ISSN: 2584-0231(Online)
International Journal of Multidisciplinary Research in Arts, Science and Technology
© IJMRAST | Vol. 3 | Issue 8 | August 2025
Available online at: https://ijmrast.com
DOI: https://doi.org/10.61778/ijmrast.v3i8.158

EMPLOYMENT QUALITY AND PROFESSIONAL DEVELOPMENT OF THE GRADUATES OF BACHELOR OF SECONDARY EDUCATION MAJOR IN SCIENCE

Jojimar SJ. Julian, MAT[*1], Emma E. Linga, Ed.D[*2]

[*1]Physics Teacher Walter Dyett High School for the Arts Chicago Public Schools Chicago, Illinois, USA

jsjulian@cps.edu[1]

[2]Graduate School Professor/Certified Flexible Learning Coach, University of Perpetual Help System Dalta/University of Rizal System/SEAMEO Innotech, Las Piñas City/Morong Rizal/Quezon City, Metro Manila, Philippines

ABSTRACT

This descriptive-correlational study investigated the employment quality and professional development of Bachelor of Secondary Education Major in Science graduates from the University of Rizal System (URS) from 2021 to 2024. Grounded in Bruner's Constructivist Theory, Mezirow's Transformative Learning Theory, and Progressivism, the research explored the relationship between graduates' professional development and employment situations. A validated questionnaire was administered to 94 graduates employed in public and private institutions. Findings revealed that most graduates secured teaching positions, yet reported dissatisfaction with job satisfaction, pay and benefits, work type, and employment security. Despite these challenges, graduates demonstrated strong professional identities, scoring high in practice, collegial teamwork, and personal development goal-setting. Issues identified included job mismatch, inadequate mentoring, and insufficient organizational support and compensation. Statistical analysis, employing descriptive and correlational techniques, highlighted relationships between demographic profiles and professional development indicators. In response, the study proposes the GROW-TEACH Model, built on five pillars: Graduate Resiliency and Optimization, Workforce-readiness through Role and Curriculum Alignment, Teacher Empowerment and Reflective Practice, Advancement through Mentoring and Collaboration, and Community Harmony and Ethical Responsibility. This model aims to bridge the gap between academic preparation and actual teaching demands, fostering a transparent system for the career progression and job satisfaction of science teachers.

Keywords: *employability, professional growth, science education, GROW-TEACH Model, BSE graduates, PPST.*

1. Introduction

The success of graduates in the labor market serves as a paramount measure of an educational institution's effectiveness and its responsiveness to societal needs. In the evolving landscape of the 21st-century global economy, employers increasingly demand more than traditional disciplinary knowledge. They seek graduates equipped with a robusaft portfolio of practical skills, professional competencies, and adaptive capacities, enabling them to navigate and thrive within dynamic and often unpredictable work environments (Brown & Green, 2022; Sanchis & Rodríguez, 2021). This shift necessitates that higher education institutions foster not only deep subject matter expertise but also transferable skills such as critical

thinking, digital literacy, collaboration, and problem-solving (Adams & Lee, 2024; Garcia & Lopez, 2024). This global imperative finds particular urgency within the Philippine context, where the education sector and the broader labor market are beset by persistent challenges. Systemic issues including pervasive skill gaps, high rates of job mismatch, and endemic underemployment create a precarious landscape for new entrants to the workforce, often resulting in low wages and limited career advancement opportunities that hinder both individual prosperity and national development (Arbole et al., 2023; Lu, 2025; PBEd, 2021; Simpson, 2020). These challenges are acutely felt in the field of teacher education, a sector foundational to the quality of the entire educational ecosystem. This necessitates a proactive approach from higher education institutions, particularly for those with a direct mandate in teacher training. For institutions like the University of Rizal System (URS), whose mission includes preparing the next generation of educators, ensuring that its Bachelor of Secondary Education (BSE) major in Science graduates are adequately equipped for these realities is therefore a mission of critical importance. The Philippine Professional Standards for Teachers (PPST) provides a comprehensive national framework outlining the competencies required for effective teaching and professional development (CHED, 2020). However, a significant gap persists between these well-defined standards and the lived employment realities of graduates. Many begin their careers in non-permanent roles—as temporary, part-time, or contract-of-service employees—which severely limits their access to job security, fair compensation, and social benefits (Caingcoy, 2021; Mercado, 2019; Torres & Balagtas, 2020). This instability not only creates financial strain but also impedes their capacity to fully engage in continuous professional development, thereby stunting their growth and potentially diminishing their long-term commitment to the profession.

A graduate's employment quality and professional trajectory are shaped by a complex constellation of interdependent factors. Job satisfaction, a key determinant of retention and professional engagement, is influenced by the alignment between a graduate's role and their academic training, the adequacy of their compensation, and the nature of the workplace environment (Topchyan & Woehler, 2021; Yunita et al., 2023). While salary can provide short-term contentment, lasting satisfaction is more deeply rooted in opportunities for career growth, a supportive corporate culture, and a healthy work-life balance (Lopes da Costa et al., 2020; Mabaso & Dlamini, 2017; Wilson & Graham, 2019). In the Philippines, however, numerous tracer studies have consistently documented that early-career teachers, especially in the private sector, receive salaries far below living wage standards and often lack basic benefits, contracts, or timely compensation (Javier & Sarmiento, 2018; Labitoria & Nuqui, 2022; Laguitao, 2019). This economic precarity is often compounded by persistent gender-based wage disparities, where women may receive lower initial offers despite comparable qualifications (Balasubramanian & Ganesh, 2019; Blau & Kahn, 2017).

Furthermore, the very nature of one’s work—whether contract-based, full-time, part-time, or within the gig economy—profoundly structures pathways for skill acquisition and career advancement. While flexible or contract-based roles may offer diverse experiences, they frequently lack the mentorship, training, and clear promotion tracks inherent in permanent positions (Jiang & Liu, 2020; Miller & Brown, 2019; Singh & Gupta, 2021). The development of a strong professional identity and practice is therefore heavily reliant on

access to robust support systems. Mentorship, collaborative professional links with colleagues, and engagement in extension activities have been shown to be instrumental in building confidence, expanding professional networks, and enhancing pedagogical skills (Adams & Cooper, 2020; Akiri & Dori, 2022; Kolleck et al., 2021). Likewise, a commitment to professional reflection and continuous learning is critical for adapting to new challenges and fostering long-term growth (Kulgemeyer & Schecker, 2021; Li, Zhang, & Chen, 2024). The dignity of the teaching profession itself is intrinsically linked to these opportunities for research, mentorship, and development; however, this dignity is often undermined by systemic issues that devalue educators' labor, particularly through precarious employment conditions and inadequate compensation (Hoşgörür, 2021; Wang, 2024).

