

Collaboration Mechanism in State University Initiated Projects: Basis for Strategic Policy Framework

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Abstract: This survey-correlational study aimed to determine the collaboration mechanisms, extent of collaboration, and level of engagement between the Local Government Units of Barotac Nuevo, San Enrique and an institution of higher education as assessed by 120 extension program beneficiaries, faculty researchers and extensionists and LGU officials grouped according to type of respondents, age, highest educational attainment, and monthly family income. The data was analyzed and interpreted using the frequency count, percentage, Mean, Standard Deviation and Kruskal-Wallis H test. The findings indicated that formal and informal collaboration mechanisms were utilized Occasionally, both as whole and when categorizing respondents by type, age, highest educational level, and monthly family income. Furthermore, significant differences were observed in both formal and informal collaboration methods categorized by respondent type, age, highest level of education, and monthly family income.

Keywords: Collaboration, Mechanisms, Engagement, Survey-Correlational, Iloilo

Background of the Study

Partnerships expand the university's capacity to educate our citizenry, develop new knowledge, and have a positive impact in our communities. Specific strategies can leverage the power of partnerships in and across higher education's joint mission of education, discovery, and service while also contributing to progress and innovation from the community's perspective. This dynamic is at the heart of the principle that community-university partnerships should be mutually beneficial (Holton, Early, Jettner and Shaw, 2025).

University-community partnerships provide opportunities for collaborations and meaningful engagement with community partners, in order to promote sustainable community development. To date, studies on university-community partnerships have largely neglected partnership potential and readiness prior to partnership formation. These factors enable expectations and targets to be negotiated and potential problems to be anticipated, prior to any formal collaboration.

In the Philippines, university-community partnerships tend to be of a service-learning type due to a government mandate that public universities provide community outreach and extension programs. However, the collaborations often lack due to limited contractual foresight, flexibility, and expansion into future collaborations to achieve sustainable and hierarchical outcome. Recently, universities all over the world have been challenged to step up their community service through two-way engagements, in which they co-create knowledge and co-fabricate products and services. As a result, universities are emerging as valuable partners in the sustainable development of nations, regions, cities, and local communities (Mores, Lee, and Bae 2019).

Recently, universities all over the world have been challenged to step up their community service through two-way engagements, in which they co-create knowledge and co-fabricate products and services. As a result, universities are emerging as valuable partners in the sustainable development of nations, regions, cities, and local communities. The role of universities in partnership sustainability is to co-create knowledge and services and those partnerships are most likely to be sustainable when they exceed their target objective, identify other areas for future projects, and develop networks for further collaboration.

Studies on university-community partnerships are much more voluminous in Western countries than in Asian countries. This is mostly due to the policies and incentives provided to

In general, there is a dearth of research on local planning, as most studies focus on social and environmental results from ongoing or completed partnerships. Furthermore, some partnerships have resulted in neglect of local needs due to a lack of in-depth analysis prior to forming a partnership.

This study was conducted in the Municipality of Barotac Nuevo and San Enrique to investigate the university-community partnership. Currently, there is a need to seek alternatives to address local planning challenges. One way to do so is to promote university-community partnerships, since this is an existing practice in the Philippines. Local universities have the capability, resources, technology, and strategic location to facilitate local plan preparation at a quicker pace and reduced cost. However, LGUs have yet to take advantage of this resource despite the fact that public universities in the Philippines are growing rapidly with respect to finance, enrolment, and resources. State universities are also mandated to provide extension services, which local plan preparation can be included in.

Therefore, this study explored the university community partnerships in terms of collaboration mechanisms. By addressing the gaps in the literature, this study will enhance the literature on Filipino university-community partnerships.

This study is anchored on the Collective Impact Theory. Collective Impact Theory aligns diverse stakeholders around a common agenda and shared vision to address a problem. The partners' activities may differ at each organization while still being coordinated through a mutually agreed upon action plan. Data collection and shared measurement ensure efforts remain aligned, and continuous communication is essential to ensure that communication is consistent and open and builds trust. Creating and sustaining collective impact includes having an organization to coordinate partners and serve as a backbone support (Kania & Kramer as cited by Presto, 2024).

The independent variables of the study are age, highest educational attainment, monthly family income, number of years in the government service, and position in the government service. Formal and informal collaboration mechanisms are the dependent variable of the study.

