SOCIAL SCIENCE REVIEW ARCHIVES
ISSN Online: 3006-4708
ISSN Print: 3006-4694
https://policyjournalofms.com

Analysis of MS Education Program of Public and Private Universities of Islamabad and Rawalpindi: Comparative Study

Asma Mustafa[1], Hafsa Shujat[2], Zakir Abbas[3]

[1,2] MS Scholar Educational leadership and management, International Islamic University, Islamabad, asma.msedu413@iiu.edu.pk, hafsashujat98@gmail.com
[3] M.Phil Scholar, PMAS Arid Agriculture University, Rawalpindi,
Email: zakirabbaskhari@gmail.com

DOI: https://doi.org/10.70670/sra.v3i1.3898

Abstract

The main purposes of higher education include developing critical thinking skills in students, preparing them for the job market, and enabling them to cope with the challenges of a fast-moving world. The two-year MS education program aims to develop strong research skills in students, enabling them to address baseline issues from classroom practices to the teaching-learning process. By the end of the program, students are expected to become independent researchers equipped with the necessary skills and expertise. This study aimed to analyze the MS education programs of public and private universities in Islamabad and Rawalpindi, focusing on instructional facilities, research activities, assessment processes, and curriculum content. It was descriptive and quantitative, involving 90 MS education students (2021-2023) and 28 teachers. Using universal sampling, data were collected from 82 students and 26 teachers through self-developed questionnaires on a five-point Likert scale, covering 46 items under the four indicators. Data were collected via personal visits and analyzed using descriptive statistics (percentage, frequency). The major findings revealed that public university classrooms are not large enough and lack multimedia and LED facilities. Private university students reported inadequate internet access. Public university students also indicated a lack of training in data analysis techniques and insufficient supervisors. Despite these issues, faculty members from both sectors gave favorable responses regarding their programs. Based on the findings, public universities should improve classroom facilities by providing multimedia and LEDs. Private universities need to address internet availability issues and ensure access to digital libraries for students. Both sectors should encourage research publication, conduct research seminars, and provide training in research ethics. Public universities should review and make their curriculum more practical, while teachers should provide constructive feedback to students.

Keywords: Public Private Universities, Instructional Facilities, Research Activities, Assessment Process

Introduction

Higher education primarily aims to develop critical thinking, prepare students for the job market, and help them navigate a rapidly changing world. A two-year MS education program focuses on building strong research skills, enabling students to address fundamental issues from classroom practices to teaching processes, with the goal of producing independent researchers. Universities

play a crucial role by offering advanced courses, conducting exams, and awarding degrees, while also contributing to human development and improving quality of life through various resources and opportunities.

Background of the Study

Education is the most significant element for the development of any nation, in fact the progress and prosperity of every nation depends on the education system. In this regard, quality education is most concerned issue as it believed that only quality education brings forward the skilled and trained professionals which in return are the cause of nation to excel in every field (David, 2001). To develop knowledge driven society, higher education institutions play a major role to develop critical thinking and innovative skills in graduated students, which is the need of time and society. The main purpose of higher education is to develop critical thinking skills in students and secondly to make them able for market and lastly to enable students to cope with the challenges of fast-moving world (Brennan, 2004). Vision 2025 by Pakistan's Ministry of Planning, Development, and Reform emphasizes advancing higher education and research skills. Universities offering M.Phil and Ph.D. programs are tasked with ensuring quality and fostering innovation. In Pakistan, the Higher Education Commission (HEC) oversees 242 universities, with 144 public and 98 private institutions, aiming to cultivate excellence, research skills, and leadership (HEC, 2022). In Islamabad, which hosts 25 universities (17 public and 8 private), the two-year MS Education program focuses on developing strong research skills and preparing students to become independent researchers. Both public and private institutions provide challenging curricula, facilities, and diverse teaching methods to achieve these goals (HEC, 2022). This study compares the practices of public and private universities offering the MS Education program, focusing on instructional facilities, research activities, and assessment processes

Rationale of study

The Pakistani government wants both public and private universities to train highly skilled individuals within the country to help with its development. They want the universities to maintain high standards for MS programs, ensuring quality education. The students are also concerned about quality of education in both sectors. In order to analyze the contribution of the universities that have these universities meet the need of students and stakeholders there is need to conduct a study that analyze program offered by both sectors.

