



## Research Article

# Enhancing the Diversity of Student Nursing Practitioners: A Formative Participatory Program Evaluation of a Northeastern Licensed Practical Nursing Program

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## Abstract

**Objective:** This study aimed to provide a program evaluation of a longstanding Licensed Practical Nursing (LPN) program within an urban U.S. context. This study aimed to identify strengths and weaknesses in the current LPN program, gather participant feedback, and make recommendations for future improvements emphasizing culturally and contextually appropriate programming in the health sector. In this manuscript, researchers detail a final evaluation report of an external evaluation of an established LPN program. This study was guided by three key evaluation questions, an examination of multiple documents, including grant proposals, student evaluation survey data, attendance records, and interviews with student alumni and administrative staff.

**Methods:** Using purposeful sampling, semi-structured interviews were collected to understand the experiences of participants and staff. Next, document analysis was utilized to examine the discourse and portrayal of the program. We provide a qualitative overview, and recommendations based on the experiences of students and staff involved in the LPN program. Four types of documents were examined in this Institutional Review Board (IRB) -approved study, including one grant proposal, 67 student evaluation surveys (n=67), two years of attendance records, two semi-structured interviews with student alumni, and three administrative staff to identify the goals of the evaluation and develop key evaluation questions to be answered by the data collection and analysis about the nursing program.

**Results:** Findings yield an emphasis on supporting the social conditions of students and staff. Researchers suggest using a participatory framework which entails working closely with key stakeholders to advance social outcomes that might be appropriate for the altruistic norms embedded in the larger healthcare and social work arena.

**Conclusion:** Findings highlight effective measures to refine and maintain a high-quality student-centered nursing program for working adults through contextually and culturally appropriate programming.

**Keywords:** nursing education, LPN, participatory research, student satisfaction, program evaluation

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## 1 INTRODUCTION

This study investigates the Northeastern Licensed Practical Nursing Program (NLPNP) offered by an organization in a large urban city in Pennsylvania. Nursing education programs can be evaluated using diverse methodologies for assessing program implementation and management. Al-Alawi R and Alexander GL found that the vast majority of such evaluations focus on summative evaluations, conducted at the end of a programming period and often to satisfy grant requirements, versus formative evaluations which emphasize programmatic improvements in real-time<sup>[1]</sup>. Researchers further report that many nursing programs are only evaluated for accreditation during the scheduled period<sup>[2]</sup>. As Spaulding DT states, the purpose of program evaluation is to enhance decision making through a comprehensive examination of the program to make recommendations for “programmatic refinement and success”<sup>[3]</sup>. Currently, program evaluations are often limited and insufficient as they hinder the progress of the cyclical feedback system used to inform decisions for real-time improvement of nursing programs. Furthermore, it is ineffective to rely exclusively on accreditation-oriented evaluations as they are designed to assess whether the nursing program meets external standards of quality and not a comprehensive ongoing system of evaluation. The current evaluation presents a useful case study of an alternative approach for the field that utilizes a formative assessment and participatory research methods to provide real-time improvements to the practical nursing program. This study offers a unique contribution to the field of nurse education programming because it identifies new recommendations for serving working adults in historically marginalized communities through specialized training programs not previously identified in the literature. The findings from this evaluation shed insights on effective measures to analyze both the feasibility and indicators of program success in LPN programs to inform quality improvement and collaborative, consultative partnerships in the healthcare sector. This study seeks to reconcile the historical racism and prejudice leading to racial inequities in the field by addressing the program’s approach, the unique challenges of this demographic, and the strengths of the urban apprenticeship program.

### 1.1 Evaluating Adult Nursing Education Programs

Program evaluation is an important tool for quality improvement and for establishing the sustainability of educational programs<sup>[4]</sup>. Al-Alawi R and Alexander GL found that the vast majority of current literature on adult nursing program evaluation is focused on summative evaluations versus formative evaluations, thus minimizing the potential usefulness of the evaluation<sup>[1]</sup>. However, formative evaluation reports can aid in the ongoing accreditation of adult nursing programs as necessary corrections can be made midstream to make experiences more effective for the people experiencing the problems<sup>[5]</sup>. Another key challenge of program evaluations seeking

to improve nursing program quality is that the nursing program itself changes frequently from one year to the next thereby making any interview with program alumni outdated. Currently, many nursing programs use student satisfaction data to evaluate nursing education programs<sup>[1,2,6]</sup>.