This study aimed to determine the collaboration mechanisms between the Local Government Units (LGU's) and an Institution of Higher Education (HEI) in the municipalities of Barotac Nuevo and San Enrique. Specifically, it sought to answer the following questions:

1. What are demographic characteristics of the respondents as to type of respondents, age, highest educational attainment, and monthly family income?
2. What are the collaboration mechanisms between the local government unit and institution of higher education as perceived by the respondents when taken as a whole and when grouped as to type of respondents, age, highest educational attainment, and monthly family income?
3. Are there significant differences in the collaboration mechanisms between the local government unit and institution of higher education as perceived by the respondents when grouped as to type of respondents, age, highest educational attainment, and monthly family income?
4. What strategic policy framework can be developed based on the results of the study?

METHODOLOGY

This research employed the descriptive-survey research design. The present study was conducted in the Local Government Unit of Barotac Nuevo, and San Enrique along with the campuses of ISUFST located within the same municipalities.

The research employed the purposive sampling method. Purposive sampling refers to a group of non-probability sampling techniques in which units are selected because they have characteristics that you need in your sample (Nikolopoulou, 2023).

A researcher-made questionnaire was used to gather data. The survey questionnaires were distributed to the respondents. The respondents read each statement and put a mark (✓) that corresponds to his/her response: from 1 (strongly disagree), 2 (disagree), 3 (neither agree/disagree), 4 (agree), and to 5 (strongly agree) that best describes the collaboration mechanisms utilized by HEI and LGU. The item mean was employed with the values being described as follows:

Table 1. Response Mode on the Frequency of Use of Collaboration Mechanisms between the Local Government Unit and Institution of Higher Education as assessed by the respondents when grouped as to type of respondents, age, highest educational attainment, and monthly family income

Scale	Frequency of Use of Formal and Informal Mechanism	Verbal Description
4.50-5.00	Frequently	Mechanism is used often or regularly. It implies that mechanism is employed at short intervals or habitually.
3.50-4.49	Occasionally	Mechanism is used sometimes but not often or not regularly. It indicates that mechanism is utilized on a few occasions, but not frequently.
2.50-3.49	Rarely	Mechanism is not frequently or commonly employed or spoken about. It implies that mechanism is employed on very few occasions or almost never.
1.50-2.49	Very Rarely	Mechanism is used on a very infrequent basis, or almost never. It is a stronger expression of "rarely" used of mechanism, emphasizing that it is exceptionally uncommon.
1.00-1.49	Never	"At no time" or "not ever". It indicates a total lack of occurrence of Mechanism, often emphasizing that Mechanism has not been utilized at any point.

The research instrument was administered to 37 respondents to determine its reliability. For the Collaboration Mechanisms Questionnaire, Cronbach's alpha of 0.85 for Formal Mechanisms and 0.92 for Informal Mechanisms, indicate high reliability, with all items displaying a positive value for item polarity.

Twenty (20) items for Collaboration Mechanisms were retained in the validated version by panel of experts. In conclusion, the instrument developed is a valid instrument capable of validating the Collaboration Mechanisms utilized by the Local Government Unit and an Institution of Higher Education.

Approval to carry out the study was requested from the Office of the Municipal Mayors and University President of ISUFST. Subsequently, the researcher coordinated with the respondents to establish the timetable for carrying out the study. The questionnaires were distributed in March of 2025. The participants in the research have ample time to reflect on each question in the survey. Guidance for responding to the questions was elucidated, and confidentiality was maintained to the highest degree. The researcher collected the questionnaire, after which the data were organized and readied for tabulation, summation, analysis, and interpretation.

The accomplished instruments were examined, and the data were coded, processed, and statistically analyzed using the mean, frequency count and percentage, and Kruskal Wallis H test set at .05 level of significance.

Results and Discussion

Table 1 presents the demographic characteristics of the respondents according to type of respondents, age, highest educational attainment, and monthly family income.

As to type of respondents, a little less than two-fifths (38.30 percent) were beneficiaries, a little more than one-third (34.20 percent) were faculty researchers and extensionists, and a little one-fourth (27.5 percent) were LGU officials.

As to age, one-third (33.30 percent) were 41-50 years old, a little less than one-third (30.90 percent) were 51 up, one-fifth (20.00 percent), and less than one-fifth (15.80 percent) were 21-30 years old.

