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Faculty Extensionists: Key Driver for Implementing Extension Services of State Universities in the Philippines

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Abstract

This study explores the pivotal role of faculty extensionists in driving the success of extension services in State Universities and Colleges (SUCs) in the Philippines. With the backdrop of the Commission on Higher Education (CHED) Memorandum Order No. 52 Series of 2016, this research emphasizes the necessity of integrating extension activities with academic programs to create a dynamic and socially responsive educational environment. Through a mixed-method research design involving 219 faculty members across various campuses of NEUST, the study identifies the roles, motivations, support mechanisms, and challenges faced by faculty extensionists. Findings reveal diverse roles undertaken by faculty members, ranging from project leaders to consultants, driven by a blend of intrinsic and extrinsic motivations. Support received includes honorariums, academic credits, and logistical assistance, while challenges encompass cooperation with partner communities, time management, and funding constraints. The study underscores the importance of institutional support, interdisciplinary collaboration, and robust community engagement strategies in enhancing the effectiveness of extension services. Recommendations for optimizing faculty engagement in extension activities are discussed, highlighting the need for comprehensive training, streamlined support mechanisms, and fostering partnerships with community stakeholders.

Keywords
Academic Engagement, Community Development, Extension Services, Faculty Extensionists, Philippines

1. Introduction

Importance of integrating extension services within the academic framework of State Universities and Colleges (SUCs) in the Philippines. This directive from the Commission on Higher Education (CHED) underscores the significance of extension work as a bridge between the university's intellectual resources and the community's needs. By mandating the inclusion of extension activities as a core component of university operations, CHED Memorandum Order No. 52 Series of 2016 aims to foster a more dynamic and socially responsive educational environment. Faculty extensionists, as key drivers of this initiative, are thus placed at the forefront of transforming academic knowledge into practical solutions that address pressing community challenges. This reinforced mandate elevates the role of faculty members not just as educators and researchers, but as vital agents of community development. Through their direct engagement in extension services, faculty members have the unique opportunity to lead transformative projects that can enhance community welfare, stimulate local economies, and promote sustainable development. Their work in navigating the complexities of grant acquisition, project management, and interdisciplinary collaboration is pivotal in ensuring the success of extension initiatives. The emphasis placed by CHED on the importance of extension services thus highlights a growing recognition of the university's role in societal advancement, calling for a more integrated approach that values instruction, research, and extension as interconnected facets of academic excellence and community service.

Faculty members play a significant role in university extension services, with their contributions varying across different universities globally. Misra et al. (2021) highlight the importance of understanding faculty workloads,

especially in terms of equity and clarity, which can influence their engagement in extension services. Santiago et al., (2023) and Adedoyin & Soykan (2020) discuss how the Covid-19 pandemic has led to challenges and opportunities in online learning, emphasizing the need for interventions to support learners, which can impact faculty roles in extension services. Montebon et al. (2022) delve into community extension profiling, showcasing how university personnel, including faculty, can collaborate to engage in social programs, shedding light on the collaborative aspect of faculty roles in extensions. Moreover, Purcell et al. (2021) explore boundary spanning leadership among community-engaged faculty, underscoring the role of faculty in building bridges between the university and the community, which is essential in extension services. Kinder et al. (2023) discuss the factors influencing job satisfaction among Physical Education Teacher Education (PETE) faculty members, highlighting the importance of understanding faculty perspectives and experiences in different institutional contexts, which can impact their involvement in extension services. Faculty members' roles in university extension services are influenced by various factors such as workload perceptions, pandemic challenges, community engagement, and job satisfaction. Understanding these factors across different institutional, regional, and national contexts is crucial for enhancing the effectiveness of faculty contributions to extension services globally.

Faculty engagement in extension activities is driven by a combination of intrinsic and extrinsic motivations. Intrinsic motivations, such as personal satisfaction, community service, and professional development, play a significant role in encouraging faculty members to participate in extension activities. These intrinsic motivations are closely linked to the fulfillment of psychological needs for autonomy, competence, and relatedness (Wu & Lee, 2020). On the other hand, extrinsic motivations, including compliance with institutional mandates and accreditation requirements, also influence faculty engagement. Extrinsic motivation has been found to be positively related to self-efficacy and learning engagement (Wu et al., 2020). Moreover, the engagement of faculty members in extension activities is crucial for the success of academic institutions, particularly in fields like academic medicine where motivated faculty are essential for institutional success (Olson, 2023). Studies have shown that high levels of engagement, which are closely related to intrinsic motivation, can increase the risk of burnout (Taris et al., 2020). Therefore, it is essential to balance intrinsic motivation with self-care practices to prevent burnout while actively engaging in extension activities. Additionally, faculty motivation has been positively associated with engagement in faculty development activities and the utilization of teaching best practices (Hanson et al., 2022). This highlights the importance of understanding and nurturing faculty motivations to enhance their engagement in extension activities. Institutions can support faculty engagement by recognizing and rewarding their efforts, as extrinsic motivators have been shown to be important in encouraging faculty participation (Johnston et al., 2022). Faculty engagement in extension activities is a complex interplay of intrinsic and extrinsic motivations. Understanding and addressing these motivations are crucial for promoting active participation and ensuring the success of extension initiatives within academic institutions.

Support systems for faculty involved in extension work encompass a variety of elements, including financial and non-financial support. Financial support may include reduced teaching loads, honorariums, academic credits, or logistical assistance. On the other hand, non-financial support can come from institutions, faculty management, and partner universities (Suraya et al., 2021). The provision of such support is crucial as it impacts faculty satisfaction and overall program success. Studies have shown that faculty mentoring and financial support significantly influence program satisfaction (Tram et al., 2023). Additionally, the work environment plays a pivotal role in faculty retention, with faculty members more likely to stay long-term if they are satisfied with their work environment (Tassabehji, 2023). Comparing support systems across different institutions or countries can help identify best practices. For instance, in academic medicine, providing faculty members with options like salary reduction or furlough can assist them in finding solutions that align with their needs (Spencer et al., 2021). Furthermore, committing to improving faculty salaries, providing compensation for diversity, equity, and inclusion (DEI) work, addressing medical school debt, and offering paid parental leave are essential steps for academic medical centers to enhance diversity and inclusion (Clark et al., 2022). A comprehensive support system that includes both financial and non-financial elements is vital for faculty engaged in extension work. By examining and comparing support systems across various institutions and countries, best practices can be identified to enhance faculty satisfaction, retention, and program success.