Smith MR et al. note that past and current literature on student satisfaction has highlighted the roles of satisfaction, students’ overall academic performance, as well as the relationship between satisfaction and academic outcomes<sup>[6]</sup>. Mohammed AK found that the level of student satisfaction with a nursing program is primarily associated with curriculum content and structure, faculty teaching strategies, social interactions among peers and faculty, and the educational environment<sup>[2]</sup>. A look at research for the past five years indicates that in nursing programs, student satisfaction is usually measured using quantitative methods<sup>[1,2]</sup>. Utilizing qualitative methods to measure student satisfaction provides a focused discussion on all the factors that impact students’ academic outcomes within the nursing program.

A participatory research theoretical framework was used in this study to emphasize a collaborative approach between the evaluators and participants. This theory includes centering the voices of the participants for effective inclusion of their contextual insight and expertise and is appropriate for program evaluation because it ensures that multiple stakeholders’ perspectives are being explored when determining the vital questions that will be examined throughout the evaluation. Furthermore, the community-driven approach was suitable for this evaluation as the NLPNP is situated within the broader community efforts of advancing public health equity for all residents of the Philadelphia community.

### 1.2 Program Sustainability and Adaptability

The sustainability and adaptability of nursing programs are critical in responding to changing healthcare landscapes and educational requirements. A study by Martone and Sireci<sup>[7]</sup> emphasized the importance of ongoing program evaluation and curriculum revision to ensure alignment with evolving student needs, healthcare standards, and technological advancements. Additionally, Alfauzan et al.<sup>[8]</sup> noted that the purpose of a curriculum, is to outline goals for student learning, the sequence of content delivery, methods of instruction, resources used for teaching, evaluation methods, and procedures for adjusting the plan based on experience or assessment data<sup>[9]</sup>. This study evaluated an established LPN program by assessing different components of the program including its curriculum and instructional practices as well student outcomes and competencies.

#### 1.2.1 Curriculum Design and Structure

The structure and content of nursing curricula

significantly influence educational outcomes and preparedness of graduates for clinical practice<sup>[10]</sup>. According to Lopez V and Cleary M<sup>[11]</sup> and Lopez et al.<sup>[12]</sup>, a well-designed curriculum integrates theoretical knowledge with clinical experiences, preparing students to meet the complex demands of modern healthcare settings<sup>[12]</sup>. Moreover, the integration of evidence-based practice and interprofessional education has been highlighted as crucial for enhancing the quality of nursing education<sup>[13]</sup>.

### 1.2.2 Student Outcomes and Competencies

Evaluating student outcomes is paramount in assessing the overall effectiveness of nursing programs. Key outcome measures often include licensure examination pass rates, graduation rates, student satisfaction, and employment placement rates<sup>[1,14,15]</sup>. Furthermore, research suggests that programs incorporating clinical preceptorships and structured clinical experiences contribute to improved competency development and professional readiness<sup>[16]</sup>.

The literature review in the context of this study served as a foundation upon which the analysis of the documents was built. The results obtained from the literature review played a dual role in shaping the analysis process, providing a comprehensive understanding of the existing body of knowledge, and allowing the researchers to identify key themes, concepts, and theoretical frameworks relevant to the study. These insights from the literature review guided the coding and analysis of the documents. Rather than a purely descriptive approach, the researchers utilized the outcomes of the literature review to inform the coding process of the documents<sup>[17]</sup>. The identified themes and concepts from the literature were used as a lens through which the documents were analyzed. This approach enabled the researchers to discern connections, patterns, and nuances within the documents that resonated with the established knowledge base. As a result, the integration of the literature review's findings into the document analysis process enhanced the depth and contextuality of the analysis, contributing to a more nuanced and insightful interpretation of the data.

The evaluation was guided by the following questions:

RQ1: How does student perception of satisfaction impact students participating in a tenured licensed practical nursing (LPN) program?

RQ2: How do students measure their satisfaction of education in the LPN program?

