



PALESTINE POLYTECHNIC UNIVERSITY INNOVATION AND INSTITUTIONS

PERFORMANCE:

REGULAR UNIVERSITIES IN THE SOUTH OF THE WEST BANK



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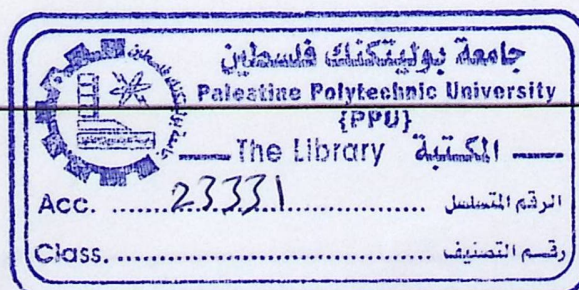
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DEDICATION

To our devoted, patient, and passionate parents, who have really waited for
the raise of our graduation sun?

To Dr. Suhil Sultan who has really been giving us all the attention
needed and all he could afford us with resources, time, energy and
experience.

To him we say you are model of "professionalism"

To those who die without knowing why!?

To the children of Gaza

ABSTRACT

Innovation now-a days is becoming a critical asset that lead the world organizations, companies, institutions and manufactures for successfulness and profit. So universities are in need for innovation and all the subtitles that occur under the big title "**innovation**" starting from the thinking process and the need for radical and critical thinking ending with financial performance. For the purpose this research focuses on the regular universities in the South of the West Bank in Palestine (Palestine Polytechnic University, Hebron University, Bethlehem University), in order to examine the availability of innovation sources in the mentioned universities and the affect of those sources on the universities performance (financial performance, internal business process, learning and growth and customer satisfaction).

This research met those aims through qualitative approach of an extensive study of relevant literature, and through quantitative approach of the implementation of practical and statistical research. The practical section was carried out through a case study of Palestine Polytechnic University using a structured interviews with key members in the university. The statistical section was carried through a questionnaire that examine a sample of the three universities (Palestine Polytechnic University, Hebron University, Bethlehem University) which were chosen in statistical way using stratified random sample technique.

This research produced a number of key findings, the survey confirmed a significant relationship between the availability of innovation sources and the performance level at universities, and in addition, there is a significant difference between the performance levels between the universities according to the availability of innovation sources among the regular Southern West Bank universities.

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1 Introduction

1.1. Research focus

Organizations around the world are in continuous progress and change movement, they are improving the way of doing business in incremental, radical, and revolutionary ways. Innovation was the headline and the main gateway that lead these organizations to become what they are now.

So the Palestinian universities as a whole and the polytechnic university in particular are part of the world's organizations society, the research team sensed the importance for applying what is required to be an innovative instituted.

The importance of the research comes from the need to be distinctive in doing business, to be creative and innovative in the rapid change and development around the world. Palestinian universities should be open to those developments, this project is not important for the universities to be high performance institute but also to the society, through applying the innovation in the whole universities that will help to graduate creative, innovative and high educated students who would contribute in the society to be in a better situation. The importance of this research comes from tow areas: the literature review through it the terms of higher education, innovation and performance will be clear and consolidate and producing deeper intellectual understanding, the other area is the empirical practical research that will provide a valuable insight into a problem area.

Innovation commentators encourage that higher education requires a process of preparation to cope with innovation that has become essential requirement for higher education institutions to succeed in achieving its goal in distinct way, that may face some challenges that regular universities may avoid because of applying something new that might always be difficult and face

resistant, nevertheless universities should be aware of those challenges and resistant and deal with them properly.

A major focus on this research will concentrate on whether innovation would affect higher education institutions performance or not and how? Moreover, measuring some variables to decide to what degree would they affect innovation and performance in higher education institutions. It would also measure the relationships between those variables and innovation and performance. In addition this research will suggest a mean to measure innovation performance in higher education institutions is through innovation scorecard.

1.2. Overall research aim and research objective

The overall aim of the research is to highlight the importance of innovation in the Southern West Bank regular universities, in order to keep pace with the change and development in universities requirements needed nowadays, then to examine if the university innovative ,could this effect its performance ,growth , excellence, effectiveness ,and the graduate students and their ability to become suitable and efficient enough for the labor market?.

The most concept that take attention in the research is performance, this research will study the relationship between innovation and performance in the institutions so that will be indicator to realize the role that innovation plays in such institutions.