In examining the challenges faced by faculty members in delivering extension services, several key themes emerge from the literature. Cooperation with partner communities is highlighted as a significant challenge (Eschbach et al., 2022). This involves establishing effective partnerships and collaborations with various stakeholders to ensure the success of extension projects. Time management is another critical issue faced by faculty members, especially when balancing teaching, research, and extension responsibilities (Atwa et al., 2022). Funding constraints also pose a challenge, impacting the ability to implement and sustain extension initiatives (Stluka, 2023). Additionally, skill gaps among faculty members can hinder the delivery of high-quality extension services, emphasizing the need for continuous professional development and training (Mike et al., 2020; De Lara & Santos, 2024). To overcome these challenges, strategies such as leveraging evidence-based practices in community behavioral health programming have

been recommended (Eschbach et al., 2022). Establishing clear communication channels and utilizing various communication mechanisms during disasters can enhance the effectiveness of extension efforts (Mike et al., 2020). Moreover, developing partnerships with community organizations and engaging in collaborative projects can help address population health issues and promote sustainability (Watts & Green, 2023; Holston et al., 2020). Embracing innovative approaches like policy, systems, and environmental change through community coalitions can also drive successful outcomes in addressing challenges such as obesity in rural areas (Stluka, 2023; Holston et al., 2020). The literature underscores the importance of addressing challenges in implementing extension projects through effective cooperation, time management, funding strategies, and skill development. By adopting evidence-based practices, fostering strong partnerships, and embracing innovative approaches, faculty members can navigate these challenges and deliver impactful extension services to communities.

University extension services play a crucial role in impacting communities across various domains such as local development, education, health, and socio-economic status. Research has shown that agricultural extension services significantly contribute to poverty reduction and increased consumption among farmers (Mesfin et al., 2023). Additionally, community extension programs have been found to have a positive impact on community development and sustainability (Asio et al., 2022). These programs not only benefit the communities but also play a role in enhancing students' interests and community service participation (Asio et al., 2023). Moreover, university community programs, especially in the agricultural sector, have been identified as a dominant approach to national extension, disseminating agricultural innovations and aiding in rural development (Manik et al., 2021). The linkage between research, education, and extension services is crucial for rural development, creating a connection between technical assistance, research, and community services (Jaishi, 2020). However, challenges exist in measuring the impact of extension services due to the diverse topics covered, but efforts are being made to aggregate program impact to communicate the public value of these services better (Dobbins et al., 2021). Furthermore, it is essential for universities to foster strong university-community relationships through strategic planning and service-learning initiatives to ensure positive outcomes for community partners (Mitchell & Buckingham, 2020). While universities tend to benefit from long-term partnerships, there is a need to address the imbalance to prevent resentment and mistrust within communities (Harrison et al., 2020). Overall, university extension services play a vital role in community development and sustainability, with a focus on improving education, health, and socio-economic conditions.

In examining how different universities structure their extension services through policies and frameworks, it is crucial to consider various factors such as national education policies and institutional practices. National education policies, like the Commission on Higher Education (CHED) Memorandum Order No. 52, Series of 2016 in the Philippines, significantly influence the configuration of extension services within universities (Cristobal, 2023). Extension services can be organized in various ways, depending on the institutional context. They can be associated with public universities, government entities, or non-governmental organizations, each with its distinct operational model (Bowling et al., 2021). These structures are shaped by policies and frameworks that direct the provision of extension services at the local level (Huang et al., 2020). Institutional obstacles and challenges can impact the efficiency of extension services. Factors such as institutional instability, human resource constraints, and policy inconsistencies can impede the optimal delivery of extension services (Neupane & Jaishi, 2020). Overcoming these challenges necessitates a comprehensive understanding of institutional dynamics and a strategic approach to address them. Furthermore, the integration of technology, such as mobile phone applications, can improve the delivery of extension services. However, there may be limited utilization of such tools in certain contexts, leading to missed opportunities for enhancing the reach and impact of extension programs (Ezeh et al., 2021). The structuring of extension services within universities is a multifaceted process influenced by national policies, institutional frameworks, and technological advancements. Addressing institutional barriers, harnessing technology, and aligning with national education policies are critical steps in enhancing the effectiveness and impact of extension services in the academic setting.

Interdisciplinary collaboration is essential for enhancing the effectiveness of extension services by bringing together faculties from diverse academic backgrounds to work on projects. Professionals across various fields value interdisciplinary collaboration (Charoenmuang et al., 2020). For example, in STEM education, high school teachers believe that their subject areas can significantly contribute to interdisciplinary teams (Charoenmuang et al., 2020). In healthcare settings like pediatric oncology, interdisciplinary care is crucial for providing comprehensive services to patients (Graetz et al., 2023). The benefits of interdisciplinary collaboration are evident in various fields such as computer science, psychology, and mathematics education, where research has highlighted the advantages and challenges of interdisciplinary work in collaborative learning environments (Jacoba et al., 2024; Hmelo-Silver & Jeong, 2021). Additionally, in service delivery and healthcare, studies emphasize the importance of person-centered care and prevention strategies facilitated through interdisciplinary collaboration among healthcare providers (Lyhne et al., 2022).In academia, collaborative models support faculty-student mentoring and research endeavors, leading to increased retention rates and improved educational outcomes (Lukes, 2023). Interdisciplinary collaboration has also

played a significant role in developing innovative approaches to end-of-life care, with positive outcomes such as increased rates of dying at home (Kjellstadli et al., 2020). Interdisciplinary collaboration fosters innovation, improves service delivery, and enhances the quality of research and education across various disciplines. By breaking down silos between different fields of study, professionals can leverage their diverse expertise to address complex challenges effectively and drive positive outcomes in their respective domains.

Community engagement and relationship building are essential components of successful collaborations between universities and community partners. Strategies such as communication, cultural competence, and involving the community in project planning are key to fostering trust and achieving mutual goals (Dietrich et al., 2022). Effective community engagement involves prioritizing partnerships and allocating resources to engage with diverse communities, leading to increased participation and representation of minority groups (Andrasik et al., 2021). It is crucial to have intentional and robust community engagement strategies to ensure inclusivity and build trustworthy relationships between communities and institutions (Klusaritz et al., 2022). Community engagement not only enhances understanding of community perspectives but also increases the relevance and cultural sensitivity of research, ultimately improving the quality of outcomes and interventions (Han et al., 2021). Successful community engagement is an ongoing and iterative process that relies on mutual trust, transparency, and clearly defined roles for all partners involved (Turin, 2023). By mapping the community ecosystem and fostering mutual trust among stakeholders, community engagement can empower community members and enhance their capacity for meaningful engagement (Turin et al., 2023). For meaningful community engagement, it is crucial to focus on developing equitable partnerships, taking a community-centered approach, and employing culturally sensitive strategies (Turin et al., 2022). While ideal community engagement involves deep partnerships between researchers and communities, many research endeavors fall short of achieving this level of collaboration (Shadiev, 2023). Developing intercultural competence through communication and shared insights can enhance understanding and collaboration between individuals from different backgrounds. Successful community engagement and relationship building require a commitment to equitable partnerships, cultural sensitivity, and ongoing communication with all stakeholders involved. By prioritizing community involvement, fostering trust, and ensuring transparency, universities and community partners can work together effectively to address shared challenges and achieve meaningful outcomes.

2. Materials and Methods

The study utilized a mixed method research design. Mixed method is a research approach whereby researchers collect and analyze both quantitative and qualitative data within the same study (Shorten & Smith, 2017). Quantitative design was utilized in the analysis of data on the Role of Faculty Extension Implementers, Reason of Faculty Implementers in Extension Engagement, Support Received by the Faculty Implementers in Extension Engagement, and Challenges Encountered by the Faculty Implementers. Purposive sampling was also utilized to identify the members of the faculty with experiences in implementing extension programs. Through the recommendations from the deans and directors of the University, 219 faculty members across the different campuses of NEUST served as the respondents of the study.