Problem Statement

MS Education program is offered by both public and private sector universities of Islamabad and Rawalpindi but, there exists a difference in terms of facilities provision, the processes followed in pursuing the program and the outcomes of the program. The research problem is that whether MS Education program in public universities focuses on the provision of instructional facilities, research activities and assessment process than the private universities. Therefore, this study intends to compare MS Education program of public and private universities of Islamabad and Rawalpindi with reference to instructional facilities, research activities, and assessment process.

Objectives of the Study

The objectives of this study were to:

1) Compare MS Education program of public and private universities in terms of Provision of instructional facilities.
2) Differentiate MS Education program of public and private universities in terms of research activities.

3) Compare MS Education program of public and private universities with reference to assessment process.

Research Questions

1) What are the differences between MS Education program of public and private universities in terms of instructional facilities?
2) What differences are there in MS Education program of public and private universities with reference to research activities?
3) How assessment processes of MS Education differ in public and private sector?

Significance of the Study

This study was useful for the university administrative (Deans, HOD, chairperson and professors), concerned universities (IIUI and UOW), students, faculty members. The finding of this study will be a documented source for the stakeholders to revise policy and bring improvement in higher education. The comprehensive finding of proposed study will help the concerned universities to work on their strengths and weaknesses and make required improvements. The study would provide the clear findings that will be used by students to analyze the practices of both public and private sector universities. This study has provided recommendation with the view that concerned universities management, stakeholders by knowing the findings will work to raise the quality of that program and most importantly to bring harmony in both public and private sectors.

Literature Review

Higher Education

Higher education entails learning, acquiring outstanding talents, receiving training, and learning about various viewpoints and methods that can help one become more understanding and lead a respectable existence. People who are highly qualified are better able to utilize their abilities and the chances society provides for self-fulfillment. In order to ensure fairness in the distribution of opportunity and success among those in and around, it is thus a crucial tool. Higher education advances people's objectives, satisfies their thirst for knowledge, and fosters the growth of their intellectual capacities and aptitudes over the course of their life. (Gupta, 2017). According to Patel (2003) globally, higher education is the primary and most significant source for meeting some of a community's higher aspirations. Global university students and faculty members are constantly inspired to uphold the principles of liberty, individuality, and fraternity. According to Crowley (2008) in both hypothetical and practical terms, the major role of advanced education requires a satisfactory experimental understanding of what is happening inside learning organizations and to the learners, who spend a significant portion of their childhood and adult years in these learning organizations.

Role of Higher Education Commission

The Higher Education Commission (HEC) was established in Pakistan in 2002 with the primary objective of evaluating and enhancing the country's higher education system to match that of industrialized nations. HEC scrutinizes all areas needing improvement in the educational system and offers recommendations and guidelines to all degree-awarding institutions (DAIs) across the nation, aiming to help them grow and provide high-quality higher education to local residents. As a governing organization for higher education, HEC supports both public and private sector institutions in their pursuit of excellence. HEC's major objectives in budget provision and policy-making include encouraging universities to pursue ongoing quality improvements and strengthening standards in teaching, instruction, and research. It aims to implement plans that satisfy the requirements of the learner market, local community, and broader societies while

ensuring equal access to higher education opportunities for everyone. Achieving value for government funding through careful investigation and resource utilization is also a key priority. To support researchers, HEC offers financial aid and scholarships in various fields and ensures institutions provide modernized methods of student evaluation. Projects to finance foreign PhDs have been developed to enhance Pakistan's research environment, encouraging community-oriented examination among employees of Pakistani firms and foreign employees. Joint research projects between researchers and the local workforce are supported, and resource distribution efforts aim to minimize inequalities. HEC emphasizes the continuous improvement of quality standards in teaching, learning, and research to foster diversity and collaboration, setting up systems to meet the goals of the learner market and various societies, thereby achieving value for government money through effective resource use and fostering healthy competition (HEC, 2023).