This research will assess innovation in Palestinian regular universities in South of the West Bank (Palestine Polytechnic University, Hebron University, and Bethlehem University). Specifically, within the context of higher education, the objectives of this research are to:

- 1.2.1. Discovering to what extent do the sources of innovation influence the performance at South of the West Bank regular universities.
- 1.2.2. Determine what are the sources of innovation available at South of the West Bank regular universities?.
- 1.2.3. Determine what are the performance levels of regular universities that are in the south of the West Bank ? .
- 1.2.4. Studying in depth Palestine Polytechnic University (PPU) case to know how can the PPU improve its performance.

1.3. Research hypothesis:

Main Hypotheses

- **H0:** There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level.

Sub hypotheses

- **H1:** There is no significant differences at ($\alpha = .05$) between the availability of sources of innovation and financial performance level between universities.
- **H2:** There is no significant differences at ($\alpha = .05$) between the availability of sources of innovation and internal business process performance level between universities.
- **H3:** There is no significant differences at ($\alpha = .05$) between the availability of sources of innovation and customer satisfaction between universities.
- **H4:** There is no significant differences at ($\alpha = .05$) between the availability of sources of innovation and university learning and growth ability between universities.

1.4. Research methodology

This research study has a number of inter-related objectives set within the context of higher education:

- 1.4.1. Discovering to what extent do the sources of innovation influence the performance of regular universities.
- 1.4.2. Determine what are the sources of innovation available at regular universities in the South of the West Bank ?
- 1.4.3. Determine what is the performance level of Southern West Bank regular universities ?.
- 1.4.4. Studying in depth Palestine Polytechnic University (PPU) case to know how can the PPU improve its performance.

To achieve these objectives the research team followed analytical descriptive methodology built on two main tools:

1. **Quantitative strategy:** the results that are based on this strategy was collected through the use of a questionnaire where the research population was the staff of Palestinian regular universities in Southern West Bank (Palestine Polytechnic University, Hebron University, Bethlehem University).
 - The population : the research population was the staff of Palestinian regular universities in Southern West Bank (Palestine Polytechnic University, Hebron University, Bethlehem University).
 - The sample : As for the sample that have been selected to represent the population is a stratified random sample.

The project team had subdivided each university to its faculties and took information about the number of university's employees (academic, administrative, academic\administrative) for each faculty, PPU have 4 faculties (Engineering and Technology Faculty, Business Administration and informatics faculty \, Applied Science faculty, Applied Professions faculty). Hebron university have 8 faculties (Faculty of Agriculture, Faculty of Al-Shari'a, Faculty of Arts, Faculty of Education, Faculty of Finance and Management, Faculty of Science and Technology, Faculty of Nursing), Bethlehem university have 6 faculties (Faculty of Arts, Faculty of Business Administration, Faculty of Science, Faculty of Nursing, Faculty of Education, Faculty of Hotel Management), then the questionnaire was distributed to academic, administrative, academic\administrative employees randomly.

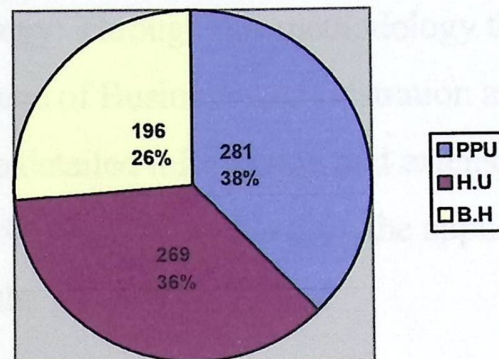
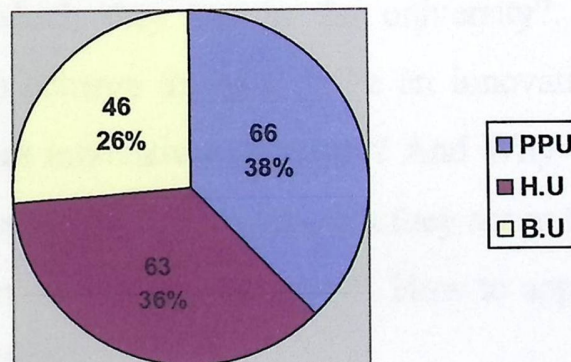
After that, the research team has distributed the 210 questionnaire which set to be the size of the sample on the staff at these colleges according to career positions (administrative, academic, academic administrator), so that each faculty to have the same opportunity to be covered in the sample that represent the research population .