3. Results and Discussion

The following section offer insights into the roles, motivations, and support mechanisms for faculty extension implementers at the University. These findings illuminate the diverse responsibilities undertaken by faculty members, the factors driving their engagement in extension activities, and the support systems in place to facilitate their contributions. Through a structured analysis of these results, this section highlights the multifaceted nature of faculty involvement in extension projects and underscores the importance of institutional support in fostering impactful community outreach initiatives.

Table 1 provides a glimpse into the pivotal roles assumed by faculty extension implementers within an academic context, shedding light on the diverse responsibilities that contribute to the success of extension initiatives.

Table 1. Role of Faculty Extension Implementers

Role in Extension Implementation	f	%
Project Leader	45	20.55
Component Leader	30	13.70
Support/Technical Staff	105	47.95
Trainer	91	41.55
Facilitator	121	55.25
Consultant/Adviser	6	2.74
Out of 219 total number of respondents per role		100.00

The data provides valuable insights into the diverse roles assumed by faculty members in the implementation of extension projects at the University. These roles encompass Project Leader, Component Leader, Support/Technical Staff, Trainer, Facilitator, and Consultant/Adviser, with corresponding frequencies and percentages.

The roles of Project Leader and Component Leader indicate the existence of a hierarchical structure in project management. Project Leaders, constituting 13.70%, oversee the entire project, ensuring its alignment with goals and objectives. Component Leaders (20.55%) take charge of specific components, ensuring detailed attention to key aspects of the projects. This distribution suggests a well-organized leadership framework for effective project coordination and execution. The roles of Trainer and Support/Technical Staff highlight the educational and technical dimensions of extension projects. Trainers (41.55%) play a crucial role in imparting knowledge and skills, emphasizing the educational aspect of community outreach. Meanwhile, Support/Technical Staff (47.95%) contribute technical expertise, ensuring that projects are implemented with a sound understanding of the relevant technologies and methodologies. This balance reflects a comprehensive approach to addressing both educational and technical aspects of community engagement.

The roles of Facilitator and Consultant/Adviser underscore the collaborative nature of extension projects. Facilitators (55.25%) play a pivotal role in guiding project processes, fostering effective communication, and ensuring smooth collaboration among stakeholders. On the other hand, a smaller group of faculty members (2.74%) serves as Consultants/Advisers, providing advisory input. This dual approach reflects a combination of hands-on collaboration and strategic advisory guidance in the implementation of extension initiatives. The diverse roles assumed by faculty members in extension projects at the University reflect a balanced and collaborative approach. The leadership structure ensures effective coordination, while the inclusion of educational, technical, and advisory roles underscores the multidimensional nature of community engagement. This data indicates a strategic and well-rounded strategy in utilizing the expertise of faculty members for successful extension project implementation. Table 2 offers valuable insights into the motivations propelling faculty implementers to actively participate in extension activities within the university context.

Table 2. Reason of Faculty Implementers in Extension Engagement

Reason for Engagement	f	%
Compliance with the mandated function of the University (IPCR)	212	96.80
Compliance to the accreditation	150	68.49
Contribute to people	132	60.27
Find satisfaction in doing extension	141	64.38
Love to serve people in the community	133	60.73
Others	6	2.74
total number of respondents per role		100.00

The data on faculty roles in extension projects at the University illuminates the intricate web of responsibilities shouldered by faculty members. Leadership and coordination roles, exemplified by Project Leaders and Component Leaders, delineate a structured hierarchy within project management. With Project Leaders at 13.70% overseeing the entire project and Component Leaders at 20.55% managing specific components, the data suggests a well-organized leadership framework that ensures effective project coordination and execution. This hierarchical distribution is instrumental in maintaining alignment with overarching project goals and objectives. Educational and technical expertise emerge as pivotal dimensions in the faculty's involvement in extension projects. Trainers, constituting 41.55%, play a critical role in imparting knowledge and skills, emphasizing the educational aspect of community outreach. Concurrently, Support/Technical Staff at 47.95% contribute technical expertise, ensuring that projects are executed with a robust understanding of relevant technologies and methodologies. This equilibrium in roles reflects a comprehensive strategy aimed at addressing both the educational and technical facets of community engagement, thereby enhancing the overall impact of extension initiatives.

Collaborative and advisory roles further characterize the faculty's engagement in extension projects. Facilitators, representing 55.25%, play a pivotal role in guiding project processes, fostering effective communication, and ensuring smooth collaboration among stakeholders. In contrast, a smaller group of faculty members (2.74%) serves as Consultants/Advisers, offering strategic advisory input. This dual approach underscores a combination of hands-on collaboration and strategic advisory guidance, emphasizing the University's commitment to a well-rounded implementation of extension initiatives. In conclusion, the multifaceted roles assumed by faculty members in extension projects showcase a balanced and collaborative approach. The structured leadership framework facilitates effective coordination, while the inclusion of educational, technical, and advisory roles underscores the multidimensional nature of community engagement. This data reflects a strategic and comprehensive strategy in leveraging faculty expertise for the successful implementation of extension projects, reinforcing the University's

commitment to impactful community outreach. Table 3 delves into the essential support mechanisms provided to faculty implementers engaged in extension activities within the academic realm. With a comprehensive overview from 219 respondents, this analysis examines the diverse forms of support extended to faculty members as they actively contribute to extension initiatives.

Table 3. Support Received by the Faculty Implementers in Extension Engagement

Support Received	f	%
Reduce workload or equivalent teaching load (ETL)	22	10.05
Honorarium	91	41.55
Credit for Academic Rank/Faculty Evaluation	66	30.14
Allowable representation and travelling allowances (RATA)	20	9.13
Service Credits	54	24.66
Incidental expenses (transportation, hotel meal, etc)	54	24.66
Terminal Cash	18	8.22
Supervision Cost of On-going	32	14.61
Recognition	34	15.53
Others	3	1.37
total number of respondents per role		100.00

The data on the support received by faculty members engaged in extension services provides a comprehensive overview of the various forms of support, shedding light on the institutional commitment to facilitating and recognizing their contributions. Among the identified forms of support, honorarium emerges as a predominant mechanism, with 41.55% of respondents benefiting from financial compensation. This reflects the institution's acknowledgment of the additional effort and time invested by faculty members in extension activities, serving as a motivational factor for sustained engagement.

Academic recognition is also a significant facet of support, as evidenced by 30.14% of respondents receiving credit for promotion on academic rank/faculty evaluation. This recognition indicates the University's commitment to integrating extension work into the broader academic framework, affirming the importance of community engagement in faculty career advancement. Such acknowledgment not only reinforces the value of extension efforts but also encourages faculty members to actively participate in community outreach initiatives.

In addition to financial and academic support, the data highlights other tangible forms of assistance. Service credits, incidental expenses coverage, and supervision costs are utilized to varying degrees, indicating a holistic approach to supporting faculty members engaged in extension projects. These diverse forms of support shows the institution's commitment to addressing not only the financial aspects of faculty involvement but also the practical and logistical considerations, promoting a conducive environment for meaningful community service.