As to highest educational attainment, a little more than one-half (50.80 percent) were bachelor's degree, a little more than one-fifth (20.80 percent) were doctorate degree, a little less than one-fifth were high school graduate and master's degree (15.00 and 13.30 percent, respectively).

As to monthly family income, one-half (50.00 percent) were middle level, a little more than two-fifths (42.50 percent) were low level, and 7.5 percent were highest level.

Table 2. The Demographic Profile of the Respondents

Variables	Frequency	Percent
Type of Respondents		
Faculty Researchers/Extensionists	41	34.2
LGU	33	27.5
Beneficiary	46	38.3
Total	120	100
Age		
21-30	19	15.8
31-40	24	20.0
41-50	40	33.3
51 up	37	30.9
Total	120	100
Highest Educational Attainment		
High School	18	15.0
Bachelor's Degree	61	50.8
Master's Degree	16	13.3
Doctorate Degree	25	20.8
Total	120	100
Monthly Family Income		
Highest Level	9	7.5
Middle Level	60	50.0
Low Level	51	42.5
Total	120	100

The formal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when taken as a whole and when grouped according to type of respondents, age, highest educational attainment, and monthly family income

Table 2 shows the formal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when taken as a whole and when grouped according to type of respondents, age, highest educational attainment, and monthly family income.

The results showed that the formal collaboration mechanisms were "Occasionally" used by the local government unit and an institution of higher education when taken as a whole ($M=4.30$, $SD=0.87$) and when the respondents are grouped according to type of respondents, age, highest educational attainment, and monthly family income. Specifically, respondents with high level of income assessed formal collaboration mechanisms as "Frequently" used by the local government unit and an institution of higher education ($M=4.59$, $SD=0.35$).

This finding is in congruence with the finding of Li, Sánchez, Carr, and Siciliano (2021) in their study on insights on institutional mechanisms, partners, and purpose among local governments. The results of the content analysis revealed three important findings. First, the most common institutional forms to collaborate are service contracts, joint operations, and new joint entities, while the least common institutional mechanism is joint facilities. Second,

city and county, general- and special-purpose government, and cross-sector collaborations are the most frequent groupings found across the service areas. However, collaborations between cities are rare in our sample.

This result also supports Park, Krause, and Hawkins (2021), on their study on duality of formal and informal mechanisms in promoting collaborative processes, empirically examined the types of coordination mechanisms employed by us local governments to promote intra-governmental efforts to collaborate around the issue of sustainability—a complex and broad objective that transcends city departments’ traditional boundaries. The research particularly focused on assessing the relative contributions of formal and informal mechanisms toward achieving that end. Results from structural equation modeling analyses of 506 city governments indicate that informal mechanisms are positively and significantly associated with promoting cross-departmental collaboration. Interestingly, the results further show that formal mechanisms have important implications for facilitating collaborative processes indirectly through their influence on informal mechanisms.

This finding does not support the collective impact theory as the theoretical foundation of the present study. Occasional use of formal collaboration mechanisms would negatively impact the core principles of Collective Impact theory, potentially hindering its effectiveness in achieving substantial social change. Collective Impact emphasizes consistent, coordinated efforts between the local government unit and learning institution to address a specific social problem. In this case, inconsistent collaboration would weaken the shared vision, weaken the common agenda, and potentially lead to duplication of efforts and conflicting strategies.

Table 3. Formal Collaboration Mechanisms Between The Local Government Unit And An Institution Of Higher Education As Assessed By The Respondents When They Are Grouped According To Type Of Respondents, Age, Highest Educational Attainment, And Monthly Family Income

Variable	M	SD	Description
As a whole	4.30	0.87	Occasionally
Type of Respondents			
Faculty Researcher/ Extensionist	4.30	0.53	Occasionally
LGU	3.45	1.25	Occasionally
Beneficiary	4.20	0.55	Occasionally
Age			
21-30	4.06	0.46	Occasionally
31-40	3.51	1.23	Occasionally
41-50	4.34	0.48	Occasionally
51 up	4.03	0.97	Occasionally
Highest Educational Attainment			
High School	4.34	0.51	Occasionally
Bachelor’s Degree	3.76	1.04	Occasionally
Master’s Degree	4.20	0.57	Occasionally
Doctorate Degree	4.37	0.50	Occasionally
Monthly Family Income			
High Level	4.59	0.35	Frequently
Middle Level	3.99	0.95	Occasionally
Low Level	3.96	0.83	Occasionally

Scale: Frequently (4.50-5.00), Occasionally (3.50-4.40), Rarely (2.50-3.49), Very Rarely (1.50-2.49), Never (1.00-1.49)

The informal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when taken as a whole and when grouped according to type of respondents, age, highest educational attainment, and monthly family income

Table 3 shows the informal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when taken as a whole and when grouped according to type of respondents, age, highest educational attainment, and monthly family income.