The questionnaire was analyzed using SPSS statistical analysis program, to check the validity of hypothesis Pearson Correlation and one way analysis of variance ANOVA was used.

As for the content of the questionnaire it was composed of three parts:

• Part one was a table of questions to measure the level of realization for the innovation as a concept.

• Part two, it was aimed to measure the availability of sources of information from the viewpoint of the employees in the universities.

Charts :**Figure 1-1 Population****Figure 1-2 Sample**

The questionnaire was analyzed using SPSS statistically analysis program, to ensure the validity of hypothesis Person Correlation and one way analysis of variance AVOVA was used.

As for the content of the questionnaire it was composed of three parts:

- Part one: was a table of questions to measure the level of realization for the innovation as a concept.
- Part two: it was aimed to measure the availability of sources of innovation from the viewpoint of the employees in the universities.

- Part three : measures the performance level of the three universities from the point view of each employee according to certain criteria were intended by the set of questions.

2. Qualitative methodology: Through this methodology the research team aims to focus on the College of Business Administration and information systems through access to detailed information and extensive manner on the concept of innovation and the problems faced by the application and the other questions posed to the persons concerned

The main questions the research team asked the interviewee were What is the concept of innovation from their point of view?. What is the most important aspect of innovation, which they see in the university?. What are the obstacles facing them to achieve the goal to be an innovative university?. Does they classify PPU as innovative university? And Why ?. What are the procedures that should be followed to ensure that they are in the right path to achieve the goal to be an innovative university?. How to approach a way of having innovative university?

For answering these questions the research team conducted interviews with number of the university staff, these interviews targeted the senior management of the (PPU), administrative and academic employees from Administrative Science and Informatics College, in addition to the deanship of the Scientific research.

The case study contents

- Introduction about the PPU, with some numbers and historical information about the university.
- The PPU strategic Plan (Vision, Mission , Main objectives).

- Summarizing for the interviews and the data that was collected from the interview.
- The research them conclusion analysis and findings

1.5. Timescale

Dissertation activity	Duration (in weeks)	Month
Clarify aim/objectives	2	Sep.
Literature	4	Oct.
Data collection	2	Nov.
Questionnaire	3	Nov - Dec.
Case study	3	Dec.
Findings	1	Dec - Jan.
Conclusion	1	Jan.

Table 1-1 – Timescale

2. LITERATURE REVIEW

This section contains a detailed explanation of three concepts (Innovation, Performance management, Higher education in Palestine).

2.1. Innovation

The term **innovation** means a new way of doing something (Mckeown, Max 2008). It may refer to incremental, radical, and revolutionary changes: in thinking, producing, processes, or organizations (Mckeown, Max (2008). The Truth about Innovation. Pearson / Financial Times). In many fields, something new must be substantially different to be innovative, not an insignificant change, e.g., in the economics, business and government policy. In economics the change must increase value, customer value, or producer value. The goal of innovation is positive change, to make someone or something better.

Innovation is an important topic in the study of economics, business, technology, sociology, and engineering. The word "innovation" is often used as synonymous with the output of the process, any processes even in productive institutions .

Since innovation is also considered a major driver of the economy, the factors that lead to innovation are also considered to be critical to policy makers.

Those who are directly responsible for application of the innovation are often called "pioneers" in their field, whether they are individuals or organizations.

In the organizational context, innovation may be linked to performance and growth through improvements in efficiency, productivity, quality, competitive positioning, market share, etc. All organizations can innovate, including for example hospitals, universities, and local governments.

Innovation has been studied in a variety of contexts, including in relation to technology, commerce, social systems, economic development, and policy construction. There are, therefore, naturally a wide range of approaches to conceptualizing innovation in the scholarly literature. Innovation is typically understood as the successful introduction of something new and useful. For example introducing new methods, techniques, or practices or new or altered products and services.

2.1.1. Innovation from many world organizations view points :

A convenient definition of innovation from an organizational perspective is given by "Luecke and Katz (2003)", (Luecke, Richard; Ralph Katz (2003). *Managing Creativity and Innovation*. Boston, MA: Harvard Business School Press). Who wrote?

"Innovation . . . is generally understood as the successful introduction of a new thing or method . . . Innovation is the embodiment, combination, or synthesis of knowledge in original, relevant, valued new products, processes, or services "

2.1.2. Innovation vs. creativity :

Innovation typically involves "creativity", but it is not identical to it:

"All innovation begins with creative ideas . . . We define innovation as the successful implementation of creative ideas within an organization. In this view, creativity by individuals and teams is a starting point for innovation; the first is necessary but not sufficient condition for the second". (Amabile (1996).