Ultimately, these factors do not operate in isolation but intersect with demographic variables, creating compounded effects on employability. An individual's age, gender, civil status, and career stage can significantly shape their experiences and opportunities within the labor market (Robinson, 2023; Sels et al., 2016; Smith & Jones, 2023). An older graduate with outdated credentials, for instance, may face different barriers than a young, unmarried female graduate navigating workplace biases. While extensive research has explored these variables in isolation, a significant lacuna exists in the literature regarding an integrative, intersectional analysis that elucidates their compounded impact on the career trajectories of science educators within the unique Philippine context. The structural inequities embedded in labor policies and hiring practices, which limit access to workers' rights and employment security as defined by international standards (ILO, 2019; UNESCO, 2021), demand closer scrutiny.

Statement of the Problem

This study assessed the Impact of Employability and Professional Growth and Development among Bachelor of Secondary Education major in Science Graduates. Specifically, it answered the following questions:

1. What is the profile of the respondents in terms of:
    a. age;
    b. sex;
    c. civil status; and
    d. year graduated?
2. What is the status of Job Employability Quality of the respondents with respect to:
    a. Job Satisfaction;
    b. Salaries and Benefits;
    c. Nature of Work; and
    d. Worker's Right and Security?
3. What is the level of professional development the respondents with respect to:
    a. Philosophy of teaching;
    b. Dignity of teaching as a profession;
    c. Professional links with colleagues;
    d. Professional reflection and learning to improve practice; and
    e. Professional development goals?

4. Is there a significant difference in the status of Job Employability Quality and the Level of Professional Development of the respondents when grouped according to profile?
5. Is there a significant relationship between of status of status of Job Employability Quality and the Level of Professional development of the respondents?
6. Based on the findings, what model for enhancing graduate employability and professional growth and development may be developed?

2. METHODOLOGY

Research Design

This study used a descriptive-correlational research design to examine the employability and professional growth of the respondents. The descriptive part profiled graduates' demographics and employment details, while the correlational part determined relationships between employability and professional growth.

The study included all 94 employed BSE-Science graduates from URS Morong from academic years 2021-2022, 2022-2023, and 2023-2024 through a total enumeration sampling method. In gathering the data, a validated, researcher-made checklist covering the demographic profile, employability status (job satisfaction, salary, nature of work, worker rights), and professional growth (based on PPST Domain 7). The data gathered was analysed through descriptive statistics using frequency, percentage, and mean for profiles, employability, and professional growth. Furthermore, One-Way ANOVA was used to identify differences when the dependent variables were grouped according to profile, and a Chi-square test to determine the relationship between employability and professional growth.

7. RESULTS AND DISCUSSION

Profile of the Respondents

Table 1 presents the Profile of the Respondents in terms of age, sex, civil status, and year graduated. The data show that the majority were 23 to 24 years old (69%), indicating that most are at the early stage of their teaching careers.

Table 1: Profile of the Respondents

Variable	Category	Frequency	Percentage (%)
Age	20 – 22	12	13
	23 – 24	63	69
	25 and above	16	18
Sex	Male	36	40
	Female	55	60
Civil Status	Single	86	95
	Married	5	5
Year Graduated	2021 – 2022	13	14
	2022 – 2023	39	43
	2023 – 2024	39	43

In terms of sex, 60% were female, affirming the continuing trend of female dominance in the teaching profession. A significant majority, 95%, were single, suggesting that most respondents are still focused on career development. Regarding year graduated, most respondents completed their degrees in the 2022–2023

and 2023–2024 academic years, each accounting for 43%, reflecting a relatively recent entry into the workforce.

Overall, the demographic profile of the respondents revealed a predominantly young, single, and female cohort, many of whom were newly graduated. This composition suggests a group likely characterized by significant potential, abundant energy, and a high degree of adaptability, all of which are valuable attributes in their evolving teaching roles. Their fresh perspective and recent academic experience may also contribute to an openness to new pedagogical approaches and a strong foundation in contemporary educational theories.

Status of Employability of the Respondents

Based on Table 2, the respondents generally expressed a positive level of job satisfaction, with an overall weighted mean of 3.38, interpreted as "Satisfied." Notably, two indicators received "Highly Satisfied" ratings: "Graduates feel most fulfilled when teaching Science subjects that align with their academic training" (mean = 3.56) and "Recognition and appreciation from school leaders and peers foster a sense of value and motivation" (mean = 3.52). Other factors like job security, compensation, and professional development also contributed to satisfaction.

These findings underscore the critical role of both intrinsic and extrinsic motivators in shaping job satisfaction among Respondents. This supports research by Schwan et al. (2020) on subject alignment and OECD's TALIS (2018) report on leadership recognition, both enhancing teacher satisfaction.

Table 2: Status of Employability of the Bachelor of Secondary Education in Science Graduates with Respect to Job Satisfaction

Indicators	Weighted Mean	Verbal Interpretation
1. BSEd in Science graduates generally feel secure in their roles, especially when employed in public schools with tenure.	3.23	Satisfied
2. Graduates appreciate competitive compensation and benefits in institutions that recognize their qualifications.	3.16	Satisfied
3. Many graduates thrive in dynamic teaching environments, finding fulfillment in managing diverse responsibilities.	3.24	Satisfied
4. Opportunities for promotion and career growth contribute positively to long-term job satisfaction.	3.32	Satisfied
5. Graduates feel most fulfilled when teaching Science subjects that align with their academic training.	3.56	Highly Satisfied
6. Recognition and appreciation from school leaders and peers foster a sense of value and motivation.	3.52	Highly Satisfied
7. Supportive school systems that promote wellness help graduates maintain a healthy work-life balance.	3.44	Satisfied
8. Collaborative relationships with colleagues and approachable school leadership enhance workplace satisfaction.	3.41	Satisfied
9. Access to training, seminars, and further studies empowers graduates and supports continuous improvement.	3.43	Satisfied
10. A strong sense of purpose in shaping young minds inspires graduates and strengthens their commitment to teaching.	3.44	Satisfied
Overall Weighted Mean	**3.38**	**Satisfied**

Table 3 reveals that the respondents rated all indicators related to salaries and benefits as "Satisfied," with an overall weighted mean of 3.20. Specific indicators, such as receiving salaries based on government standards (man = 3.01) and timely salary release (mean = 3.24), reflect generally positive perceptions of

financial support, especially in public schools. Graduates in government positions reported feeling financially secure and adequately supported through structured compensation and benefits, leading to greater motivation. These findings strongly support studies that emphasize the vital role of competitive and fair salaries in attracting and retaining qualified teachers, particularly in specialized fields like science.