HEC Guidelines for MS program

Criteria for the MS Education program include requiring sixteen years of schooling or a 4-year education (130 credit hours) post-HSSC/F.A./Fsc/Grade 12 for admission. Candidates must achieve a minimum 50% cumulative score on the GAT-General test by the National Testing Service, valid for two years. To earn an M.Phil/MS/Equivalent degree, candidates must complete either 30 credit hours of coursework or 24 credit hours of coursework plus 6 credit hours of research/thesis work. Six credit hours of research are mandatory for MS, with exemptions allowed only in disciplines where research is not feasible (HEC, 2023).

Role of University in Higher Education

Universities are higher learning institutions that offer advanced courses, conduct exams, and award degrees across various faculties. Their main responsibilities include fostering human growth, providing resources and opportunities, and enhancing the quality of life. Committed to serving society, universities should address both local and global issues while promoting research and contemporary skills among instructors. Curricula should emphasize professionalism, politeness, and communication, preparing graduates with creative abilities, a love of humanity, strong analytical skills, and the capacity for inquiry and problem-solving (Andersen, 2008). Universities have four major roles: communicating ideological conflicts, serving as socialization and selection mechanisms for elites, conducting investigative research, and developing a skilled labor force. Their most emphasized capability is producing university specialists. They often lack adequate resources for peer evaluation due to insufficient training. To address this, universities should offer programs that train staff to function as partners in all workforce activities (Greene, 2008).

MS Education Degree Program

MS education is a postgraduate research degree. MS is completely made up of students own independent project, as opposed to finishing taught units and evaluations. Training in research methodologies, research ethics, and topics relating to proposal writing, grant applications, publishing, data analysis, and the evaluation of conflicting evidence are frequently included in the curricula of research-oriented programmes (Bennett, 2015). The MS Education program develops students' critical thinking and in-depth analysis of education through diverse disciplinary, political, and philosophical perspectives. It emphasizes scientific inquiry to enhance research skills and equip students to address key educational issues creatively. Graduates gain comprehensive knowledge and skills for advanced research, policy-making, and practice, preparing them for roles in education and related fields. The program offers rigorous curricula, diverse teaching methods, and a supportive environment, preparing students for careers as research associates, project officers, librarians, and in various educational and professional sectors (LUMS, 2022).

Development of Research at University Level

According to the study, research universities are also involved in fostering the best networks, journals, and libraries in the world, creating societies for research scholars, and disseminating information about the burgeoning sciences, globalization, internationalization, and upcoming trends in education, language, and research (Gyuris, 2008). According to Wilison, (2014) the standard of higher education is largely dependent on the environment for research and development, as well as the motivation of teaching staff to foster a culture of research by conducting top-notch studies that will help students improve their research writing abilities Knowledge and education. In addition to providing devoted teaching and guiding services, Any educational institution's teaching staff had a crucial role to play in the development and production of the top researchers and studies. Find out that that a researcher can conduct research anywhere in the world more simply and independently than a researcher conducting research in Germany, where PhD candidates are required to serve as an assistant to a professor. The candidate will thereafter participate in the professor's research programme as an assistant (Garcia, 2016). Blasi (2005) stated that The DAIs and research centres are locations for advancing education, promoting information and new technology development, conducting research, and introducing innovation and novelty to the fields of exploration and modernization Therefore, the universities should make use of all the resources and funding provided to them by various (Venning, 2013).

Assessment of Research Skill

Incorporating research techniques into exam-based social science courses requires teachers to effectively evaluate and guide students' use of these skills. The effectiveness of such instruction depends on the depth of the teacher's guidance and the quality of supervision, which affects students' abilities to analyze problems, conduct research, and complete projects (Stokking et al., 2014). A new assessment approach is needed to measure students' growth in research skills accurately. Historically, higher education aimed to prepare students for public service and leadership, but today it faces pressures to adapt to economic and market demands. This shift has transformed higher education from a public good into a private benefit, emphasizing college access, affordability, and the development of critical thinking and problem-solving skills (Hoffmann, 2018). Redesigning curricula and assessment practices is essential to ensure students are equipped to meet contemporary societal needs and contribute to the global economy (Hart Research Associates, 2015; Timmerman et al., 2013).