Table 4 provides an exploration of the challenges confronted by faculty implementers engaged in extension projects within the academic landscape. Drawing insights from 219 respondents, this analysis outlines the diverse array of hurdles faced during the implementation of extension initiatives.

Table 4. Challenges Encountered by the Faculty Implementers

Challenges Encountered	f	%
Lack of cooperation of partner community	77	35.16
Insufficient time to monitor/evaluate extension projects	79	36.07
Inadequate knowledge and skills in implementing extension projects	8	3.65
Inadequate funds	35	15.98
Negative attitudes of extension beneficiaries	32	14.61
No emperical data to monitor and evaluate	10	4.57
Non-capacity to engage/role in extension projects	2	0.91
Poor linkage with other unit/org within and outside the institutions	26	11.87
Lack of administrative support to conduct monitoring and evaluating projects in the form of logistics, vehicles, etc.	14	6.39
Lack of awareness on the benefits that can be derived from it.	27	12.33
Insufficient immediate supervisor	5	2.28
Lack of qualified extension personnel	13	5.94
Others	0	0.00
total number of respondents per role		100.00

The challenges encountered by faculty members engaged in extension services at the University are diverse, reflecting the complex nature of community engagement. One prominent challenge, noted by 35.16% of respondents, is the lack of cooperation from partner communities. This indicates that establishing collaborative relationships with communities may be a significant hurdle, potentially arising from various factors such as communication barriers, cultural differences, or community resistance. Addressing this challenge requires effective strategies for community engagement and relationship-building to ensure mutual cooperation and understanding.

Insufficient time for monitoring and evaluating extension projects emerges as another major challenge, affecting 36.07% of respondents. This challenge points to the competing demands on faculty members' time, balancing teaching, research, and administrative responsibilities alongside extension commitments. Allocating dedicated time for monitoring and evaluation is crucial for the success and sustainability of extension initiatives. Universities may need to reconsider workload distribution and provide adequate institutional support to faculty members engaged in community service.

The challenges of inadequate knowledge and skills (3.65%), inadequate funds (15.98%), and negative attitudes of extension beneficiaries (14.61%) highlight the multifaceted nature of the obstacles faced. These challenges shows the importance of ongoing professional development, securing adequate funding mechanisms, and implementing effective community engagement strategies. It also emphasizes the need for awareness campaigns to promote the benefits of extension services among both faculty and community stakeholders. Addressing these challenges comprehensively will contribute to a more conducive environment for successful extension project implementation.

Discussion

Faculty members play various roles in project management, including Project Leaders, Component Leaders, Support/Technical Staff, Trainers, Facilitators, and Consultants/Advisers. This structured and collaborative approach to project management involves a hierarchical leadership structure essential for strategic project coordination. Project Leaders focus on overarching objectives, while Component Leaders handle specific components. The involvement of Trainers and Support/Technical Staff highlights the educational and technical contributions to community outreach, ensuring projects benefit from comprehensive knowledge and skills. Facilitators, representing the majority, emphasize the importance of collaboration and communication, essential for project success. Consultants/Advisers provide critical advisory support, showcasing a strategic use of faculty expertise for effective project implementation (Ahmad et al., 2022; Owusu-Manu et al., 2020). Research emphasizes the importance of balanced leadership, transferring authority between project managers and team members, fostering a collaborative project environment (Owusu-Manu et al., 2020). Effective project managers play a crucial role in creating a conducive working environment for project teams, promoting success (Fareed, 2023). Leadership competencies of project managers are vital for project success, and these competencies should be considered during project development (Podgórska & Pichlak, 2019; Ahmed et al., 2020). Studies show that effective project managers adapt their leadership behaviors to meet the needs of team members and the project environment, indicating the importance of flexible leadership styles (Henkel et al., 2019). The involvement of faculty members in various project roles reflects a well-rounded and effective approach to project management, leveraging their expertise for successful project outcomes. The distribution of roles among faculty members ensures a comprehensive coverage of project needs, from strategic coordination to technical support, highlighting the importance of a collaborative and structured leadership approach in project management.

Faculty involvement in extension activities is driven by a combination of extrinsic and intrinsic motivations. Externally, compliance with university mandates and accreditation requirements serves as a significant motivator for faculty participation in extension projects (Paulican & Intong, 2020). This external drive ensures alignment with institutional goals and obligations. Internally, intrinsic motivations such as the desire to contribute to community welfare, personal satisfaction from extension activities, and a passion for serving the community play crucial roles in faculty engagement (Ruth, 2020; Raina & Khatri, 2015). These intrinsic motivators reflect a deep-seated commitment to social responsibility and personal growth, highlighting the alignment between faculty members' professional duties and personal values. The literature suggests that faculty engagement in extension activities is influenced by various factors. For instance, faculty receptivity to assessment and the promotion of "buy-in" to assessment processes can impact their engagement (Dunn et al., 2020). Additionally, the availability, preparation, respect, and care that faculty project to students can positively influence both behavioral and emotional student engagement (Wilson et al., 2020). Furthermore, the individual motivation of faculty members, including their self-competence, self-efficacy, and attitude, plays a role in their international involvement (Li & Tu, 2015). Recognizing and nurturing these dual motivations—both extrinsic and intrinsic—is essential for fostering a more engaged and committed faculty body in extension projects. By acknowledging the importance of both institutional directives and personal values, universities can enhance the impact and sustainability of their community outreach initiatives. Understanding the complex interplay between external requirements and internal drives can lead to a more holistic approach to faculty involvement in extension activities, ultimately benefiting both the academic institution and the communities it serves.

The multifaceted nature of institutional support for faculty engaged in extension activities encompasses various mechanisms that are essential for promoting effective engagement. Financial incentives, such as honorariums, are prevalent and play a crucial role in motivating sustained faculty involvement by compensating for the additional effort and time dedicated to extension projects Scott et al. (2018). Academic recognition, through credits for academic rank or faculty evaluation, integrates extension work within the academic framework, emphasizing community engagement as part of faculty career progression (Finkelstein et al., 2016). The range of support mechanisms, including reduced workloads, service credits, coverage for expenses, and supervision costs, reflects a comprehensive approach to supporting faculty (Patel et al., 2016). These mechanisms not only address financial needs but also acknowledge logistical and practical challenges, demonstrating the institution's commitment to creating a supportive environment for extension activities. Research indicates that both financial and non-financial incentives are vital in enabling faculty members to contribute effectively to community service and extension initiatives (Ahmed et al., 2021). While financial incentives are commonly associated with increased motivation and performance, non-financial incentives, such as recognition and support, also play a significant role in enhancing engagement (Katuwal, 2023). Studies suggest that a combination of financial and non-financial incentives can lead to improved job satisfaction and performance among faculty members (Ormel et al., 2019). Moreover, the effectiveness of incentives in promoting behavior change and enhancing performance is influenced by factors such as motivation, satisfaction, and individual preferences (Charness & Grieco, 2018). Understanding the interplay between financial and non-financial incentives is crucial for designing support systems that cater to the diverse needs of faculty members engaged in extension activities. By recognizing the importance of both types of incentives, institutions can create a supportive environment that fosters faculty engagement, ultimately enhancing the impact and sustainability of extension projects.