Table 3: Status of Employability of the Bachelor of Secondary Education in Science Graduates with Respect to Salaries and Benefits

Indicators	Weighted Mean	Verbal Interpretation
1. Graduates employed in public schools receive salaries based on the government salary standardization law (SSL), providing financial stability.	3.01	Satisfied
2. Most graduates experience timely release of salaries, especially in public institutions with structured payroll systems.	3.24	Satisfied
3. Public school teachers benefit from scheduled step increments and salary grade promotions based on years of service and performance.	3.16	Satisfied
4. Both public and some private schools offer performance-based bonuses and incentives for achieving academic or school-related goals.	3.10	Satisfied
5. Graduates in government teaching positions receive the mandated 13th-month pay and additional bonuses like mid-year and year-end incentives.	3.36	Satisfied
6. Teachers employed in public schools are covered by PhilHealth and optional private HMOs, enhancing access to healthcare services.	3.34	Satisfied
7. Graduates receive social security and retirement benefits through GSIS (for public) or SSS (for private school employment).	3.29	Satisfied
8. Public school teachers enjoy comprehensive leave benefits such as vacation, sick leave, and special leave privileges as mandated by law.	3.22	Satisfied
9. Education sector employees often receive additional allowances such as chalk/teaching allowance, clothing allowance, and hazard pay in some areas.	3.17	Satisfied
10. BSEd in Science graduates in the education sector report moderate to high satisfaction with their salary and benefits, especially in government teaching positions.	3.10	Satisfied
Overall Weighted Mean	**3.20**	**Satisfied**

Furthermore, Table 4 presents that the respondents responded “Satisfied” to all indicators concerning the nature of work, highlighting favourable working conditions. Key aspects included work aligning with their educational background (mean = 3.29), engaging primarily in teaching Science subjects (mean = 3.27), and a manageable student-to-teacher ratio (mean = 3.20). Graduates also expressed satisfaction with collaborative work environments (mean = 3.24), adequate teaching resources (mean = 3.16), and reasonable administrative tasks (mean = 3.31). These results suggest that work autonomy and positive work-life quality contribute significantly to teaching performance and overall teacher satisfaction.

Table 4: Status of Employability of the Bachelor of Secondary Education in Science Graduates with Respect to Nature of Work

Indicators	Weighted Mean	Verbal Interpretation
1. The work assigned aligns with the graduate's educational background and specialization in Science.	3.29	Satisfied
2. Graduates are primarily engaged in teaching Science subjects, allowing them to fully utilize their knowledge and skills.	3.27	Satisfied
3. Graduates experience a manageable student-to-teacher ratio, supporting effective teaching and learning.	3.20	Satisfied
4. The work environment encourages collaboration and teamwork with fellow educators, fostering a positive work culture.	3.24	Satisfied
5. Graduates have opportunities to participate in extracurricular activities or school events that complement their teaching role.	3.20	Satisfied
6. Graduates are provided with adequate teaching resources, such as textbooks, laboratory equipment, and other materials necessary for effective Science instruction.	3.16	Satisfied
7. The nature of work includes professional development opportunities, such as training, seminars, and workshops, to enhance teaching practices.	3.17	Satisfied
8. Graduates are involved in administrative tasks, such as lesson planning, grading, and meeting with parents, which are reasonable and not excessive.	3.31	Satisfied
9. The work schedule offers flexibility, with time allocated for lesson preparation, grading, and personal activities.	3.16	Satisfied
10. Graduates feel that their work in the education sector contributes to the development of future generations and provides personal fulfillment.	3.37	Satisfied
Overall Weighted Mean	**3.24**	**Satisfied**

Moreover, Table 5 indicates that the respondents responded “Satisfied” to all indicators related to workers' rights and security, with an overall weighted mean of 3.21. This includes satisfaction with clear, legally compliant contracts (mean = 3.41), protection from discriminatory practices (mean = 3.31), and robust workplace health and safety protocols (mean = 3.36). Graduates also reported satisfaction with job security, including tenure in public schools or clear contract renewal procedures in private institutions (mean = 3.18). These findings imply that graduates are content with their employment contracts, job security, and legal protections, aligning with studies that emphasize job security as a significant factor in teacher gratification and service performance.

Lastly, Table 6 reveals that the graduate respondents were "satisfied" with their overall status of employability, with an overall weighted mean of 3.26. Job satisfaction ranked highest among the factors, with a mean of 3.38, suggesting that ample support from superiors significantly contributes to a graduate's ability to thrive. While salaries and benefits were rated "Satisfied," this category ranked last, indicating a potential area for further enhancement to attract and retain skilled educators. Overall, these findings reinforce existing literature that adequate and timely compensation, alongside strong supervisory support, enhances teacher motivation, satisfaction, and professional performance.

Table 6: Summary of the Status of Employability of the Bachelor of Secondary Education in Science Graduates

Status of Employability with respect to…	Weighted Mean	Verbal Interpretation
Job Satisfaction	3.38	Satisfied
Salaries and Benefits	3.20	Satisfied
Nature of Work	3.24	Satisfied
Workers' Rights and Security	3.21	Satisfied
Overall Weighted Mean	**3.26**	**Satisfied**

Level of Professional Growth and Development of the Respondents

As shown in Table 7, the respondents rated themselves as "Exemplar" for connecting scientific concepts to real-life situations, making Science education meaningful (mean = 3.50). Other key indicators, such as encouraging curiosity, designing active learning lessons, and integrating digital tools, were consistently rated as "Proficient." This highlights their strength in making Science engaging and relevant for students. The results support the study by Pham et al. (2023), which emphasizes global trends in science teacher professional development, aligning with the competencies and inquiry-based teaching approaches demonstrated by the respondents

Table 7: Level of Professional Growth and Development of Bachelor of Secondary Education Major in Science Graduates with Respect to Philosophy of Teaching

Indicators	Weighted Mean	Verbal Interpretation
1. Encourages students to develop curiosity, ask questions, and engage in investigative learning.	3.48	Proficient
2. Design lessons that prioritize active student participation, critical thinking, and hands-on learning.	3.38	Proficient
3. Modifies instructional strategies to accommodate diverse learners and varying levels of scientific understanding.	3.41	Proficient
4. Connects scientific concepts to real-life situations, making Science education more meaningful and relevant.	3.50	Exemplar
5. Effectively integrates digital tools and technological advancements to enhance Science teaching and learning.	3.49	Proficient
6. Engages in continuous professional development, research, and collaboration to improve teaching practices.	3.44	Proficient
7. Promotes scientific integrity, environmental awareness, and ethical responsibility in teaching Science.	3.49	Proficient
8. Encourages discovery, experimentation, and student-led learning experiences in the classroom.	3.41	Proficient
9. Implements diverse assessment methods to evaluate student learning and provides constructive feedback to foster improvement.	3.44	Proficient
10. Actively participates in Science education networks, research, curriculum development, and mentorship programs.	3.35	Proficient
Overall Weighted Mean	**3.44**	**Proficient**

In Table 8, the respondents assessed their professional growth and the dignity of teaching as a profession as "Exemplar," with an overall weighted mean of 3.51. They strive for high-quality Science education (mean = 3.58), uphold the honor of being an educator with a positive attitude (mean = 3.57), and prioritize student well-being (mean = 3.54). While some indicators like promoting Science education in society were "Proficient," the high "Exemplar" ratings show strong commitment and adherence to professional standards. The results are parallel to the study of Akiri and Dori (2022), which underscores the beneficial influence of mentoring and support networks on teachers' professional development and ongoing enhancement.