The results showed that the informal collaboration mechanisms were “Occasionally” used by the local government unit and an institution of higher education when taken as a whole ($M=3.83$, $SD=.90$) and when the respondents are grouped according to type of respondents, age, highest educational attainment, and monthly family income.

This finding is in congruence with the finding of Li, Sánchez, Carr, and Siciliano (2021) in their study on insights on institutional mechanisms, partners, and purpose among local governments. The results of the content analysis revealed three important findings. First, the most common institutional forms to collaborate are service contracts, joint operations, and new joint entities, while the least common institutional mechanism is joint facilities. Second, city and county, general- and special-purpose government, and cross-sector collaborations are the most frequent groupings found across the service areas. However, collaborations between cities are rare in our sample.

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Table 4. Collaboration Informal Mechanisms Between The Local Government Unit And An Institution Of Higher Education As Assessed By The Respondents When They Are Grouped According To Type Of Respondents, Age, Highest Educational Attainment, And Monthly Family Income

	M	SD	Description
As a whole	3.83	0.90	Occasionally
Type of Respondents			
Faculty Researcher/ Extensionist			
	4.13	0.46	Occasionally
LGU	3.30	1.23	Occasionally
Beneficiary	3.93	0.78	Occasionally
Age			
21-30	4.07	0.51	Occasionally
31-40	3.29	1.16	Occasionally
41-50	4.09	0.68	Occasionally
51 up	3.76	0.97	Occasionally
Highest Educational Attainment			
High School	4.16	1.03	Occasionally
Bachelor's Degree	3.53	1.00	Occasionally
Master's Degree	4.10	.46	Occasionally
Doctorate Degree	4.15	0.47	Occasionally
Monthly Family Income			
High Level	4.32	0.44	Occasionally
Middle Level	3.85	0.90	Occasionally
Low Level	3.70	0.96	Occasionally

Scale: Frequently (4.50-5.00), Occasionally (3.50-4.40), Rarely (2.50-3.49), Very Rarely (1.50-2.49), Never (1.00-1.49)

The Significant Differences in Formal Collaboration Mechanisms between the Local Government Unit and an institution of Higher Education as assessed by the Respondents when grouped according to Type Of Respondents, Age, Highest Educational Attainment, and Monthly Family Income

Table 4 shows if statistically significant differences exist in formal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when grouped according to type of respondents, age, highest educational attainment, and monthly family income.

The results showed that the when the Kruskal-Wallis H test was employed, statistically significant differences were noted in formal and informal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when grouped according to type of respondents [$H(2)=13.14$, $p=0.00$], age [$H(2)=10.57$, $p=0.01$], highest educational attainment [$H(2)=12.75$, $p=0.01$], and monthly family income [$H(2)=6.81$, $p=0.03$]. Hence, the hypothesis was rejected.

This result indicates that differences in formal collaboration mechanisms based on age, education, and income will significantly impact the effectiveness of Collective Impact initiatives. While Collective Impact emphasizes a shared agenda and common goals, uneven participation and engagement due to these demographic differences can hinder progress.

Table 5. Significant Differences in Formal Collaboration Mechanisms between the Local Government Unit and an Institution of Higher Education As Assessed By the Respondents When Grouped According to Type of Respondents, Age, Highest Educational Attainment, and Monthly Family Income

Variables	H	Sig	Remarks	Decision
Type of Respondents	13.14	0.00	Significant	Reject Ho
Age	10.57	0.01	Significant	Reject Ho
Highest Educational Attainment	12.75	0.01	Significant	Reject Ho
Monthly Family Income	6.81	0.03	Significant	Reject Ho

*Sig at .05

Significant Differences in Informal Collaboration Mechanisms between the Local Government Unit and an Institution of Higher Education As Assessed By the Respondents When Grouped According to Type of Respondents, Age, Highest Educational Attainment, and Monthly Family Income

Table 5 shows if statistically significant differences exist in informal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when grouped according to type of respondents, age, highest educational attainment, and monthly family income.