The challenges faced by faculty members in executing extension projects are multifaceted and impact the effectiveness and sustainability of these initiatives. Lack of cooperation from partner communities and insufficient time for monitoring and evaluating projects are identified as major hurdles, indicating difficulties in establishing strong collaborative relationships and managing time constraints due to academic and research commitments Malisch et al. (2020) Menezes & Premnath, 2016). Additionally, challenges such as inadequate knowledge and skills for project implementation, insufficient funding, and encountering negative attitudes from extension beneficiaries further complicate the environment in which extension activities operate (Frueh et al., 2023; Devine et al., 2017). To address these challenges, enhancing professional development opportunities for faculty is crucial. This includes providing training to improve knowledge and skills necessary for successful project implementation (Stergiopoulou et al., 2022). Moreover, establishing more robust funding mechanisms is essential to ensure adequate resources for extension projects (Napoé, 2023). Effective strategies to foster positive perceptions of extension projects among beneficiaries are also needed to overcome negative attitudes and enhance community engagement (Johnston, 2023). Research suggests that creating a supportive framework for faculty-led extension initiatives requires a comprehensive approach that considers both financial and non-financial support mechanisms. Financial incentives, academic recognition, reduced workloads, and coverage for expenses are essential components of this framework (O'Donnell et al., 2022; Alam & Shaba, 2022). By addressing the identified challenges through enhanced support mechanisms, professional development opportunities, and improved funding strategies, institutions can create an environment that enables faculty members to effectively contribute to community service and extension initiatives, aligning with both community needs and academic objectives.

4. Conclusion and Recommendations

The conclusion of the study emphasizes the indispensable roles faculty extensionists serve in bridging academic resources with community needs within the Philippines' State Universities and Colleges (SUCs). Through their involvement, faculty members have been instrumental in leading projects that not only enhance community welfare but also stimulate local economies and promote sustainable development. Despite facing challenges such as limited cooperation from partner communities, time constraints, and funding shortages, faculty members' dedication to extension work shines through. Their roles are varied and multifaceted, encompassing project leadership, technical support, training, facilitation, and consultancy, each contributing uniquely to the success of extension initiatives. The study underscores the criticality of both intrinsic motivations—such as personal fulfillment and community service—and extrinsic factors, like institutional mandates and accreditation requirements, in driving faculty engagement in extension activities. Institutional support, in terms of honorariums, academic credits, and logistical assistance, alongside interdisciplinary collaboration and robust community engagement strategies, emerges as pivotal in enhancing the effectiveness of these services. Thus, the study highlights a growing recognition of the university's role in societal advancement and calls for a more integrated approach that values instruction, research, and extension as interconnected facets of academic excellence and community service.

To enhance the involvement of faculty in extension activities, it's crucial for the University to implement a comprehensive strategy that intertwines various elements crucial for the success and sustainability of these initiatives.

This approach involves launching detailed training programs that are designed to arm the faculty with a broad range of skills essential for the effective management and execution of extension projects. Such programs would cover everything from project management to community engagement and technical expertise, ensuring faculty are well-equipped to face the challenges of their roles. Simultaneously, fostering an environment that encourages interdisciplinary collaboration stands as a cornerstone of this strategy. By bringing together faculty members from diverse academic backgrounds, the University can cultivate a rich tapestry of perspectives and expertise, significantly enriching the approach to meeting community needs. This collaborative spirit is further bolstered by strengthening institutional support in the form of enhanced access to funding, resources, and administrative assistance, which together work to reduce bureaucratic barriers and facilitate a smoother engagement in extension activities. Building and nurturing partnerships with community organizations and stakeholders also play a pivotal role in this strategy. Such partnerships not only enhance trust and communication but also amplify the collaborative impact of extension initiatives. Additionally, supporting faculty in managing their time and workload effectively is essential to prevent burnout and ensure their continuous, sustained engagement with extension work. This includes investing in robust monitoring and evaluation frameworks to assess the impact of these activities, guiding future improvements, and focusing on professional development opportunities to keep faculty members engaged and abreast of the latest practices in community outreach. Recognizing the value of extension work and the contributions of faculty through awareness campaigns and accolades further incentivizes participation, promoting a culture of engagement within the university community. Finally, addressing the common challenges related to community engagement, such as communication barriers and resistance from community members, necessitates a proactive strategy and the establishment of support mechanisms to empower faculty in navigating these issues effectively. By adopting such a multifaceted approach, the University not only fosters a supportive environment conducive to impactful community outreach but also maximizes the positive effects of extension projects on both faculty members and the communities they serve, thereby laying the groundwork for a more engaged, collaborative, and effective extension program.

Limitations:

The study on the role of faculty extensionists in Philippine State Universities and Colleges, specifically focusing on NEUST, presents insightful findings but comes with certain limitations. Primarily, the scope being confined to a singular institutional context limits the wider applicability of the results, as experiences and challenges in NEUST may not mirror those in other educational settings, both within the Philippines and globally. The reliance on quantitative data and self-reported measures from a specific subset of faculty members might also introduce biases, such as social desirability bias, skewing perceptions towards a more favorable view of extension activities. The cross-sectional design, while effective for a snapshot analysis, restricts the ability to trace the evolution of faculty engagement over time, and the sample size, though significant, represents a limited segment of the academic community engaged in extension work. Furthermore, while the study sheds light on the multifaceted roles and motivations of faculty extensionists, it does not fully explore the qualitative nuances of these experiences. A deeper, qualitative approach could enrich our understanding of the intricate dynamics influencing faculty engagement in extension services, including personal, institutional, and socio-cultural factors. Recognizing these limitations is essential for placing the study's contributions in context and for guiding future research towards a more comprehensive and nuanced exploration of faculty extension activities in the broader landscape of Philippine higher education.

Ethics Statements:

This research adhered to ethical guidelines and was conducted with approval from the relevant College Review Board, ensuring participant respect, confidentiality, and well-being. Informed consent was obtained from all participants, and the study was aligned with the Declaration of Helsinki principles to uphold ethical research standards. Identifiable information was anonymized to protect participant privacy.

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Conflict of Interest:

The authors declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article. The study was self-funded, and neither of the authors has received any financial or personal benefits from third parties that could be perceived as influencing the research outcomes. This declaration is made to assure transparent and ethical conduct of the study and its reporting.