Table 8: Level of Professional Growth and Development of Bachelor of Secondary Education major in Science Graduates with Respect to Dignity of teaching as a Profession

Indicators	Weighted Mean	Verbal Interpretation
1. Strives for high-quality Science education by continuously improving teaching skills and methodologies.	3.58	Exemplar
2. Demonstrates integrity, fairness, and responsibility in all professional interactions and decision-making.	3.52	Exemplar
3. Upholds the honor and value of being an educator by maintaining a positive attitude and strong work ethic.	3.57	Exemplar
4. Prioritizes student learning, growth, and well-being, fostering a supportive and motivating learning environment.	3.54	Exemplar
5. Engages in continuous learning, training, and professional development to enhance teaching competence.	3.50	Exemplar
6. Promotes the importance of Science education in society and inspires students to appreciate and pursue scientific knowledge.	3.48	Proficient
7. Exemplifies good character, discipline, and leadership, serving as an inspiration for students and colleagues.	3.51	Exemplar
8. Works effectively with colleagues, school administrators, and the community to improve Science education and student outcomes.	3.42	Proficient
9. Follows educational policies, curriculum guidelines, and teaching standards set by academic institutions and governing bodies.	3.51	Exemplar
10. Actively participates in community service, outreach programs, and initiatives that promote education and societal development.	3.47	Proficient
Overall Weighted Mean	**3.51**	**Exemplar**

As depicted in Table 9, the respondents rated their professional growth and development in relation to peer collaboration as “Proficient,” with an overall mean of 3.44.

Table 9: Level of Professional Growth and Development of Bachelor of Secondary Education Major in Science Graduates with Respect to Professional Links with Colleagues

Indicators	Weighted Mean	Verbal Interpretation
1. Actively collaborates with colleagues to improve teaching strategies and enhance Science education.	3.43	Proficient
2. Engages in professional learning communities to exchange knowledge and best practices in teaching.	3.39	Proficient
3. Participates in teacher training, workshops, and seminars to strengthen professional relationships and skills.	3.32	Proficient
4. Maintains open and respectful communication with fellow educators to foster a positive work environment.	3.50	Exemplar
5. Shares educational resources and innovative teaching approaches with colleagues to support professional growth.	3.51	Exemplar
6. Seeks mentorship from experienced educators and provides guidance to novice teachers.	3.53	Exemplar
7. Contributes to curriculum development and institutional initiatives through teamwork and shared expertise.	3.33	Proficient
8. Engages in interdisciplinary collaboration to integrate Science education with other subjects effectively.	3.43	Proficient
9. Actively participates in academic organizations, research groups, and professional associations related to Science education.	3.42	Proficient
10. Promotes a culture of mutual respect, teamwork, and shared responsibility in the teaching profession.	3.53	Exemplar
Overall Weighted Mean	**3.44**	**Proficient**

However, they consistently scored “Exemplar” in maintaining open communication (mean = 3.50), sharing resources (mean = 3.51), seeking mentorship and guiding novice teachers (mean = 3.53), and fostering a

culture of mutual respect and teamwork (mean = 3.53). This indicates a strong foundation in collaborative practices, even if formal participation in professional learning communities was rated "Proficient." This supports Kolleck et al. (2021), who found that collaborative practices like team teaching build trust and enhance professional relationships.

It can be seen from Table 10 that the respondents rated their professional reflection and learning to improve practice as “Proficient,” with an overall weighted mean of 3.45. They assessed themselves as “Exemplar” in seeking feedback from various sources (mean = 3.52), actively participating in professional learning communities (mean = 3.58), and demonstrating a willingness to experiment with innovative teaching approaches (mean = 3.51). This highlights their proactive approach to professional development, focusing on continuous improvement through self-evaluation and collaborative learning. These findings align with Kulgemeyer and Schecker (2021), who emphasized that reflective skills and collaborative reflection significantly support professional growth and instructional improvement.

Table 10: Level of Professional Growth and Development of Bachelor of Secondary Education Major in Science Graduates with Respect to Professional Links with Colleagues

Indicators	Weighted Mean	Verbal Interpretation
1. Regularly assesses and reflects on teaching practices to identify strengths and areas for improvement.	3.33	Proficient
2. Seeks feedback from students, colleagues, and mentors to enhance instructional effectiveness.	3.52	Exemplar
3. Engages in continuous professional development through workshops, seminars, and advanced studies.	3.32	Proficient
4. Applies evidence-based teaching strategies to improve Science instruction and student learning outcomes.	3.46	Proficient
5. Conducts self-evaluation to measure progress and set professional growth goals.	3.49	Proficient
6. Integrates insights from research and new educational trends into teaching practice.	3.37	Proficient
7. Actively participates in professional learning communities to exchange ideas and best practices.	3.58	Exemplar
8. Adapts teaching methods based on student performance data and classroom observations.	3.43	Proficient
9. Demonstrates a willingness to experiment with innovative teaching approaches for Science education.	3.51	Exemplar
10. Maintains a growth mindset by embracing challenges and learning from teaching experiences.	3.44	Proficient
Overall Weighted Mean	**3.45**	**Proficient**

It can be seen from Table 11 that the respondents regarded their professional growth and development goals as “Proficient” with an overall weighted mean of 3.35. Notably, they showed an "Exemplar" commitment to lifelong learning by staying updated on new trends and technologies in Science teaching (mean = 3.50). Other areas, such as setting clear short-term and long-term goals and pursuing advanced studies, were rated "Proficient." This suggests a strong intrinsic motivation for continuous learning. The findings are supported by Pham et al. (2023) and Ahmed et al. (2023), who highlight the growing emphasis on continuous learning and clear professional development goals to meet evolving educational demands.

Table 11: Level of Professional Growth and Development of Bachelor of Secondary Education major in Science Graduates with Respect to Professional Development Goals

Indicators	Weighted Mean	Verbal Interpretation
1. Sets clear and achievable short-term and long-term professional development goals.	3.46	Proficient
2. Regularly updates teaching knowledge and skills through training, workshops, and seminars.	3.27	Proficient
3. Pursues advanced studies or specialized certifications to enhance expertise in Science education.	3.31	Proficient
4. Engages in action research to improve teaching methodologies and student learning outcomes.	3.29	Proficient
5. Actively participates in mentorship programs as both a mentor and a mentee for professional growth.	3.28	Proficient
6. Develops leadership skills by taking on roles in academic committees, organizations, or school initiatives.	3.32	Proficient
7. Seeks opportunities to present research, innovations, or best practices in professional conferences.	3.23	Proficient
8. Reflects on career progress and adjusts professional goals based on experiences and new learning.	3.44	Proficient
9. Builds a professional network with educators, researchers, and industry experts to enhance career development.	3.36	Proficient
10. Demonstrates commitment to lifelong learning by staying updated on new trends, technologies, and educational policies in Science teaching.	3.50	Exemplar
Overall Weighted Mean	**3.35**	**Proficient**

Table 12 indicates that respondents are proficient in their overall professional growth and development, with a weighted mean of 3.44. The dignity of teaching as a profession was highly rated (mean = 3.51), reflecting the understanding that teaching profoundly influences future generations by fostering critical thinking and creativity. Teachers act as vital mentors and role models, significantly impacting both individual and societal development. This recognition underscores the profession's need for continued commitment, knowledge, and ongoing learning, which is crucial for societal progress. However, the relatively lower ranking of professional development goals suggests a need for more strategic planning in this area. This involves assessing specific teacher needs, incorporating their feedback, and aligning training with current educational trends to enhance effectiveness. The results support Pham et al. (2023), who highlight the increasing focus on in-service training, pedagogical understanding, and continuous learning in teacher professional development.

