambiguity"
Technical Language Proficiency	Mastery of technical language for academic and administrative contexts.	Technical terms, academic communication, administrative language.	"technical na salita," "pang-akademiko at pang-administratibong konteksto"
Formal Writing and Speaking Skills	Development of formal communication skills for handling workplace concerns.	Writing skills, technical communication, and presentation proficiency.	"formal writing at speaking," "technical writing," "pag-handle ng concerns"
Appropriateness of Language	Tailoring language to specific contexts to meet diverse needs.	Context-based communication, audience awareness, tailored language use.	"appropriateness ng mga salita," "pangangailangan ng bawat isa"

Communication Landscape	Current state and desired improvements in university communication systems.	Openness, communication ecology, feedback mechanisms.	"disenyo ng komunikasyon sa unibersidad," "openness, access, ecology"
Formal vs. Informal Tone	Balancing formal and informal communication practices within institutional contexts.	Tone adjustment, informal interactions, hierarchical sensitivity.	"pormal at impormal na praktis," "kahit yung President"
Process and Accessibility	Establishing clear protocols and flexible communication tools for accessibility.	Protocol clarity, flexible tools, access to email/chat.	"multiple ways of reaching out," "malinaw na protocol"
Client-Centered Approach	Balancing client accommodation with efficient communication processes.	Client needs, structured communication, transactional boundaries.	"client-centered na sistema," "accommodation at structured na proseso"
Use of Technology	Leveraging technology to streamline communication and reduce unnecessary interaction.	Digital tools, analytics, reducing face-to-face communication.	"data analytics," "email," "bawasan ang face-to-face"
Cultural Reflection	Communication reflecting the values and inclusiveness of the organizational community.	Inclusivity, "education for all," community personality.	"education for all," "BULSO community"
Professional Development	Continuous improvement in communication skills for better interaction and institutional growth.	Skill development, lifelong learning, ongoing studies.	"tuloy-tuloy na growth," "studies ng participants"
Language Skills and Climate	Relationship between language proficiency and a positive communication climate.	Language proficiency, positive climate, supportive communication environment.	"higher language skills," "positive communication climate"

As presented in Table 3, charting the codes and themes provides a comprehensive overview of the communication practices and needs in an organizational context. Using qualitative analysis techniques, recurring themes and core insights from participant discussions were identified and coded into distinct themes. Such themes as "Formal Communication Training" and "Clear

and Open Lines of Communication" were derived through a systematic, open, and axial coding process, whereby assumed codes were grouped under broader categories. With an inductive approach, the analysis permitted these themes to grow from the actual data, so the nuances of workplace communication were fulfilled. It says the chart is a framework to restate individual and systemic factors shaping the organization's communication climate, thus opening targeted entries for improvement. Specifically, categorizing data identified the selective coding that appropriately selected the themes.

Conclusion

The study concluded that regardless of age, gender, education, and position, language skills are not significant. The results revealed that the employees at the university transact and interact with very high language skills and leadership commitment, as evident in social affairs, because state universities provide a respectful and inclusive environment. When standardizing varied data types collected using different methods, a uniform coding system must be applied so clients' needs are properly attended to and addressed, particularly when collecting information and performance evaluation relating to collecting valid and reliable clients' demographics and communication needs. Significantly, the study reported a positive atmosphere in the university; hence, its communication climate is high. As institutions with an outcomes-based education curriculum, their outputs are their people; therefore, charting demographics, automating systems' processes from collection to disposal, and using intelligent systems in production can use and reuse language that could systematize data management for people's and universities' consumption. It is important to note that when this required condition is achieved, it will create a highly positive emotional atmosphere that could maintain a highly positive communication climate using the high language skills of employees in state universities. Such a condition can transform the university into a client-centered agency that puts people as its priority; therefore, the people and their needs could be best addressed by the university through an integrated technology for data analytics that is culture-specific and technology social to frame interaction.

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