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References:

1. Adedoyin, O. and Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. Interactive Learning Environments, 31(2), 863-875. https://doi.org/10.1080/10494820.2020.1813180

2. Ahmad, M., Abdulhamid, A., Wahab, S., & Nazir, M. (2022). Impact of the project manager's transformational leadership, influenced by mediation of self-leadership and moderation of empowerment, on project success. International Journal of Managing Projects in Business, 15(5), 842-864. https://doi.org/10.1108/ijmpb-03-2021-0066

3. Ahmed, K., Hashim, S., Khankhara, M., Said, I., Shandakumar, A., Zaman, S.,& Veiga, A. (2021). What drives general practitioners in the uk to improve the quality of care? a systematic literature review. BMJ Open Quality, 10(1), e001127. https://doi.org/10.1136/bmjoq-2020-001127

4. Ahmed, R., Philbin, S., & Cheema, F. (2020). Systematic literature review of project manager's leadership competencies. Engineering Construction & Architectural Management, 28(1), 1-30. https://doi.org/10.1108/ecam-05-2019-0276

5. Alam, M. and Shaba, S. (2022). Ict-enabled agricultural extension: how to promote and sustain?. Information Development, 39(3), 600-610. https://doi.org/10.1177/02666669221112367

6. Andrasik, M., Broder, G., Wallace, S., Chaturvedi, R., Michael, N., Bock, S., & Mensah, G. (2021). Increasing black, indigenous and people of color participation in clinical trials through community engagement and recruitment goal establishment. Plos One, 16(10), e0258858. https://doi.org/10.1371/journal.pone.0258858

7. Asio, J., Sardina, D., & Olaguir, J. (2023). Student's community service involvement: implications for a sustainable community extension service. Asian Journal of Community Services, 2(1), 65-76. https://doi.org/10.55927/ajcs.v2i1.2523

8. Asio, J., Sardina, D., Olaguir, J., Obispo, K., & Macaraeg, E. (2022). Community extension programs in a small suburban community: its impact and basis for institutional sustainability and support. International Journal of Humanities Management and Social Science, 5(2), 50-58. https://doi.org/10.36079/lamintang.ij-humass-0502.365

9. Atwa, H., Shehata, M., Al-Ansari, A., Kumar, A., Jaradat, A., Ahmed, J., & Salem, A. (2022). Online, face-to-face, or blended learning? faculty and medical students' perceptions during the covid-19 pandemic: a mixed-method study. Frontiers in Medicine, 9. https://doi.org/10.3389/fmed.2022.791352

10. Balaji, R., Saravanan, R., & Govindarasu, R. (2022). Study on the impact of human factors on health and safety performance. Available on the https://doi.org/10.53730/ijhs.v6ns5.10597

11. Bowling, L., Mazer, K., Bocardo-Delgado, E., Frankenberger, J., Pinto, J., Popovici, R., … & Prokopy, L. (2021). Addressing water resources and environmental quality programming needs in arequipa, peru. Journal of Contemporary Water Research & Education, 173(1), 1-12. https://doi.org/10.1111/j.1936-704x.2021.3354.x

12. Charness, G. and Grieco, D. (2018). Creativity and incentives. Journal of the European Economic Association, 17(2), 454-496. https://doi.org/10.1093/jeea/jvx055

13. Charoenmuang, M., Knobloch, N., & Tormoehlen, R. (2020). Defining interdisciplinary collaboration based on high school teachers' beliefs and practices of stem integration using a complex designed system. International Journal of Stem Education, 7(1). https://doi.org/10.1186/s40594-019-0201-4

14. Clark, S., Cohen, A., & Heard-Garris, N. (2022). Moving beyond words: leveraging financial resources to improve diversity, equity, and inclusion in academic medical centers. Journal of Clinical Psychology in Medical Settings, 30(2), 281-287. https://doi.org/10.1007/s10880-022-09914-4

15. Cristobal, E. B. (2023). The community extension of university as a driving factor to societal reform. JETT, 14(2). https://doi.org/10.47750/jett.2023.14.02.035

16. Devine, P., Forscher, P., Cox, W., Kaatz, A., Sheridan, J., & Carnes, M. (2017). A gender bias habit-breaking intervention led to increased hiring of female faculty in stemm departments. Journal of Experimental Social Psychology, 73, 211-215. https://doi.org/10.1016/j.jesp.2017.07.002

17. De Lara, M. G. O., & Santos, A. R. (2024). Service delivery and quality assurance in administrative units of higher education institutions during the pandemic [Special issue]. Corporate & Business Strategy Review, 5(1), 494–504. https://doi.org/10.22495/cbsrv5i1siart22

18. Dietrich, J., Munoz, J., Tshabalala, G., Makhale, L., Hornschuh, S., Rentas, F., … & Andrasik, M. (2022). A qualitative study of stakeholder and researcher perspectives of community engagement practices for hiv vaccine clinical trials in south africa. Journal of Community Psychology, 51(3), 998-1015. https://doi.org/10.1002/jcop.22951

19. Dobbins, C., Faulk, K., Roberts, A., & Lamm, A. (2021). Evaluating extension in times of crisis: assessing program impact during covid-19. Journal of International Agricultural and Extension Education, 28(2), 6-13. https://doi.org/10.5191/jiaee.2021.28201

20. Dunn, D., Troisi, J., & Baker, S. (2020). Faculty receptivity to assessment: changing the climate for evaluating teaching and learning in psychology. Scholarship of Teaching and Learning in Psychology, 6(3), 244-253. https://doi.org/10.1037/stl0000247

21. Eschbach, C., Contreras, D., & Kennedy, L. (2022). Three cooperative extension initiatives funded to address michigan's opioid crisis. Frontiers in Public Health, 10. https://doi.org/10.3389/fpubh.2022.921919

22. Ezeh, A., Eze, A., & Eze, E. (2021). Extension agents' use of mobile phone applications for agricultural extension service delivery in ebonyi state agricultural development programme, nigeria. Journal of Agricultural Extension, 25(1), 48-58. https://doi.org/10.4314/jae.v25i1.6

23. Fareed, M. (2023). Transformational leadership and project success: the moderating effect of top management support. Sage Open, 13(3). https://doi.org/10.1177/21582440231195685

24. Finkelstein, E., Haaland, B., Bilger, M., Sahasranaman, A., Sloan, R., Nang, E., & Evenson, K. (2016). Effectiveness of activity trackers with and without incentives to increase physical activity (trippa): a randomised controlled trial. The Lancet Diabetes & Endocrinology, 4(12), 983-995. https://doi.org/10.1016/s2213-8587(16)30284-4

25. Frueh, T., Hiesinger, H., Bogert, C., Clark, J., Watters, T., & Schmedemann, N. (2023). Timing and origin of compressional tectonism in mare tranquillitatis. Journal of Geophysical Research Planets, 128(2). https://doi.org/10.1029/2022je007533

26. Graetz, D., Chen, Y., Devidas, M., Antillon-Klussmann, F., Fu, L., Quintero, K., … & Mack, J. (2023). Interdisciplinary care of pediatric oncology patients: a survey of clinicians in central america and the caribbean. Pediatric Blood & Cancer, 70(5). https://doi.org/10.1002/pbc.30244

27. Han, H., Xu, A., Mendez, K., Okoye, S., Cudjoe, J., Bahouth, M., … & Himmelfarb, C. (2021). Exploring community engaged research experiences and preferences: a multi-level qualitative investigation. Research Involvement and Engagement, 7(1). https://doi.org/10.1186/s40900-021-00261-6

28. Hanson, E., Gantwerker, E., Chang, D., & Nagpal, A. (2022). To teach or not to teach? assessing medical school faculty motivation to teach in the era of curriculum reform. BMC Medical Education, 22(1). https://doi.org/10.1186/s12909-022-03416-5