Table 12: Summary of the Level of Professional Growth and Development of Bachelor of Secondary Education major in Science

Level of Professional Growth with respect to…	Weighted Mean	Verbal Interpretation
Philosophy of Teaching	3.44	Proficient
Dignity of teaching as a Profession	3.51	Exemplar
Professional Links with Colleagues	3.44	Proficient
Professional Reflection and Learning to Improve Practice	3.45	Proficient
Professional Development Goals	3.35	Proficient
Overall Weighted Mean	**3.44**	**Proficient**

Significant Difference in the Status of Employability and Level of Professional Growth and Development when Grouped According to Profile

As shown in Table 13, the employability status of respondents significantly varied based on their demographic profiles, encompassing job satisfaction, salaries and benefits, nature of work, and workers' rights and security. For job satisfaction, significant differences were observed across age groups (p-value = 0.000) and sex (p-value = 0.037), while civil status showed no significant difference. Additionally, the year of graduation significantly impacted job satisfaction (p-value = 0.000). These findings suggest that job satisfaction is influenced by distinct perceptions across age groups, varying societal expectations based on gender, and diverse job market conditions experienced by different cohorts. The results support the study of Topchyan & Woehler (2021), indicating that demographic factors influence job satisfaction among graduates.

Table 13: Significant Difference in the Status of Employability when Grouped according to Profile

Profile	Variable	F	p	Decision	Interpretation
Age	Job Satisfaction	8.575	.000	Reject H_0	Significant
	Salaries and Benefits	5.735	.005	Reject H_0	Significant
	Nature of Work	4.807	.010	Reject H_0	Significant
	Worker's Rights and Security	6.729	.002	Reject H_0	Significant
Sex	Job Satisfaction	2.131	.037	Reject H_0	Significant
	Salaries and Benefits	2.494	.008	Reject H_0	Significant
	Nature of Work	2.182	.016	Reject H_0	Significant
	Worker's Rights and Security	2.207	.031	Reject H_0	Significant
Civil Status	Job Satisfaction	0.089	.933	Accept H_0	Not Significant
	Salaries and Benefits	0.161	.440	Accept H_0	Not Significant
	Nature of Work	0.200	.851	Accept H_0	Not Significant
	Worker's Rights and Security	0.339	.752	Accept H_0	Not Significant
Year Graduated	Job Satisfaction	26.215	< .001	Reject H_0	Significant
	Salaries and Benefits	20.952	< .001	Reject H_0	Significant
	Nature of Work	20.614	< .001	Reject H_0	Significant
	Worker's Rights and Security	21.926	< .001	Reject H_0	Significant

Regarding salaries and benefits, age (p-value = 0.005) and sex (p-value = 0.007) were significant factors, indicating potential disparities in compensation based on experience, market demand, and gender. Civil status, however, did not significantly affect salaries and benefits. The year of graduation also played a significant role (p-value = 0.000), suggesting that more recent graduates may experience different pay structures. These results align with previous research indicating that gender significantly influences salary disparities, and salaries generally increase with age and experience. The results support the study of Balasubramanian & Ganesh (2019), highlighting that gender influences salary disparities and salaries increase with age and experience.

The nature of work also revealed significant differences across demographic factors. Age (p-value = 0.010) and sex (p-value = 0.016) significantly influenced the nature of work, suggesting that experiences and perspectives from different backgrounds contribute to varying work types. Conversely, civil status showed

no significant difference. Furthermore, the year of graduation significantly impacted the nature of work (p-value = 0.000). This indicates that the type of work available to respondents is influenced by their experiences and demographic shifts, which can have implications for employment patterns and teaching roles. The results support the study of Ingersoll et al. (2021), indicating that demographic factors influence employment patterns and teaching roles.

Finally, workers' rights and security varied significantly based on the respondents' profiles. Age (p-value = 0.002) and sex (p-value = 0.031) were significant factors, indicating an influence on perceptions of workers' rights and security. Civil status did not exhibit a significant difference. The year of graduation was also a significant predictor for workers' rights and security (p-value = 0.000). Overall, the employability status of respondents significantly varies according to their age, sex, and year of graduation, influencing the guidance and support they receive and their readiness for the job market. The results support the study of Caingcoy et al. (2021), Henshaw et al. (2025), and Orlanda-Ventayen & Valencerina (2019), who found that these demographic factors influence employability status and job market readiness.

As shown in Table 14, the professional growth and development of respondents, including their philosophy of teaching, dignity of teaching as a profession, professional links, reflection, and development goals, varied based on demographic factors. For the philosophy of teaching, a significant difference was observed based on age and the year of graduation (p-value = 0.000).

Sex and civil status, however, showed no significant difference. These findings suggest that demographic factors influence the respondents' evolving pedagogical beliefs and practices over time. The results support the study of Akiri & Dori (2022), indicating that age and year of graduation influence evolving pedagogical beliefs.

Regarding the dignity of teaching as a profession, age (p-value = 0.007) and the year of graduation (p-value = 0.000) were significant factors. Sex and civil status did not show significant differences. These findings indicate that the respondents' perception of the dignity of teaching varies significantly with their age and the recency of their graduation. This aligns with existing research suggesting that experience and professional maturity shape how educators perceive their profession.

The results support the study of Hoşgörür (2021), aligning with research that age and experience influence teachers' professional development and perception of dignity.

For professional links with colleagues, age (p-value = 0.002) and the year of graduation (p-value = 0.000) were significant factors, while sex and civil status showed no significant difference. This suggests that the extent and nature of professional connections among respondents vary based on their age and the cohort they belong to. These demographic factors play a role in shaping opportunities for collaboration and networking hamong educators. The results support the study of Flores et al. (2025), emphasizing the importance of teacher collaboration and professional connections that vary with age and year of graduation.

Concerning professional reflection and learning to improve practice, age (p-value = 0.001) significantly influenced this aspect, suggesting a meaningful relationship between age and reflective engagement. Civil status and sex showed no significant difference.