### 1.3 Program Being Evaluated

More than two decades ago, the inception of the NLPNP marked a significant contribution to the ongoing discussion surrounding apprenticeships. This program distinguishes itself by offering valuable career guidance and comprehensive training across various labor sectors, with a particular focus on healthcare and early childhood

education. Notably, in 2019, the NLPNP established a collaborative partnership with a prominent health and technology institute, resulting in the creation of a LPN Program, the primary subject of this assessment.

This LPN program is tailored to cater to the needs of working adults residing in the Philadelphia region, offering a 22-month part-time curriculum that includes evening and weekend classes. The program typically enrolls 25 to 30 students in each cycle, representing a diverse age range spanning from 18 to 70 years old.

## 2 METHODS

This research design aligns with the values of an equitable program evaluation, which seeks to collect information about the activities of the LPN program systematically to improve effectiveness and be accountable for positive and equitable results<sup>[5]</sup>. In previous studies, evaluators triangulated findings by conducting student interviews with alumni to better understand student experiences in a nursing program, which has been observed in prior evaluation reports<sup>[18]</sup>. Multiple sources of systematic data collection were utilized. Four types of documents were examined in this IRB-approved study, including one grant proposal, 67 student evaluation surveys (n=67), two years of attendance records, two semi-structured interviews with student alumni, and three administrative staff to identify the goals of the evaluation and develop key evaluation questions to be answered by the data collection and analysis about the nursing program. The documents included attendance records and grant proposals comprised a supplementary data source that served as evidence to provide context and understanding of the LPN program being evaluated<sup>[19]</sup>. Researchers conducted four semi-structured interviews with a purposeful sample of participants including the Executive Director, the Program Director, the Administrative Assistant who is also an alumnus, and one recent graduate of the LPN program. The participants interviewed were all Black females. Students included were enrolled from 2020-2022. Of the 67 students included, 63 are female, four are male, 56 self-identified as African American, six Hispanic/Latino, two white, one Asian, and two of mixed ethnicities, as shown in Table 1 below. The second data collection method entailed document analysis which allowed us to examine the discourse and portrayal of the program.

### 2.1 Sample/Setting

Interviews were conducted with a purposefully sampled group of staff members to help inform a cyclical feedback system to be improved to inform decisions to accelerate the timeframe in which program improvements are made<sup>[20,21]</sup>. The evaluation team first identified a purposeful sample of students and staff and provided participants with detailed information regarding the purpose of the evaluation, the design, plans for dissemination (including future grant writing opportunities), and other potential benefits as well

**Table 1. Demographics of LPN Students**

Race & Ethnicity	Count of Last Name
African American/Black	55
African American/Black, Hispanic/Latino	1
Asian	1
Caucasian/White	2
Hispanic/Latino	6
Other	1
Prefer not to respond	1
Grand Total	67
Gender	Count of Last Name
Female	63
Male	4
Grand Total	67

as risks for stakeholders. Informed consent was collected from all participants to adhere to the ethical guidelines and protocol of the data collection process. Additionally, data was stored securely in university-owned software and pseudonyms were used to protect the identity of all participants. Survey data from student participants also had their names redacted to maintain confidentiality.

The student evaluations utilized in our study were approached as a continuous feedback loop for the LPN program advisors and informed instructional adjustments and enhancements throughout students' learning experiences within the LPN program. Instructors and program advisors were allowed to gain insight into what was working well and what needed to be improved in real time. These student evaluations allowed for the adaptation of teaching methods, assignments, and materials based on student feedback to better align with students' needs and preferences.

## 2.2 Sampling Procedure

Researchers conducted four semi-structured interviews with a purposeful sample of participants including the Program Director, the Interim Program Director, the Administrative Assistant who is also an alumnus, and a student of the LPN program. This study employed purposeful, homogenous sampling techniques, which typically have a small sample size in qualitative research<sup>[20,22]</sup>. Homogenous samples require smaller sample sizes in order to describe a subgroup in detail, and this study seeks to capture commonalities in the experiences of students from a LPN program in the northeastern U.S. This study examines the experiences of three staff members which is an appropriate size that allow for the higher level of detail required in case study<sup>[23]</sup>. In conjunction with participatory methods to program evaluations, the advantage of this sample size is that it allows researchers to provide an in-depth examination of the nursing education community.