29. Harrison, T., Weigel, D., & Smith, M. (2020). Application of faith and learning. Metropolitan Universities, 31(3), 163-180. https://doi.org/10.18060/23986

30. Henkel, T., Marion, J., & Bourdeau, D. (2019). Project manager leadership behavior: task-oriented versus relationship-oriented. Journal of Leadership Education, 18(2). https://doi.org/10.12806/v18/i2/r8

31. Hmelo-Silver, C. and Jeong, H. (2021). Benefits and challenges of interdisciplinarity in cscl research: a view from the literature. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.579986

32. Holston, D., Stroope, J., Cater, M., Kendall, M., & Broyles, S. (2020). Implementing policy, systems, and environmental change through community coalitions and extension partnerships to address obesity in rural louisiana. Preventing Chronic Disease, 17. https://doi.org/10.5888/pcd17.190284

33. Huang, Y., Cox, A., & Sbaffi, L. (2020). Research data management policy and practice in chinese university libraries. Journal of the Association for Information Science and Technology, 72(4), 493-506. https://doi.org/10.1002/asi.24413

34. Increasing Collaboration Between Extension and University Faculty: The .... (n.d). https://scholarsjunction.msstate.edu/cgi/viewcontent.cgi?article=1381&context=jhse

35. Jacoba, F. P., Santos, A. R., Armas, K. L., & Gamit, A. M. (2024). A comprehensive analysis of a science and technology university's alignment with the performance excellence framework: A governance outlook study. Journal of Governance & Regulation, 13(3), 213–223. https://doi.org/10.22495/jgrv13i3art18

36. Jaishi, M. (2020). Strengthening research-education-extension (r-e-e) linkage in new context of federal structured nepal. Responsible Education Learning and Teaching in Emerging Economies, 2(1), 1-11. https://doi.org/10.26710/relate.v2i1.1309

37. Johnston, A., Malhi, R., Cofie, N., Jokic, R., Goertzen, J., Smith-Windsor, T., … & Bell, A. (2022). Currencies of recognition: what rewards and recognition do canadian distributed medical education preceptors value?. Mededpublish, 12, 12. https://doi.org/10.12688/mep.17540.1

38. Johnston, J. (2023). Henry s. pennypacker, 1937–2023. Journal of Applied Behavior Analysis, 57(1), 25-26. https://doi.org/10.1002/jaba.1041

39. Katuwal, B. (2023). Incentives as a driving force for scholarly activity in general surgery training: survey of program directors and our institution's experience. The American Surgeon, 89(12), 6114-6120. https://doi.org/10.1177/00031348231191209

40. Kinder, C., Richards, K., Trad, A., Woods, A., & Graber, K. (2023). Perceived organizational support, marginalization, isolation, emotional exhaustion, and job satisfaction of pete faculty members. European Physical Education Review, 29(4), 475-492. https://doi.org/10.1177/1356336x231159636

41. Kjellstadli, C., Allore, H., Husebø, B., Flo, E., Sandvik, H., & Hunskaar, S. (2020). General practitioners' provision of end-of-life care and associations with dying at home: a registry-based longitudinal study. Family Practice, 37(3), 340-347. https://doi.org/10.1093/fampra/cmz059

42. Klusaritz, H., Maki, J., Levin, E., Ayala, A., Nodora, J., Coyne-Beasley, T., & Cunningham, S. (2022). A community-engaged approach to the design of a population-based prospective cohort study to promote bladder health. Neurourology and Urodynamics, 42(5), 1068-1078. https://doi.org/10.1002/nau.25098

43. Li, B. and Tu, Y. (2015). Motivations of faculty engagement in internationalization: a survey in china. Higher Education, 71(1), 81-96. https://doi.org/10.1007/s10734-015-9890-x

44. Lukes, L. (2023). Designing a collaborative faculty-student mentoring model in a large, complex science curriculum development team project. New Directions for Teaching and Learning, 2023(175), 61-70. https://doi.org/10.1002/tl.20559

45. Lyhne, C., Bjerrum, M., & Jørgensen, M. (2022). Person-centred care to prevent hospitalisations – a focus group study addressing the views of healthcare providers. BMC Health Services Research, 22(1). https://doi.org/10.1186/s12913-022-08198-6

46. Malisch, J., Harris, B., Sherrer, S., Lewis, K., Shepherd, S., McCarthy, P., … & Deitloff, J. (2020). In the wake of covid-19, academia needs new solutions to ensure gender equity. Proceedings of the National Academy of Sciences, 117(27), 15378-15381. https://doi.org/10.1073/pnas.2010636117

47. Manik, T., Timotiwu, P., & Pramono, E. (2021). The role of university community programs in disseminating agriculture innovation: a case study in sekincau region, west lampung, indonesia. E3s Web of Conferences, 306, 03022. https://doi.org/10.1051/e3sconf/202130603022

48. Menezes, S. and Premnath, D. (2016). Near-peer education: a novel teaching program. International Journal of Medical Education, 7, 160-167. https://doi.org/10.5116/ijme.5738.3c28

49. Mesfin, H., Tirivayi, N., Nillesen, E., & Tessema, Y. (2023). The impact of agricultural extension service on the uptake of various agricultural technologies in ethiopia. Africa Development, 47(4), 77-105. https://doi.org/10.57054/ad.v47i4.2978

50. Mike, M., Rampold, S., Telg, R., & Lindsey, A. (2020). Utilizing extension as a resource in disaster response: florida extension's communication efforts during the 2017 hurricane season. Journal of Applied Communications, 104(1). https://doi.org/10.4148/1051-0834.2308

51. Misra, J., Kuvaeva, A., O'Meara, K., Culpepper, D., & Jaeger, A. (2021). Gendered and racialized perceptions of faculty workloads. Gender & Society, 35(3), 358-394. https://doi.org/10.1177/08912432211001387

52. Mitchell, D. and Buckingham, G. (2020). Transforming plans into community impact: strategic planning as service-learning in public and nonprofit administration graduate programs. Teaching Public Administration, 39(1), 9-25. https://doi.org/10.1177/0144739420929380

53. Montebon, R., Bachanicha, R., Monton, M., Engkong, J., & Labana, A. (2022). Community extension profiling of the teaching and non-teaching personnel of the university. Jpair Multidisciplinary Research, 50(1), 1-12. https://doi.org/10.7719/jpair.v50i1.442

54. Napoé, G. (2023). A framework for diversifying obstetrics and gynecology training programs. Obstetrics and Gynecology, 143(2), 204-209. https://doi.org/10.1097/aog.0000000000005467

55. Neupane, A. and Jaishi, M. (2020). Agricultural extension service delivery in provincial and local government of nepal: an integrative literature review. Journal of the Institute of Agriculture and Animal Science, 269-277. https://doi.org/10.3126/jiaas.v36i1.48429

56. O'Donnell, C., O'Brien, B., Markey, K., McCarthy, J., Flaten, C., Mueller, C., … & Graham, M. (2022). Transatlantic collaborations: baccalaureate nursing students' experiences of participating in a semester-long study abroad program. Nursing Education Perspectives, 43(6), 357-362. https://doi.org/10.1097/01.nep.0000000000001000