The results showed that the when the Kruskal-Wallis H test was employed, statistically significant differences were noted in formal and informal collaboration mechanisms between the local government unit and an institution of higher education as assessed by the respondents when grouped according to type of respondents [$H(2)=8.46$, $p=0.02$], age [$H(2)=8.95$, $p=0.03$], highest educational attainment [$H(2)=11.38$, $p=0.03$], and monthly family income [$H(2)=7.05$, $p=0.03$]. Hence, the hypothesis was rejected.

This result indicates that differences in informal collaboration mechanisms based on age, education, and income will significantly impact the effectiveness of Collective Impact initiatives. While Collective Impact emphasizes a shared agenda and common goals, uneven participation and engagement due to these demographic differences can hinder progress.

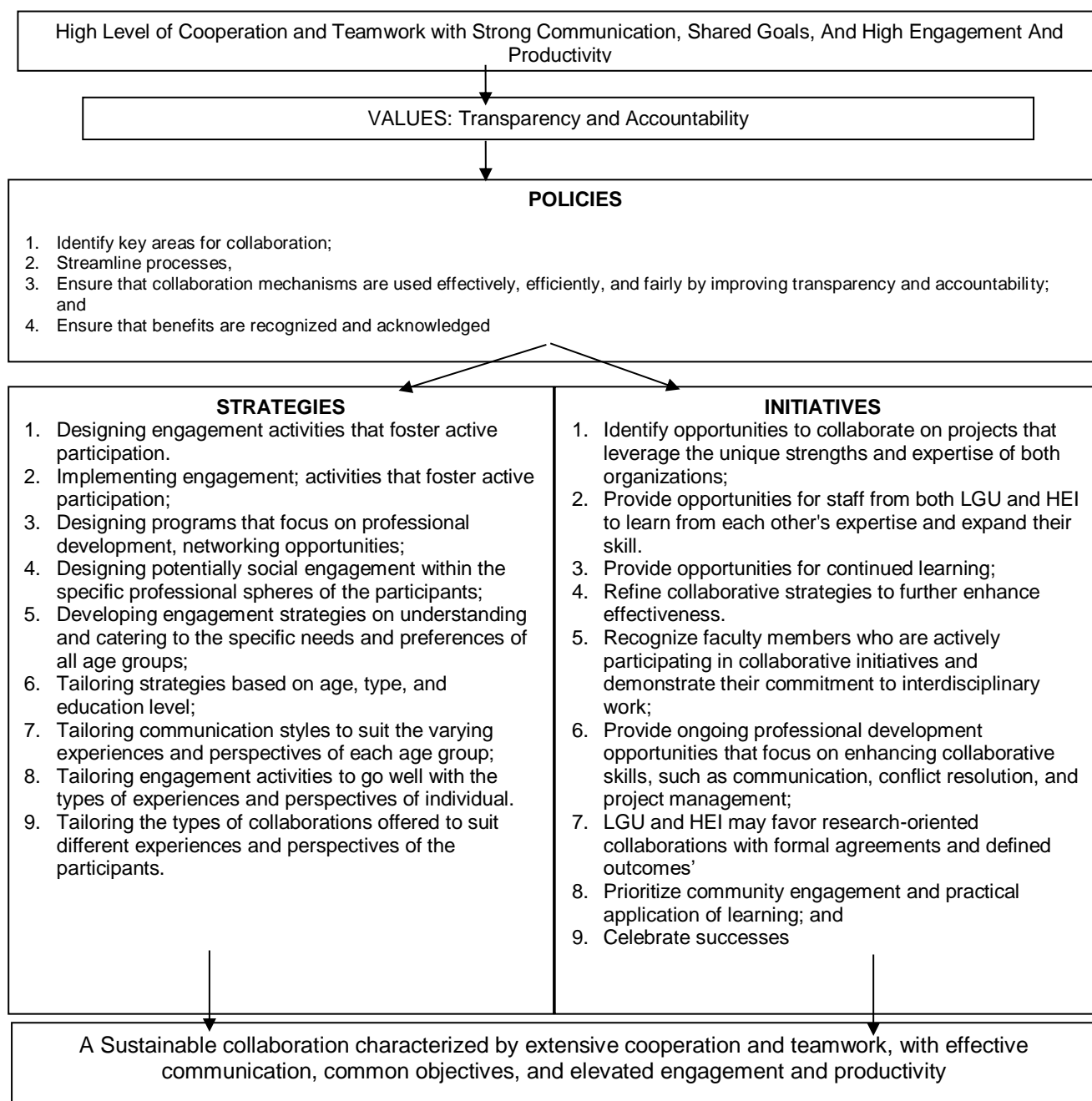
Table 6. Significant Differences in Informal Collaboration Mechanisms between the Local Government Unit And An Institution Of Higher Education As Assessed By The Respondents when grouped According to Type Of Respondents, Age, Highest Educational Attainment, and Monthly Family Income