Researchers also collected 67 end-of-course student survey evaluation data, as well as descriptive data including attendance, completion, and participation rates from administrative staff. 56 students self-identified as African American, 6 Hispanic/Latino, 2 white, 1 Asian, and 2 are of mixed ethnicities. 63 students are female and 4 are male. End-of-course student surveys and attendance, completion, and participation rates were provided for the school years 2020 and 2021. The students interviewed were also members of these class years.

The Program Director, the Interim Program Director, and the Administrative Assistant were interviewed to provide their insight and expertise in the LPN program. Each administrator has multiple responsibilities. The Program Director is responsible for the distribution of resources, operating budget, and oversight of the LPN as well as other career programs. The Interim Program Director oversees the LPN program specifically and also serves as the Recruitment Coordinator, the Grant Writer, and the Student Advisor. The Administrative Assistant serves as a Secretary for the Interim Program Director and completes various tasks related to student support.

## 2.3 Instruments and Measurement

The organization supplied the evaluation team with student response data from the years 2020 and 2021 based on end-of-term evaluation surveys. These surveys offered both quantitative and qualitative data on the climate of the nursing program and student satisfaction of the programming. The survey was composed of three sections with a total of 21 parent questions and a series of sub-questions including open and closed-ended questions as well as questions measured on a 3-point and 4-point Likert scale.

Students were asked about their healthcare experience before entering the LPN program and the climate of the LPN nursing program at two different stages: the pre-nursing courses stage that served as a precursor to entering the LPN program and the LPN required coursework stage. Section one utilized open and closed-ended questions; Section 2 was composed of questions related to students' satisfaction with coursework and clinical experiences and was measured on a 3-point Likert scale: Satisfactory, needs improvement, and unsatisfactory. Section 3 related to students' satisfaction with preparation for the National Council Licensure Examination for Practical Nurses examination, which is a necessary requirement for graduates from an LPN program to earn licensure to practice nursing in the United States<sup>[2]</sup>, lab experiences, and overall experiences in the nursing school including instructional experiences. The questions related to preparation for the National Council Licensure Examination and lab experiences were measured on a 4-point Likert scale ranging from (1) "Not at all helpful" to (4) "Very



helpful". The remaining questions were open-ended.

The semi-structured interviews were conducted via Zoom and guided by an interview protocol with a total of ten questions for student interviews and fifteen open-ended questions for staff members. All interviews ranged from 30-75 minutes depending on the context, the schedule of the participant, and the organic flow of the conversation. These surveys offered both quantitative and qualitative data on the climate of the nursing program and the perception of student satisfaction with the program. The level of participation was measured by the survey data and current attendance records.

## 2.4 Data Analysis

### 2.4.1 Transcript Analysis

The interview transcripts were analyzed using a thematic analysis method that entailed two rounds of coding. The first approach to the data was open or inductive coding, which involved posing sensitizing questions and comparing the data and codes<sup>[24]</sup>. In this inductive process, researchers sought to conceptualize and categorize emerging phenomena through an intense evaluation of the data. In the second round of coding, researchers took emergent categories and grouped them into themes. Researchers carefully examined the emergent categories while systematically relating it to other categories to validate the themes. During this process, researchers documented analytical memos to help organize their thinking about the data and refine their understanding of the findings.

The participants in the study engaged in a comprehensive review process that went beyond mere transcript perusal. After their initial interviews, the participants were presented with their interview transcripts along with preliminary thematic analyses. This approach aimed to ensure that the participants' insights were not only accurately represented but also validated by their own perspectives. This process encouraged participants to reflect on the initial analysis and provided them with an opportunity to offer additional information or clarifications based on their expertise and experiences. As a result, some participants did provide valuable supplementary insights during this review, which led to a refinement and deepening of the overall analysis. Thus, the engagement of participants in reviewing the transcripts within the context of the initial analysis played a pivotal role in enhancing the accuracy and richness of the study's findings.