Assessment Process

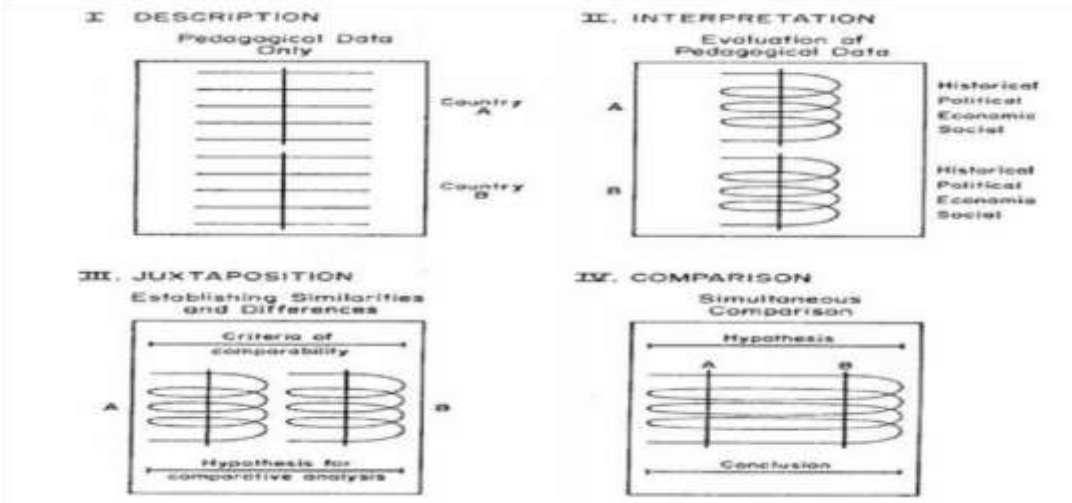
Effective classroom assessment enhances learning by closely aligning with instruction and understanding students' backgrounds. While large-scale standardized tests can communicate broadly, they often lack relevance and timeliness for individual classroom contexts (Miller, 2012). Integrating assessment with instruction and using cognitive theories can provide more meaningful feedback on student progress and improve teaching effectiveness (Cox, 2014). Recent advancements in cognitive and measurement sciences allow for rethinking assessment approaches. These developments help understand nuanced evidence of learning and emphasize the need for integrating assessment with instructional practices (Richardson et al., 2012). This integration is crucial for setting challenging academic standards and effectively tracking student progress.

Comparison through Bereday's Comparison Method

George Bereday, a pioneer in comparative education, developed a systematic method that views educational systems within broader cultural contexts. His approach, described by Kidd (1975), focuses on identifying lessons from varying educational practices across cultures. Bereday

emphasized the importance of recognizing personal and cultural biases and understanding the cultures under study. He proposed a four-stage process for comparing educational systems.

Fig 2.1 *Stages of beredyas*



Stages in Bereday's Comparison Method in Education

Bereday's comparison method involves four stages:

1. **Description and Data Collection**: Gather and present instructional data from various universities in descriptive formats using tables and graphs for easy future analysis.
2. **Interpretation**: Analyze data with social science techniques, considering contextual factors such as historical, geographic, socioeconomic, and political influences.
3. **Juxtaposition**: Classify and process data through preliminary comparisons, setting criteria for comparability.
4. **Comparison**: Combine data from different universities to test hypotheses and create action plans.

Empirical Researches

Problems in Higher Education

Siddiquah (2017) highlights the critical importance of educational quality in driving socioeconomic and political change. Quality education fosters collaboration among educators, parents, and community members, ensuring students are prepared for future academic and societal challenges. Enhancing educational quality is essential for improving access, equality, and fundamental life skills, as endorsed by international declarations. Slaughter (2001) identifies three ways to evaluate educational quality: inputs (resources and infrastructure), processes (classroom delivery), and results (student performance and outcomes). High-quality education requires focusing on these aspects to guide economic, social, and personal development. The Universal Declaration of Human Rights (1948) recognizes quality primary education as a fundamental right. Ameen (2017) notes the increasing concern for quality and rising competition among institutions, emphasizing the need for formal assessment strategies. More funding is available for infrastructure and development, with expectations that "M.Phil Leading to Ph.D." programs will address the demand for qualified faculty. Lenn (2004) points out that accreditation can resolve quality issues by validating educational programs and informing prospective students about institutional standards.