Variables	Mean Rank	H	Sig	Remarks	Decision
Type of Respondents	70.27	8.46	0.02	Significant	Reject H ₀
Age	70.13	8.95	0.03	Significant	Reject H ₀

Highest Educational Attainment	49.72	11.38	0.03	Significant	Reject H ₀
Monthly Family Income	81.94	7.05	0.03	Significant	Reject H ₀

*Sig at .05

A Proposed Strategic Policy Framework for HEI-LGU Partnership



Conclusions

Based on the findings on the study, the following conclusions were drawn:

1. The programs and projects are primarily attracting participants who are in their prime working years, potentially with a more established professional background and a degree of financial stability. This

demographic profile could also suggest that the activity is aligned with the needs and interests of this specific group, potentially offering opportunities for professional development or social engagement.

2. The findings indicated that formal and informal mechanisms are used often or regularly by the local government unit and a higher education institution. It implies that the said mechanisms are employed at short intervals or habitually," as assessed by the respondents when taken as a whole and when categorizing respondents by type, age, highest educational level, and monthly family income. In particular, respondents with a high income level assessed formal collaboration mechanisms as used sometimes but not often or not regularly. It indicates that formal mechanism is utilized on a few occasions, but not frequently by the local government unit and a higher education institution.
3. The significant differences in formal and informal collaboration mechanisms are found across respondent categories (type, age, education level, income). These means that these demographic factors influence how LGU and HEI prefer to collaborate. This suggests that tailoring collaboration approaches based on these factors could lead to more effective and engaging learning or work experiences.
4. A statistically significant relationship is found between collaboration mechanisms. This suggests that the chosen methods and structures for collaboration between LGU and HEI significantly impact how much and how deeply individuals and groups engage in collaborative activities.

Recommendations

Based on the foregoing conclusions, the following recommendations were forwarded:

1. The programs and projects of LGU and HEI predominantly attract participants in their prime working years. This suggests the initiatives are likely well-aligned with their needs and interests. This demographic profile could be leveraged to enhance the programs by focusing on professional development, networking opportunities, and potentially social engagement within their specific professional spheres such as conferences, participating in online communities, joining professional organizations, and engaging in social events with colleagues.
2. The formal and informal mechanisms are used frequently by a local government unit (LGU) and a higher education institution (HEI). The recommendations should focus on ensuring these mechanisms are used effectively, efficiently, and fairly by improving transparency and accountability, strengthening feedback loops between stakeholders, and promoting inclusivity and participation. If respondents with high monthly incomes indicate inconsistent use of formal collaboration mechanisms between LGUs and HEIs, recommendations should focus on establishing clear guidelines, promoting regular communication, and incentivizing collaboration. This includes identifying key areas for collaboration, streamlining processes, and ensuring that benefits are recognized and acknowledged like brainstorming with experts, delegating tasks on shared projects, and collaborating on documents. Streamlining processes can involve automating workflows, using customizable templates, and improving communication.
3. Significant differences in formal and informal collaboration mechanisms are found across respondent categories (type, age, education level, and income), then tailoring collaboration approaches based on these demographic factors could lead to more effective and engaging learning or work experiences for Local Government Units (LGUs) and Higher Education Institutions (HEIs). Younger generations may prefer more dynamic, informal, and technology-driven collaboration methods (online platforms, social media). Older generations may prefer more structured, formal, and face-to-face interactions. Therefore, LGU and HEI may favor research-oriented collaborations with formal agreements and defined outcomes, and may prioritize community engagement and practical application of learning.
4. Future researchers may investigate how different collaboration strategies affect the breadth and depth of collaborative activities and the level of active participation. Additionally, research should delve into how the extent of collaboration influences the level of engagement, and vice versa, to understand the effects of these factors. Further, they should consider post hoc analysis on collaboration and engagement levels including longitudinal studies and explore factors influencing engagement.

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