### 2.4.2 Document Analysis

The overarching approach to investigating the document data involved an in-depth content analysis process. Content analysis is the "*process of organizing information into categories related to the central questions of the research*"<sup>[25]</sup>. Researchers first conducted a literature review on adult learning and nursing education, then sourced

copies of relevant data including demographic data, participation rates, and the original grant proposal funding for the organization's LPN program. Lastly, researchers synthesized findings to answer research questions to be presented to the institution's board of directors. Researchers again documented analytical memos in a shared Microsoft Excel to reflect on the emergent findings through an inductive process and maintain organized data.

When evaluating the LPN program, researchers reviewed an original grant proposal to seek specific information and insights to assess the LPN program's design, goals, impact, and potential for success. Regarding the program goals and objectives, researchers examined the stated goals and objectives of the LPN program outlined in the grant proposal. This includes understanding the program's intended outcomes, target audience (e.g., students, and nurses seeking further education), and how these goals align with the broader healthcare and education landscape. Researchers also were looking for details about the educational methods used within the program. This might include teaching strategies, simulation experiences, hands-on training, and approaches for fostering critical thinking and clinical skills. The grant proposal also provided information about the program's curriculum structure, including course offerings, clinical components, and any specialized tracks. Additionally, researchers reviewed the grant proposal to seek information on the support mechanisms in place for students, such as mentoring, advising, and resources to promote student success and retention. Lastly, researchers gained valuable insights from the grant proposal on ways to evaluate any strategies that the LPN program would utilize for measuring student performance, evaluating program outcomes, and ensuring continuous improvement. In summary, in the evaluation of the LPN program, the original grant proposal provided a comprehensive assessment of its design, goals, methods, and anticipated outcomes.

### 2.4.3 Course-Evaluation Survey Analysis

The overarching approach for analyzing the course evaluation survey involved descriptive statistics, which was used to organize and describe the characteristics of the survey data collection. Researchers collapsed the various student records together into one single database to generate key themes and findings. Researchers calculated the mode, a descriptive statistic that summarizes the most frequent choice for each survey question. Researchers also computed the average statistic in a statistical software to identify the mean and represent the larger characteristics of the larger collection of data. Survey responses and attendance data for analysis were also stored in Microsoft Excel through the secure Drexel University network. According to Thomas VG and Campbell PB, a relational database can assist in identifying the various types of stakeholders including students, alumni, and staff who are engaged with the

organization<sup>[5]</sup>. Lastly, thematic analysis of the data was also used to help interpret and analyze the open-ended questions of the survey evaluation data. Data excerpts, quotations, or entire passages from the student surveys were evaluated and organized into major themes, categories, and case examples specifically through thematic analysis.

Key stakeholders including staff and students were interviewed to provide their insight and expertise into the LPN program. Member-checking was also conducted to ensure credibility and provided participants with an opportunity to clarify or refine their statements based on the researcher's initial analysis. Researchers used analytical memos to practice constant reflexivity and triangulate the data.

### 3 RESULTS

Our findings identified key themes that emerged from the study based on the different sources of data. The study's key themes revolve around the program's adaptability during the pandemic, strong attendance and policies, positive perceptions of curriculum and instruction, and insights into social conditions and school culture.

#### 3.1 Adaptability of the Program During the Pandemic (Interviews)

The first theme that emerged from this study was that the program is adaptive. Multiple participants commented on the adaptability of the program during the pandemic. For example, one participant stated *"they [the staff] made sure I got through their program"* while another stated *"We were only at Temple [university] because of COVID-19 but I still learned a lot...even through the pandemic we got through it."*

The interviews highlighted how the program demonstrated adaptability during the pandemic. Participants expressed that despite the challenges posed by COVID-19, the program staff ensured their progress. The participants acknowledged the program's flexibility and effectiveness even in the midst of the pandemic.

#### 3.2 Strong Attendance and Policies (Document Analysis)

The document analysis emphasized the strong attendance of students and the consistent enforcement of attendance and lateness policies. This suggests that both students and staff were dedicated to maintaining a high level of attendance, which contributed to the overall positive learning environment. For example, students and staff both spoke to consistent enforcement of attendance and lateness policies with one staff member noting, *"We have very little tolerance for lateness, students are only allowed to miss 20 hours of time which was just increased because of the pandemic. If we start class at 9 a.m., that classroom door is closed at 9 a.m."*. These findings were in alignment with research which found that just as providers and professors were forced to become more resilient and

adapt to the necessary changes that the pandemic required of them, students were forced to become more self-reliant and to take charge of their learning<sup>[26,27]</sup>.