Provision of Facilities at University Level

A study conducted by Bano (2013) on provision of facilities at university level found out that Academic facilities include academic libraries, lectures halls, display projectors, and lighting systems. They all perform specific academic functions and provide specific conveniences or services for academics. One of the most crucial components of any student's learning environment and experience is the academic atmosphere. They distinguish the higher education institution from other academic institutions by adding more value to it. Understanding what constitutes academic facilities and how they relate to student satisfaction is crucial. -clean, peaceful, safe, and healthy school buildings are necessary for good teaching and learning. A study by Price (2003) in South West Nigeria found a strong link between physical amenities and students' motivation and academic performance. The research suggests that enhancing the quality of physical, human, and material resources in public schools can improve academic standards and create a more conducive learning environment. Iheanach (2003) investigated the impact of facilities on student satisfaction and found that the quality of social spaces, auditoriums, and libraries significantly affects student satisfaction, while access to computers has a minimal impact. The study emphasizes that high-quality facilities play a crucial role in students' choice of institution.

Evaluation and Assessment Process at University Level

Assessment significantly impacts how students approach learning, encompassing tasks such as designing appropriate assessments, focusing on higher-order cognitive outcomes, and maintaining academic standards. Despite innovations in assessment techniques and technology, core responsibilities like task design, criteria for evaluation, and interpretation of marks remain crucial (Encyclopedia of Education, 2022). Research identifies two main goals for assessment: evaluating student performance for certification and supporting student learning (Gronlund, 2006; Nicol & Dick, 2006). Studies show that traditional methods like exams dominate, with few educators using alternative techniques such as essays or peer assessments (Postareff et al., 2011). Effective assessment should involve students actively and encourage real-world assessment techniques (Walstad, 2001). Current practices reveal a disconnect between curricular content and assessment procedures, with a focus on assessment for learning rather than learning through assessment. Authentic assessments, like project work and portfolios, are better received by students and align more closely with teaching. Incorporating formative feedback and integrating assessment with instructional cycles can improve student learning outcomes (Cauley, 2010).

Research Methodology

This chapter is about an overview of the research methodology that was used to make a comparative analysis of MS Education Programme in government and Private Universities of Islamabad and Rawalpindi.

Research Design

This study was descriptive in nature and survey method was used for research. This study includes one public and private university offering MS Education program from Islamabad and Rawalpindi as per criteria.

Research Paradigm

Positivist research paradigm as it synchronizes with the study. Positivism adheres to the view that knowledge is gained through factual data, findings must be quantifiable and the researcher being an objective analyst keeps away from personal values in conducting the study (Rayan, 2015).

Population and Sample

MS Education program was offered only by these universities so, the population of this study was 90 MS education students of batch (2021-2023) and 28 teachers of MS education program of (public and private) universities of Islamabad and Rawalpindi found by the personal visit of researcher in universities. Universal sampling technique was used and all 82 students and 26 teachers of MS education Program of public and private universities of Islamabad and Rawalpindi were selected as sample of study.

Table 3.1
Population of the study

Public University	Department of Education	
1 International Islamic University Islamabad	No of students 46	No. of Teachers 19
Private University	Department of Education	
2 University of Wah	No. of Students 44	No. of Teachers 9
Total	90	28

Instruments

The researcher devised two self developed questionnaires after reviewing literature on five-point Likert scale. For data Analysis interpretation five point Likert scale is converted to 3 point Likert scale by merging (SA with A), neutral and (D with SD).

A) Questionnaire for students to examine the instructional facilities, research activities, curriculum content and assessment process about MS education program. The questionnaire includes 14 statements related to instructional facilities, 13 statements related to research activities, 10 statements related o research activities and 14 statements related to assessment process

B) Questionnaire for the faculty members of MS education program to find about research activities, instructional facilities, curriculum content and assessment process about MS education program. The questionnaire includes 14 statements related to instructional facilities, 13 statements related to research activities, 10 statements related o research activities and 14 statements related to assessment process

Procedure (Validity)

Validity

The validity of the instruments was checked by experts of social sciences from international Islamic university. They examined content, ambiguity wording and grammar of the statements. To validate the questionnaire statements their valuable comments are incorporated in questioner like some demographic changes are made fourth variable curriculum content is added and some grammatical mistakes are removed after expert's opinion.