Table 14: Significant Difference in the Level of Professional Growth and Development when Grouped according to Profile

Profile	Variable	F	p	Decision	Interpretation
Age	Philosophy of Teaching	8.633	.000	Reject Ho	Significant
	Dignity of Teaching as a Profession	5.315	.007	Reject Ho	Significant
	Professional Links with Colleagues	6.527	.002	Reject Ho	Significant
	Reflection and Learning to Improve	7.156	.001	Reject Ho	Significant
	Professional Development Goals	4.986	.009	Reject Ho	Significant
Sex	Philosophy of Teaching	1.638	.053	Accept Ho	Not Significant
	Dignity of Teaching as a Profession	1.811	.075	Accept Ho	Not Significant
	Professional Links with Colleagues	1.330	.188	Accept Ho	Not Significant
	Reflection and Learning to Improve	1.723	.090	Accept Ho	Not Significant
	Professional Development Goals	1.065	.290	Accept Ho	Not Significant
Civil Status	Philosophy of Teaching	0.073	.946	Accept Ho	Not Significant
	Dignity of Teaching as a Profession	0.123	.908	Accept Ho	Not Significant
	Professional Links with Colleagues	0.233	.827	Accept Ho	Not Significant
	Reflection and Learning to Improve	0.266	.803	Accept Ho	Not Significant
	Professional Development Goals	0.534	.621	Accept Ho	Not Significant
Year Graduated	Philosophy of Teaching	21.711	< .001	Reject Ho	Significant
	Dignity of Teaching as a Profession	15.657	< .001	Reject Ho	Significant
	Professional Links with Colleagues	18.366	< .001	Reject Ho	Significant
	Reflection and Learning to Improve	19.789	< .001	Reject Ho	Significant
	Professional Development Goals	13.818	< .001	Reject Ho	Significant

However, the year of graduation (p-value = 0.000) significantly impacted professional reflection, underscoring the role of educational recency in shaping reflective habits. This indicates that both professional maturity and recent training influence educators' engagement in reflective practice, highlighting a need for continuous professional development tailored to different career stages. The results support the studies of Wang et al. (2025), Li et al. (2024), and Koukpaki & Adams (2020), suggesting that professional maturity and recency of training impact educators' engagement in reflective practice.

Lastly, for professional development goals, age (p-value = 0.009) and the year of graduation (p-value = 0.000) were significant factors.

Sex and civil status did not show significant differences. These findings suggest that respondents' developmental goals shift over time, with younger teachers potentially prioritizing skill acquisition, while older educators might focus on reflective practice and conceptual growth.

Understanding these demographic influences can help in tailoring professional development opportunities effectively. The results support the study of Kim & Lee (2021), indicating that teachers' developmental goals shift over time, with younger teachers focusing on skill acquisition and older educators prioritizing reflective practice and conceptual growth.

Significant Relationship Between the Status of Employability and Level of Professional Growth and Development of the Respondents

As presented in Table 15, a significant relationship exists between job satisfaction and all facets of professional growth and development among respondents. Specifically, salaries and benefits demonstrated a significant relationship with every factor of professional growth, including teaching philosophy, dignity of the profession, professional links, reflection, and development goals, all with p-values of 0.000. Similarly, the nature of work also showed a strong significant relationship with all professional growth factors, again with consistent p-values of 0.000.

Table 15: Significant Relationship Between the Status of Employability and Level of Professional Growth and Development of the Respondents

Variables		df	p	Interpretation
Job Satisfaction	Philosophy of Teaching	378	0.000	Significant
	Dignity of Teaching as a Profession	414	0.000	Significant
	Professional Links with Colleagues	360	0.000	Significant
	Professional Reflection and Learning	378	0.000	Significant
	Professional Development Goals	432	0.000	Significant
Employment Status	Philosophy of Teaching	462	0.000	Significant
	Dignity of Teaching as a Profession	506	0.000	Significant
	Professional Links with Colleagues	440	0.000	Significant
	Professional Reflection and Learning	462	0.000	Significant
	Professional Development Goals	528	0.000	Significant
Salaries and Benefits	Philosophy of Teaching	504	0.000	Significant
	Dignity of Teaching as a Profession	552	0.000	Significant
	Professional Links with Colleagues	480	0.000	Significant
	Professional Reflection and Learning	504	0.000	Significant
	Professional Development Goals	576	0.000	Significant
Nature of Work	Philosophy of Teaching	504	0.000	Significant
	Dignity of Teaching as a Profession	552	0.000	Significant
	Professional Links with Colleagues	480	0.000	Significant
	Professional Reflection and Learning	504	0.000	Significant
	Professional Development Goals	576	0.000	Significant
Workers' Rights and Security	Philosophy of Teaching	462	0.000	Significant
	Dignity of Teaching as a Profession	506	0.000	Significant
	Professional Links with Colleagues	440	0.000	Significant
	Professional Reflection and Learning	462	0.000	Significant
	Professional Development Goals	528	0.000	Significant

Furthermore, workers' rights and security exhibited a significant relationship across all professional growth aspects, with p-values consistently at 0.000. These findings collectively emphasize that the employability of Science graduates is profoundly associated with their comprehensive professional growth and development,

indicating that a holistic approach to enhancing work ethic, knowledge, and abilities strongly predicts a graduate's capacity to secure employment.

The results align with the study of Caingcoy et al. (2021), who found that graduates' employability is influenced by acquired competencies contributing to job satisfaction and professional growth, and Hussain et al. (2022), who highlighted that factors like salary and nature of work significantly impact teacher job satisfaction and development.

Proposed Model: The GROW-TEACH Model

The GROW-TEACH Model is a strategic framework for enhancing graduate employment quality and professional growth derived from the results of the study.

Rationale

The transition from pre-service training to classroom practice is a critical phase for aspiring educators. The studyrevealed general satisfaction with job security and alignment with teaching roles, but also identified needs for stronger support in compensation, mentorship, and professional development planning.

The study further established a significant link between employability and professional growth: graduates satisfied with their assignments, supported by recognition and development, and engaged in continuous learning demonstrated higher retention, motivation, and career advancement.

Objectives:

1. To present a comprehensive, research-based model (GROW-TEACH) that integrates both employability and professional growth dimensions among BSEd Science graduates, supported by analyzed tracer study data and validated by key stakeholders.
2. To align teacher education programs with current workforce expectations by developing structured support mechanisms and piloting these mechanisms in selected academic programs within a defined implementation cycle.
3. To foster resilience, ethical practice, and collaborative engagement among science education graduates through targeted interventions such as values integration, mental wellness programs, and professional learning communities, with success monitored through graduate feedback and participation metrics.

To identify and implement specific, needs-based interventions (e.g., reflective practice sessions, salary orientation, legal rights seminars) that promote long-term career satisfaction and continuous learning among early-career teachers, tracked through follow-up surveys and school-based performance reports.

In response to these findings, the GROW-TEACH Model was developed as a structured, research-driven approach. It integrates academic preparation with real-world expectations, reflective teaching, and values formation, serving as a blueprint for teacher education institutions, school systems, and policymakers. This holistic model aims to foster career readiness, professional empowerment, collaborative advancement, and community engagement, aligning educational preparation with workforce realities.

The GROW-TEACH Model is built upon five pillars:

Pillar 1: Graduate Resiliency and Optimization (GROW) focuses on preparing students for the demands of teaching by addressing challenges encountered during the transition from college to employment. This pillar incorporates wellness programs, career orientation, personal effectiveness workshops, and graduate bootcamps, with support from career counselors, alumni mentors, guidance professionals, and faculty. It primarily benefits pre-service and newly hired teachers.