For innovation to occur, something more than the generation of a creative idea or insight is required: the insight must be put into action to make a genuine difference, resulting in new or altered business processes within the organization, or changes in the products and services provided.

A further characterization of innovation is as an organizational or management process.

"Innovation, like many business functions, is a management process that requires specific tools, rules, and discipline." (Davila, Tony; Marc J. Epstein and Robert Shelton (2006). *Making Innovation Work: How to Manage It, Measure It, and Profit from It*". Upper Saddle River: Wharton School Publishing.)

From this point of view the emphasis is moved from the introduction of specific novel and useful ideas to the general organizational processes and procedures for generating, considering, and acting on such insights leading to significant organizational improvements in terms of improved or new business products, services, or internal processes.

Through these varieties of viewpoints, creativity is typically seen as the basis for innovation, and innovation as the successful implementation of creative ideas within an organization. From this point of view, creativity may be displayed by individuals, but innovation occurs in the organizational context only.

It should be noted, however, that the term 'innovation' is used by many authors rather interchangeably with the term 'creativity' when discussing individual and organizational creative activity. As Davila et al (2006) comment,

"Often, in common parlance, the words creativity and innovation are used interchangeably. They shouldn't be, because while creativity implies coming up with ideas, it's the "bringing ideas to life" . . . that makes innovation the distinct undertaking it is." (Davila, Tony; Marc J. Epstein and Robert Shelton (2006). *Making Innovation Work: How to Manage It, Measure It, and Profit from It*". Upper Saddle River: Wharton School Publishing.)

2.1.3. Economic conceptions of innovation

- 2.1.3.1. The introduction of a new good — that is one with which consumers are not yet familiar — or of a new quality of a good.
- 2.1.3.2. The introduction of a new method of production, which need by no means be founded upon a discovery scientifically new, and can exist in a new way of handling a commodity commercially.
- 2.1.3.3. The opening of a new market, which is a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before.
- 2.1.3.4. The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created.
- 2.1.3.5. The carrying out of the new organization of any industry, like the creation of a monopoly position (for example through justification) or the breaking up of a monopoly position .

2.1.4. Sources of innovation

Innovation by businesses is achieved in many ways, with much attention should be given to formal research and development for "breakthrough innovations." But innovations may be developed by less formal on-the-job modifications of practice, through exchange and combination of professional experience and by many other routes. The more radical and revolutionary innovations tend to emerge from R&D, while more incremental innovations may emerge from practice – but there are many exceptions to each of these trends.

Whether innovation is mainly supply-pushed (based on new technological possibilities) or demand-led (based on social needs and market requirements)

has been a hotly debated topic. Similarly, what exactly drives innovation in organizations and economies remains an open question. (Hippel, Eric.(1988) The sources of innovation. Oxford University Press).

2.1.5. Direct sources for innovation :

2.1.5.1. Learning environment

- More facilities
- Supportive low and procedures
- Supportive culture

2.1.5.2. Motivation for employees

- Financial incentives
- moral incentives

2.1.5.3. Scientific research

2.1.5.4. Access for information resources

- Knowledge sharing
- Training programs

2.1.5.5. Financial facilities

2.1.5.6. Institution mission

2.1.5.7. Continuous Collaboration with market, government and society

2.1.6. Goals of innovation

Programs of organizational innovation are typically tightly linked to organizational goals and objectives, to the business plan, and to market competitive positioning.

For example, one driver for innovation programs in corporations is to achieve growth objectives. As Davila et al (2006) note, (Davila, Tony; Marc J. Epstein and Robert Shelton (2006). Making Innovation Work: How to Manage It, Measure It, and Profit from It". Upper Saddle River: Wharton School Publishing.)

"Companies cannot grow through cost reduction and reengineering alone . . . Innovation is the key element in providing aggressive top-line growth, and for increasing bottom-line results"

Institutions spend high amount of money for getting results from its innovation programs so "how much you spend , how much you get satisfying results ".

Systematic programs of organizational innovation are most frequently driven by, while too it should be known that innovation is implemented on the organization as whole not on what it produces ".