Data Collection

The researcher collected data from the international Islamic university Islamabad, and the University of Wah. A letter seeking permission to conduct the study was composed by the researcher and submitted to the department heads of the selected universities. A questionnaire was

distributed personally by the researcher for data collection. Data were collected through personal visits of the researcher. Survey technique was used to collect data from the respondents through above mentioned questionnaires. The participants were briefly instructed about the purpose of the study.

Data Analysis

Data were analyzed through descriptive statistics (frequency, percentage) and to compare the responses of public and private universities' respondents' percentage was used.

Objective 1: Instructional Facilities

Statements	Public% S	Public % T	Private% S	Private % T
Classrooms are large enough for proper Teaching and learning process.	77%	84%	85%	86
White boards are well maintained in classroom	51%	84%	55%	86
Library is equipped with books related to MS education program	88%	100%	90%	100
Multimedia facility is available in classroom	0 %	53%	60%	100
Internet facility is available in the campus.	67%	100%	35%	100
Classrooms have LEDs for display of any 21% Video.	23%		90%	71
Seminar room is available for any course related seminar	91%	78%	100%	100
The facility of conference room is available in the campus	100%	91%	95%	100
Thesis and journals relevant to MS education program are available in library	85%	100 %	95%	100
Facility of digital library is available	95%	100%	50%	86

Both public and private sector students and faculty generally agree that classrooms are adequately sized and that libraries are well-stocked with relevant books. However, disparities emerge in multimedia facilities and LEDs availability, with public sector respondents showing less satisfaction compared to their private sector counterparts. Additionally, private sector students report lower satisfaction with internet facilities compared to public sector students.

Objective 2: Research Activities

Indicator of research activities

Statements	Public % S	Public % T	Private% S	Private % T
Supervisor encourages the research publications.	69%	100%	65%	100%
Students are trained in the data analysis techniques.	54%	100%	75%	100%
Department organizes number of seminars on research activities.	80%	100%	85%	100%
There is enough number of supervisors to supervise MS scholars.	87%	100%	90%	100%
Supervisors give proper time to research students.	46%	100%	80%	100%
Department organizes conferences.	85%	100%	80%	95%
Students are asked to practice research ethics.	80%	100%	85%	100%
Research courses are taught to students for conducting research.	91%	100%	95%	100%
Supervisor is cooperative with student regarding research work.	78%	100%	75%	100%
Thesis formatting guidelines are provided to students for conducting research.	85%	100%	95%	100%
Workshops are organized for students to enhance thesis write-up skill.	68%	100%	90%	100%
Workshop on APA referencing styles is organized for students to enhance their referencing skill.	83%	100%	90%	100%
Originality of research work is Is encouraged by teachers	98 %	100%	100%	100%

Both sectors agree on several aspects of research activities, including supervisor encouragement of research publication, organization of research seminars, and training in research ethics. However, private sector students show higher satisfaction with data analysis training and the dedication of supervisors' time compared to public sector students, who express some dissatisfaction in these areas.

Objective 3: Assessment Practices

Shows indicator of Assessment process related to MS Education program

Statements	Public % S	Public % T	Private% S	Private % T
Exams reflect the content taught in classroom.	82 %	91%	85 %	100%
Teachers use multiple techniques for assessment.	79 %	100%	90%	100%
Numbers of assessments are enough to assess students learning.	84%	100%	90%	89%
Technique of quizzes assessment is mostly used by teachers.	81%	100%	95%	100%
Teachers ask students to learn classroom material for exams.	75%	100%	75%	100%
Existing assessment system promotes students comprehension level.	82%	100%	95%	100%
Evaluation procedure of research work is satisfactory.	84%	100%	80%	100%
Exams are focusing on cognitive domain.	59%	100%	95%	100%
Classroom quizzes promote better learning.	76%	100%	85%	100%
You are satisfied with number of activities conducted before summative assessment.	75%	100%	85%	100%
Teachers provide constructive feedback regularly.	49%	100%	75%	100%
Teachers use remedial strategies after	70%	100%	85%	100%