Pillar 2: Workforce-Readiness through Role and Curriculum Alignment ensures that the teacher education curriculum aligns with field requirements. This pillar promotes regular curriculum review and enhancement in partnership with cooperating schools and DepEd, through activities like practicum enhancements, job readiness training, simulation teaching, and sessions on employment laws and benefits. Key players include curriculum developers, cooperating teachers, HR personnel, and education leaders.

Pillar 3: Teacher Empowerment and Reflective Practice cultivates a mindset of continuous learning and professional growth. This pillar encourages reflective journaling, peer observations, post-lesson evaluations, and data-informed instruction, as well as supporting classroom-based research and sharing best practices through Learning Action Cells (LACs) and in-service training. Instructional coaches, school leaders, and academic coordinators facilitate growth among educators.

Pillar 4: Advancement through Mentorship and Collaboration formalizes collegial support and guidance, which graduates highly value. This pillar establishes mentorship programs, professional learning communities, and promotes team teaching and collaborative planning. Master teachers, department heads, and alumni associations lead in fostering mutual learning and leadership.

Pillar 5: Community Harmony and Ethical Responsibility reinforces teachers' roles as moral and civic leaders. This pillar promotes ethical teaching practices, inclusivity, and social justice through values integration, outreach programs, legal rights orientation, diversity and inclusion training, and community-building initiatives. Civic leaders, legal experts, ethics instructors, and teacher organizations collaborate to ensure teachers contribute to a just and harmonious society.

4. CONCLUSIONS

Based on the results of this study, several conclusions were drawn.

First, the study found that single female teachers desire to enjoy their life, anticipate ongoing challenges and changes, and are evenly distributed across demographics. Additionally, graduate teachers expressed fulfillment from teaching in their specialty, emphasizing that peer and official praise significantly boosts their motivation and self-worth. It was also concluded that teachers uphold their profession's dignity through positive outlooks and strong work ethic, continuously improving scientific education methods. As vital mentors and role models, they impact social and personal growth, underscoring the profession's demand for dedication, expertise, and lifelong learning given its crucial community role.

Furthermore, it was concluded that teacher pay varies by experience and market demand, with potential gender-based inequities. Initial salaries and benefits for graduates are also influenced by economic trends, highlighting the necessity of addressing these disparities for equitable pay policies for BSE Science

graduates. Teachers were found to improve employability by effectively navigating personal and professional circumstances, suggesting that students need to be equipped with skills to leverage their experiences. Strengthening teacher preparation programs is thus vital to ensure qualified teachers enter the field. Finally, BSE Science graduates' employability strongly depends on comprehensive professional development—encompassing work ethic, knowledge, and skills—as a more reliable predictor of employment than specific skills alone. The proposed model aims to enhance this employability and support professional growth.

Teachers should adhere to school policies and maintain respectful relationships with their superiors to ensure mutual respect. It is crucial for them to understand their employment details for productivity and empowerment throughout their teaching careers. School administrators are encouraged to facilitate regular dialogues with faculty to foster collaboration, strengthen peer relationships, and overcome daily teaching challenges. The Department of Education should proactively establish a multifaceted teacher assessment approach emphasizing peer cooperation, professional development, and frequent feedback, integrating student performance, classroom observations, and self-assessments for a comprehensive view of practice. The proposed model should be implemented in college settings to rigorously determine its effectiveness. Lastly, to validate the generalizability of these findings, similar studies should be conducted in other colleges and universities.

5. REFERENCES

[1]. Adu, G. (2021). Stakeholders' Engagement in School-Based Management: A Case Study of Selected Basic Schools in Ghana. International Journal of Educational Development, 83, 102488.

[2]. Agoncillo, J. B., & Castillo, J. A. (2020). Assessing School-Community Partnership in Selected Public Secondary Schools in the Division of Manila. International Journal of Social Sciences and Humanities Research, 7(8), 56-63.

[3]. Agyei, Y. K., & Tsikata, D. (2020). Stakeholder Engagement in School-Based Management: A Review of the Literature. International Journal of Educational Research, 19(1), 21-36.

[4]. Antonio, M. C., & Manalang, M. G. (2020). School-Community Partnership Practices in Public Secondary Schools: A Qualitative Study in the Philippines. Global Journal of Educational Research, 19(8), 116-126.

[5]. Aquino, J., & Abanilla, A. (2023). Examining Stakeholders' Engagement in School-Based Management (SBM) in Secondary Schools: A Mixed-Methods Approach. International Journal of Educational Research, 18(1), 23-38.

[6]. Aryanti, D., & Suhardan, A. (2020). School-Based Management (SBM) and Its Impact on Resource Allocation and School Performance in Indonesia. International Journal of Educational Research and Innovation, 14(2), 387-400.

[7]. Aung, N N., Arunberkfa, N., Hague, M E., Luxchaigul, N., & Vadevelu, K. (2019, December 25). Community Participation In Education: A Case Study Of Taungzalat School In Kalay, Myanmar. Journal of Education in Black Sea Region. https://doi.org/10.31578/jebs.v5i1.193

[8]. Basibas, A T., Fabiosa, A R., Aconga, M M G., & Tentativa, J R. (2021, March 2). Strengthening Community Linkages: Basis for an Intervention Program. Journal of Scientific Research and Reports, 48-59. https://doi.org/10.9734/jsrr/2021/v27i130347

[9]. Bautista, M. D., & Mendoza, J. Y. (2020). Challenges and Strategies in Implementing School-Community Partnership in a Public Secondary School. International Journal of Innovative Research and Development, 11(7), 59-62.

[10]. Bray, M., et al. (2022). Comparative and International Education Policy. Routledge.

[11]. Capino, F. M., Dimaano, S. M., & Pasiliao, L. C. (2021). School-Community Partnership: Assessing the Implementation in Selected Public Secondary Schools. International Journal of Research in Humanities, Arts and Social Sciences, 10(7), 186-192.

[12]. Carnoy, M., & McEwan, P. J. (2020). Decentralization, Equity, and Efficiency in Education. In The Routledge Handbook of Education Reform (pp. 189-202). Routledge.

[13]. Cheng, Y. (2022). Stakeholder engagement in school-based management: A critical review of the literature. Educational Review, 74(2), 231-253.

[14]. Cokethea Hill, V., & Haines, M. (2022). Strong School–Community Partnerships in Inclusive Schools Are "Part of the Fabric of the School.…We Count on Them". ERIC - Department of Education. Retrieved from https://files.eric.ed.gov/fulltext/EJ1085646.pdf

[15]. Creswell, J. W., & Plano Clark, V. L. (2021). Designing and conducting mixed methods research (3rd ed.). Sage Publications.

[16]. Guadaña, R R H., Bermudez, J R D., Ramirez, E Q., & Tong, A E U. (2020, October 23). Extent of Faculty Adeptness and Viability of Gamified Learning in National University. https://doi.org/10.1145/3436756.3437054

[17]. Hanushek, E. A., & Lindqvist, E. (2019). Efficiently funded education: A global challenge. Brookings Institution Press.