#### 3.3 Well-Rounded Curriculum and Instruction (Course-Evaluation Surveys)

Al-Kuwaiti A et al. stated student feedback collected via course evaluation surveys are crucial because students are the primary recipients of and most influenced by the teacher's instruction<sup>[28]</sup>. In this study, the course evaluation surveys identified the positive perception of the curriculum, instruction, and instructional practices among students. Participants indicated that the curriculum was comprehensive and well-rounded. This suggests that the educational content and teaching methods were effective in providing a holistic learning experience. For example, one participant stated, *"My teachers were dedicated to us all."* Another stated, *"[the] school gives you the building blocks to give you a strong foundation."* These findings highlight the significance of course evaluation surveys that aim to gather student feedback on the courses within a specific program that enables necessary actions to enhance the quality of teaching and learning<sup>[28,29]</sup>.

#### 3.4 Social Conditions and School Culture (Course-Evaluation Surveys)

##### 3.4.1 Social Conditions

Another theme that emerged was that of social conditions relating to school culture. One participant stated that faculty *"lacked professionalism amongst certain faculty and peers in the classroom."* Another participant stated that they *"endured bullying in [their] second-year school experience."* The course evaluation surveys revealed themes related to social conditions and school culture. The findings highlighted the need for financial support and the necessity for childcare assistance. These themes shed light on significant challenges that students face and emphasize the importance of addressing these issues to ensure their successful completion of the program.

Financial support was identified as a primary concern among LPN students. The cost of education, including tuition, textbooks, and other related expenses, can be a substantial barrier for many aspiring nurses. This financial burden can lead to stress, and anxiety, and even hinder the ability to fully focus on coursework and clinical training. Scholarships, grants, and affordable loan programs were suggested as potential solutions to alleviate the financial strain on these students, allowing them to concentrate on their studies and clinical practice without constant worry about their financial situation. In the identification of barriers to successful program completion by underrepresented minority nursing student, some researcher has found that one significant obstacle students face was financial constraints, with numerous individuals stating the need to work to cover their experiences<sup>[30-34]</sup>. Thus, these findings suggest that to

create a culturally diverse nursing workforce, it is critical to provide financial support to assist in alleviating the significant obstacle that many minority students face<sup>[33,35,36]</sup>.

Childcare support also emerged as a significant factor influencing the success of LPN students, particularly for those who are parents or caregivers. The demanding nature of nursing programs, with varying class schedules and clinical rotations, often clashes with the responsibilities of childcare. This challenge can force students to make difficult choices between pursuing their education and fulfilling their caregiving duties. Implementing on-site childcare facilities, flexible scheduling options, or subsidies for external childcare services could enable students with children to better manage their responsibilities and fully engage in their educational pursuits.

### 3.4.2 School Culture

Some participants reported positive interactions with dedicated teachers and a strong foundation for learning. However, there were also concerns about unprofessional behavior among certain faculty members and peers, as well as instances of bullying that affected the school experience for some students.

## 4 DISCUSSION

This study expands beyond the current program evaluation literature which has been largely summative in nature<sup>[1]</sup>. Researchers center the representation of participants' voices through multiple modalities based on previous findings emphasizing the importance of building community in a cohort of adult learners<sup>[2]</sup>. This study contributes to the literature on higher education institutions seeking to be equitable and sustainable career-building programs<sup>[5]</sup>, no previous study provided information on the unique context of a predominantly African American population in a northeastern urban community during the 2020 COVID-19 pandemic.

A surprising finding that emerged in the program evaluation was the presence of bullying which implies that the program needs to focus on community building in the program. The evaluation team proposed the delegation of paid student representatives, which can aid in increasing student involvement and provide a space for feedback in real-time. There are different pathways to increasing student voice in the feedback system, such as creating a paid student position, forming a student government, hosting a monthly town hall, and creating a mentorship program. Evaluators also recommend that staff continue to identify the reasons students leave before completion and look for ways to assist students to complete on time including financial aid when possible.