There is broad agreement among both sectors that assessments reflect taught content and use multiple techniques. Private sector students show higher agreement with the effectiveness of quizzes and the promotion of cognitive learning compared to public sector students. Faculty in both sectors generally agree on the adequacy of assessments and feedback practices. Overall, students and faculty from both public and private sectors agree on many aspects of instructional facilities, research activities, curriculum content, and assessment practices. Notable differences include multimedia resources and digital library access, with private sector students generally reporting higher satisfaction.

Conclusion

Findings reveal consistent agreement among public and private sector students and faculty on several aspects of instructional facilities. Both groups agree that classrooms are appropriately sized, whiteboards are well-maintained, and libraries have relevant books. However, discrepancies exist in multimedia facilities and LED availability, with public sector respondents reporting lower satisfaction. Private sector students also express dissatisfaction with campus internet and digital library access. Regarding research activities, there is general agreement on supervisor encouragement, research seminars, and training in research ethics, though differences arise in data analysis training and time dedication by supervisors. Private sector students report higher satisfaction in these areas, while public sector students are less satisfied with supervisor time allocation. Both sectors agree on curriculum content alignment with objectives and topic sequence but note slight differences in trends and content completion. Assessment practices are similarly agreed upon, with both sectors supporting the reflection of taught content and diverse assessment techniques, though private sector respondents favor assessments that promote cognitive development and constructive feedback more than their public sector counterparts.

References

Abbas, Z., Dahar, M. A., & Yousuf, M. I. (2023). Impact of media addiction on academic success of secondary students. *Russian Law Journal*, *11*(3), 3146-3157.

Abbas, Z., Shakoor, Z., & Fatima, K. (2023). Role of Parental Involvement on Elementary Students Academic Success and Well Being. Journal of Asian Development studies, 12(4), 763-770.

Andersen, C., Bunda, T., & Walter, M. (2008). Indigenous higher education: The role of universities in releasing the potential. *The Australian Journal of Indigenous Education*, *37*(1), 1-8.

Bennette, M. (2015). *The master of philosophy degree guide.*

Brennan, J. (2004). Higher education and social change. *Higher Education*, *56*(3), 381–393.

Cross, K. P., & Angelo, T. A. (2008). Classroom Assessment Techniques. A Handbook for Faculty. *A journal of educational strategies, issues and ideas*, *83*(1), 1-6.

David, H., (2001). The Nature of Hope and its Significance for Education, *British Journal of Educational Studies*, *49*(4), 392-410.

García, M. G., López, C. B., Molina, E. C., Casas, E. E., & Morales, Y. A. R. (2016)

Development and evaluation of the team work skill in university contexts. Are virtual environments effective? *International Journal of Educational Technology in Higher Education*, *13*, 1-11.

Greene, F. J., &Saridakis, G. (2008). The role of higher education skills and support in graduate self-employment. *Studies in Higher Education*, *33*(6), 653-672.

Gupta, A., & Singh, A. (2017).Higher Education need skills with value education, *international journal of research publication*, *1*(1), 1-5.

Gyuris, E. (2018). Evaluating the effectiveness of postgraduate research skills training and its alignment with the Research Skill Development framework. *Journal of University Teaching & Learning Practice*, *15*(4), 15-17.

HEC (2022) education system/ structure of Pakistan/primary/secondary/higher education.

Miller, A. H. (2012). Student assessment of teaching in higher education. *Higher*

Patel, N. V. (2003). A holistic approach to learning and teaching interaction: factors in the development of critical learners, *International Journal of Educational Management*, *7*(6), 272-284.

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: a systematic review and meta-Analysis. *Psychological bulletin*, *138*(2), 353-355

Stokking, K., Schaaf, M., Jaspers, J., &Erkens, G. (2004). Teachers' assessment of students' research skills. *British educational research journal*, *30*(1), 93-116.

Willison, J. W. (2014). When academics integrate research skill development in the curriculum. *Higher Education Research & Development*, *31*(6), 905-919.