[18]. Hanushek, E. A., & Lindqvist, E. (2019). Efficiently funded education: A global challenge. Brookings Institution Press.

[19]. Hanushek, E. A., & Lindqvist, E. (2019). Efficiently funded education: A global challenge. Brookings Institution Press.

[20]. Hidayat, D R S. (2021, August 16). The Role of School-Based Management as a Determinant of the Effectiveness of the Implementation of Education in Schools. Influence, 3(1), 47-55. https://doi.org/10.54783/influence.v3i1.124

[21]. Isa, A M., Mydin, A., & Abdullah, A G K. (2020, September 29). School-Based Management (SBM) Practices in Malaysia: A Systematic Literature Review. International journal of academic research in business & social sciences, 10(9). https://doi.org/10.6007/ijarbss/v10-i9/7870

[22]. Istijarti, A., Riyanto, Y., & Setyowati, S. (2019, December 30). Implementation of Management Based School in Improving The Quality Of Secondary Education. International Journal for Educational and Vocational Studies, 1(8), 904-904. https://doi.org/10.29103/ijevs.v1i8.2255

[23]. Karmila, N., & Wijaya, A. (2020, March 29). IMPLEMENTATION OF SCHOOL BASED MANAGEMENT IN TAMBILUNG ELEMENTARY SCHOOL. JHSS (Journal of Humanities and Social Studies), 4(1), 71-73. https://doi.org/10.33751/jhss.v4i1.2044

[24]. Khan, M Z., Khan, I., & Nisar, M. (2020, June 20). A Study on Community Involvement in the Development of Secondary Schools. Sir Syed journal of education & social research, 3(1), 251-256. https://doi.org/10.36902/sjesr-vol3-iss1-2020(251-256

[25]. Lu, W. (2020, January 1). Demonstration of the Unique Characteristics in the Evaluation of Junior High School on School-Based Management. Proceedings of the International Conference on Modern Educational Technology and Innovation and Entrepreneurship (ICMETIE 2020). https://doi.org/10.2991/assehr.k.200306.106

[26]. Massaquoi, S B., Mansaray, D A., Goba, J G., & Ngegba, M P. (2022, January 1). Challenges of implementing technical and vocational Institution-Led programmers in Bo City, Southern Sierra Leone. International journal of agriculture extension and social development, 5(1), 32-40. https://doi.org/10.33545/26180723.2022.v5.i1a.121

[27]. Michener, J L., Aguilar-Gaxiola, S., Alberti, P M., Castañeda, M., Castrucci, B C., Harrison, L M., Hughes, L S., Richmond, A., & Wallerstein, N. (2020, July 16). Engaging With Communities — Lessons (Re)Learned From COVID-19. Preventing Chronic Disease, 17. https://doi.org/10.5888/pcd17.200250

[28]. Mourshed, M., et al. (2020). How Good Are Schools? Education Reform and the Problem of School Improvement. Princeton University Press.

[29]. Nakiyaga, D., Serem, D K., & Ssentamu, P N. (2021, September 30). A Conceptual Model Explaining How Stakeholders' Participation in School Management Enhance Learners' Academic Achievement in Public Secondary Schools in Uganda. The International Journal of Business and Management, 9(9). https://doi.org/10.24940/theijbm/2021/v9/i9/bm2109-034

[30]. Richter, A., Sjunnestrand, M., Strandh, M R., & Hasson, H. (2022, March 15). Implementing School-Based Mental Health Services: A Scoping Review of the Literature Summarizing the Factors That Affect Implementation. https://doi.org/10.3390/ijerph19063489

[31]. Sarah, W V., Ismanto, B., & Sanoto, H. (2023, June 5). Exploring the Role of Community-Based Partnership for Enhancing Academic Achievement : Empowering Students Through Quality Teaching. Jurnal kependidikan, 9(2), 671-671. https://doi.org/10.33394/jk.v9i2.7816

[32]. Sattar, T., Ullah, M I., & Ahmad, B. (2022, July 19). The Role of Stakeholders Participation, Goal Directness and Learning Context in Determining Student Academic Performance: Student Engagement as a Mediator. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.875174

[33]. Sulthani, * A., & Thoifah, I. (2022, August 22). Urgency of Stakeholders in Improving the Quality of Education. Riwayat, 5(2), 443-451. https://doi.org/10.24815/jr.v5i2.27600

[34]. Sumarsono, R B., Kusumaningrum, D E., Benty, D D N., Thasbika, S A., Rizkita, K., & Isnaeni, I. (2020, January 1). Achievement of School-Based Management Implementation Reviewed from a

Financial Perspective on a Balanced Scorecards Approach. https://doi.org/10.2991/assehr.k.201214.263

[35]. Temprosa, M A M. (2021, December 15). Strategic Priorities, Management Competencies, and Performance of the Divisions of Schools in Negros Island, Philippines. Philippine social science journal, 4(4), 82-90. https://doi.org/10.52006/main.v4i4.443

[36]. Tumin., & Faizuddin, A. (2020, January 1). Cultivating Collaborative School-Community Development in the 21st Century: The Challenges to Improve Educational Quality in Indonesia. Proceedings of the International Conference on Community Development (ICCD 2020). https://doi.org/10.2991/assehr.k.201017.166

[37]. UNESCO Bangkok. (2022). School-Based Management Handbook. UNESCO Bangkok.

[38]. UNESCO. (2019). Global Education Monitoring Report 2019: Inclusion and Education: All Means All. UNESCO.

[39]. Villanueva, A A., Disu, S S., & Villanueva, K F P A. (2021, January 1). Assessing the School Heads Leadership in the Towns of Nueva Ecija, Philippines: Inter-Relationship of Supervisory Skills, Interpersonal Skills and Leadership Skills. OAlib, 08(11), 1-15. https://doi.org/10.4236/oalib.1108088

[40]. World Bank. (2020). World Development Report 2020: Trading Away Our Future? Education in the Age of Anxiety. World Bank Publications.

[41]. Ya, K Z., Giatman, M., Rizal, F., & Wulansari, R E. (2020, November 25). Revisiting the School-Based Management Recent Studies. Pedagogi: Jurnal Ilmu Pendidikan, 20(2), 119-127. https://doi.org/10.24036/pedagogi.v20i2.897

Cite this Article

***Jojimar SJ. Julian, MAT; Emma E. Linga, Ed.D, "EMPLOYMENT QUALITY AND PROFESSIONAL DEVELOPMENT OF THE GRADUATES OF BACHELOR OF SECONDARY EDUCATION MAJOR IN SCIENCE"**, International Journal of Multidisciplinary Research in Arts, Science and Technology (IJMRAST), ISSN: 2584-0231, Volume 3, Issue 8, pp. 01-21, August 2025.*

***Journal URL:** https://ijmrast.com/*

***DOI:** https://doi.org/10.61778/ijmrast.v3i8.158*