Furthermore, the evaluation team recommends implementing an anti-bullying policy, which can aid

in improving social conditions at the individual, local, community, and sociocultural levels of the LPN program. Stakeholders have multiple options for application, and program staff can send home a code of conduct, prepare weekly safety announcements and tips, provide explicit training on bullying prevention to students and staff, and continue to monitor the atmosphere by conducting assessments on bullying and school climate. These measures can help to ensure that all students and staff adhere to rules of conduct. Given the time contribution of staff members in program execution, evaluators recommend distributing responsibilities among multiple positions by hiring additional staff, creating more full-time staff positions, and documenting the various roles of each staff member to identify overlaps or opportunities to delegate tasks to a specific new role.

### 4.1 Recommendations

This study addresses problems in the larger field of nursing education, as the majority of program evaluations have been summative or accreditation specific. The current case study expands the nursing field using collaborative methods that center on communities of color with low-income backgrounds. Rather than relying exclusively on accreditation-oriented evaluations, researchers posit a participatory research-based program evaluation as a method of deeply understanding a nursing program to reduce the prejudice embedded in the structure of traditional nursing programs. To understand the unique needs of this community, this study amplifies the voices of students and staff in an urban northeastern context and contributes to the literature by combining interview and document data to investigate the unique challenges of an intergenerational and predominantly African American community. To advance the science of nursing education, future research should continue to evaluate diverse contexts in changing sociopolitical times. This study could assist other programs that are novel or not as developed as national unions, as future studies should also examine programmatic differences between the LPN and Registered Nurse (RN) programs to further understand the pathways of vertical alignment in nursing education pathways.

### 4.2 Limitations

This study is not without limitations. One limitation of program evaluations is the difficulty of replicating the study because they are so program specific. Also, programs change frequently, and thus, findings can potentially be out of date by the time they are published. Even though program change is a limitation of any longitudinal evaluation, this research is still valuable because it presents a useful case study centering on improving nursing program quality in real-time.

### 4.3 Future Research

This study contributes to the literature by combining

interview and document data to investigate the unique challenges of a northeastern urban context and predominantly African American, intergenerational community. Our case study highlights unique challenges of this demographic and strengths of their LPN program to identify elements of quality and program construction. To advance the science of nursing education, future research should continue to evaluate diverse contexts in changing sociopolitical times. This study offers participatory methods for working with participants that could help other programs that are novel or not as developed as national unions. Future studies should also examine programmatic differences between the LPN and RN programs to further understand the pathways of vertical alignment in nursing education pathways and the ways to support diverse students throughout their educational journey.

## 5 CONCLUSION

This project sought to create an external evaluation report to provide credible evidence that fosters a greater understanding and improves decision-making, all aimed at improving social conditions and promoting a healthy, just, and equitable LPN program. In the larger context of nursing education, this study is useful to the field as a whole by contributing to understanding how programs are changing in sociopolitical contexts as well as how to develop equitable and sustainable nursing programs. By evaluating a tenured LPN program in an urban U.S. context, researchers highlight the importance of providing culturally and contextually appropriate programming in the health sector. Findings yield an emphasis on supporting the social conditions of students and staff. Researchers suggest using a participatory framework which entails working closely with key stakeholders to advance social outcomes that might be appropriate for the altruistic norms embedded in the larger healthcare and social work arena.

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## Conflicts of Interest

The authors whose names are listed immediately below certify that they have NO affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter or materials discussed in this manuscript.

## Author Contribution

Cameron T and Escalante KA curated the data, prepared the original draft of the manuscript, created visualizations of the data, and conducted investigations related to the study. They also contributed to reviewing and editing the manuscript. Cameron T also contributed to conceptualizations of the methodology used in the study, providing critical insights into the research findings. Escalante KA was instrumental in refining the methodology used in the study, providing critical insights into the research findings. She

also conducted investigations related to the study. Haslip M provided supervision throughout the entire project, reviewing and editing the manuscript, offering feedback, guidance, and expertise in conceptualizing the study's goals and methodology.

## Abbreviation List

IRB, Institutional Review Board

LPN, Licensed Practical Nursing

NLPNP, Northeastern Licensed Practical Nursing Program

RN, Registered Nurse

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