57. Olson, L. (2023). Well-being grants in an academic medical center: a case example. Journal of Clinical and Translational Science, 7(1). https://doi.org/10.1017/cts.2023.615

58. Ormel, H., Kok, M., Kane, S., Ahmed, R., Chikaphupha, K., Rashid, S., … & Koning, K. (2019). Salaried and voluntary community health workers: exploring how incentives and expectation gaps influence motivation. Human Resources for Health, 17(1). https://doi.org/10.1186/s12960-019-0387-z

59. Owusu-Manu, D., Debrah, C., Amissah, L., Edwards, D., & Chileshe, N. (2020). Exploring the linkages between project managers' mindset behaviour and project leadership style in the ghanaian construction industry. Engineering Construction & Architectural Management, 28(9), 2690-2711. https://doi.org/10.1108/ecam-03-2020-0149

60. Patel, M., Asch, D., Rosin, R., Small, D., Bellamy, S., Heuer, J., … & Volpp, K. (2016). Framing financial incentives to increase physical activity among overweight and obese adults. Annals of Internal Medicine, 164(6), 385. https://doi.org/10.7326/m15-1635

61. Paulican, J. and Intong, J. (2020). Determinants of extension productivity of the faculty in state universities and colleges in mindanao, philippines. International Journal of Advanced Research, 8(7), 1542-1552. https://doi.org/10.21474/ijar01/11423

62. Podgórska, M. and Pichlak, M. (2019). Analysis of project managers' leadership competencies. International Journal of Managing Projects in Business, 12(4), 869-887. https://doi.org/10.1108/ijmpb-08-2018-0149

63. Purcell, J., Pearl, A., & Schyndel, T. (2021). Boundary spanning leadership among community-engaged faculty: an exploratory study of faculty participating in higher education community engagement. Engaged Scholar Journal Community-Engaged Research Teaching and Learning, 6(2), 1-30. https://doi.org/10.15402/esj.v6i2.69398

64. Raina, K. and Khatri, P. (2015). Faculty engagement in higher education: prospects and areas of research. On the Horizon the International Journal of Learning Futures, 23(4), 285-308. https://doi.org/10.1108/oth-03-2015-0011

65. Ruth, T. (2020). Motivational influences on land-grant faculty engagement in science communication. Journal of Agricultural Education, 61(2), 77-92. https://doi.org/10.5032/jae.2020.02077

66. Santiago, J. M., Santos, A. R., & Gamit, A. M. (2022). COVID-19 vaccine hesitancy among the university students and personnel. International Journal of Public Health Science (IJPHS), 12(1), 268. https://doi.org/10.11591/ijphs.v12i1.22111

67. Scott, K., Beckham, S., Gross, M., Pariyo, G., Rao, K., Cometto, G., … & Perry, H. (2018). What do we know about community-based health worker programs? a systematic review of existing reviews on community health workers. Human Resources for Health, 16(1). https://doi.org/10.1186/s12960-018-0304-x

68. Shadiev, R. (2023). Intercultural competence development through a tele-collaborative project supported by speech-enabled corrective feedback technology. Journal of Computer Assisted Learning, 40(2), 697-714. https://doi.org/10.1111/jcal.12906

69. Shorten, A., & Smith, J. (2017). Mixed methods research: expanding the evidence base. Evidence-Based Nursing, 20(3), 74–75. https://doi.org/10.1136/EB-2017-102699

70. Spencer, S., Burrows, C., Lacher, S., Macheledt, K., Berge, J., & Ghebre, R. (2021). Framework for advancing equity in academic medicine and science: perspectives from early career female faculty during the covid-19 pandemic. Preventive Medicine Reports, 24, 101576. https://doi.org/10.1016/j.pmedr.2021.101576

71. Stergiopoulou, K., Andrews, D., Edberg, N., Halekas, J., Lester, M., Sánchez–Cano, B., & Gruesbeck, J. (2022). A two-spacecraft study of mars' induced magnetosphere's response to upstream conditions. Journal of Geophysical Research Space Physics, 127(4). https://doi.org/10.1029/2021ja030227

72. Stluka, S. (2023). Facilitating nutrition and physical activity-focused policy, systems, and environmental change in rural areas: a methodological approach using community wellness coalitions and cooperative extension. Health Promotion Practice, 24(1_suppl), 68S-79S. https://doi.org/10.1177/15248399221144976

73. Suraya, F., Rahayu, T., & Alcuizar, R. (2021). Models of sports student exchange and the role of their support systems. Journal Sport Area, 6(2), 162-174. https://doi.org/10.25299/sportarea.2021.vol6(2).6500

74. Taris, T., Beek, I., & Schaufeli, W. (2020). The motivational make-up of workaholism and work engagement: a longitudinal study on need satisfaction, motivation, and heavy work investment. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.01419

75. Tassabehji, N. (2023). Exploring dental faculty perceptions of current strategies and barriers to retention. Journal of Dental Education, 87(12), 1654-1660. https://doi.org/10.1002/jdd.13384

76. Tram, J., Nwankwo, N., Khan, A., & Sabado, J. (2023). Impact of faculty mentoring on ethnic and racial minority student program satisfaction. Scholarship of Teaching and Learning in Psychology, 9(1), 50-62. https://doi.org/10.1037/stl0000231

77. Turin, T. (2023). Community ecosystemmapping: a foundational step for effective community engagement in research and knowledge mobilization. Journal of Primary Care & Community Health, 14. https://doi.org/10.1177/21501319231205170

78. Turin, T., Chowdhury, N., Rumana, N., Lasker, M., & Qasqas, M. (2022). Partnering with organisations beyond academia through strategic collaboration for research and mobilisation in immigrant/ethnic-minority communities. BMJ Global Health, 7(3), e008201. https://doi.org/10.1136/bmjgh-2021-008201

79. Turin, T., Kazi, M., Rumana, N., Lasker, M., & Chowdhury, N. (2023). Conceptualising community engagement as an infinite game implemented through finite games of 'research', 'community organising' and 'knowledge mobilisation'. Health Expectations, 26(5), 1799-1805. https://doi.org/10.1111/hex.13801

80. Watts, T. and Green, J. (2023). Collaborating with community partners to address population health in an online advanced nursing practice course. Nurse Educator, 48(6), 310-315. https://doi.org/10.1097/nne.0000000000001414

81. Wilson, D., Summers, L., & Wright, J. (2020). Faculty support and student engagement in undergraduate engineering. Journal of Research in Innovative Teaching & Learning, 13(1), 83-101. https://doi.org/10.1108/jrit-02-2020-0011

82. Wu, H., Li, S., Zheng, J., & Guo, J. (2020). Medical students' motivation and academic performance: the mediating roles of self-efficacy and learning engagement. Medical Education Online, 25(1). https://doi.org/10.1080/10872981.2020.1742964

83. Wu, W. and Lee, Y. (2020). Do work engagement and transformational leadership facilitate knowledge sharing? a perspective of conservation of resources theory. International Journal of Environmental Research and Public Health, 17(7), 2615. https://doi.org/10.3390/ijerph17072615