1. Improved quality
2. Creation of new markets
3. Extension of the product range
4. Reduced labour costs
5. Improved production and working process
6. Reduced materials
7. Reduced environmental damage
8. Replacement of products/services
9. Reduced energy consumption
10. Conformance to regulations

These goals vary between improvements to products, processes and services and dispel a popular myth that innovation deals mainly with new product development. Most of the goals could apply to any organization be it a manufacturing facility, marketing firm, hospital or local government.

2.1.7. Failure of innovation

Failure is an inevitable part of the innovation process, and most successful organizations factor in an appropriate level of risk. Perhaps it is because all organizations experience failure that many choose not to monitor the level of failure very closely. The impact of failure goes beyond the simple loss of investment. Failure can also lead to loss of morale among employees, an increase in cynicism and even higher resistance to change in the future.

Innovations that fail are often potentially 'good' ideas but have been rejected or 'shelved' due to budgetary constraints, lack of skills or poor fit with current goals. Failures should be identified and screened out as early in the process as possible. Early screening avoids unsuitable ideas devouring scarce resources that are needed to progress more beneficial ones. Organizations can learn how to avoid failure when it is openly discussed and debated. The lessons learned from failure often reside longer in the organizational consciousness than lessons learned from success. While learning is important, high failure rates throughout the innovation process are wasteful and a threat to the organization's future.

The causes of failure have been widely researched and can vary considerably. Some causes will be external to the organization and outside its influence of control. Others will be internal and ultimately within the control of the organization. Internal causes of failure can be divided into causes associated with the cultural infrastructure and causes associated with the innovation process itself.

Failure in the cultural infrastructure varies between organizations but the following are common across all organizations at some stage in their life cycle: (O'Sullivan, David (2002). "Framework for Managing Development in the Networked Organizations". Journal of Computers in Industry (Elsevier Science Publishers B. V.)

1. Poor Leadership
2. Poor Organization
3. Poor Communication
4. Poor Empowerment
5. Poor Knowledge Management

Common causes of failure within the innovation process in most organizations can be distilled into five types:

1. Poor goal definition
2. Poor alignment of actions to goals
3. Poor participation in teams
4. Poor monitoring of results
5. Poor communication and access to information

Effective goal definition requires that organizations state explicitly what their goals are in terms understandable to everyone involved in the innovation process. This often involves stating goals in a number of ways. Effective alignment of actions to goals should link explicit actions such as ideas and projects to specific goals. It also implies effective management of action portfolios. Participation in teams refers to the behavior of individuals in and of teams, and each individual should have an explicitly allocated

responsibility regarding their role in goals and actions and the payment and rewards systems that link them to goal attainment.

Finally, effective monitoring of results requires the monitoring of all goals, actions and teams involved in the innovation process.

From this perspective innovation succeeds from strategic structures that engage the individual to the organization's benefit. Innovation pivots on intrinsically motivated individuals, within a supportive culture, informed by a broad sense of the future.

Innovation, implies change, and can be counter to an organization. Space for fair hearing of innovative ideas is required to balance the potential autoimmune exclusion that quells an infant innovative culture.

2.2. Overall Goal and Focuses of Performance Management

The overall goal of performance management is to ensure that the organization and all of its subsystems (processes, departments, teams, employees, etc.) are working together in an optimum fashion to achieve the results desired by the organization.

2.2. Performance

2.2.1. Performance management

Performance management reminds us that being busy is not the same as producing results. It reminds us that training, strong commitment and lots of hard work alone are not results. The major contribution of performance management is its focus on achieving results -- useful products and services for customers inside and outside the organization. Performance management redirects our efforts away from organization toward effectiveness. (McNamara, C.A. (2008)" Performance Management – Basic Concepts –")

Recently, organizations have been faced with challenges like never before. Increasing competition from organization across the world has meant that all organization must be much more careful about the choice of strategies to remain competitive. Everyone (and everything) in the organization must be doing what they're supposed to be doing to ensure strategies are implemented effectively.

This situation has put more focus on effectiveness, that systems and processes in the organization be applied in the right way to the right things: to achieve results. All of the results across the organization must continue to be aligned to achieve the overall results desired by the organization for it to survive and thrive. Only then it be said that the organization and its various parts are really performing.

2.2.2. Overall Goal and Focuses of Performance Management

The overall goal of performance management is to ensure that the organization and all of its subsystems (processes, departments, teams, employees, etc.) are working together in an optimum fashion to achieve the results desired by the organization.

Note that because performance management strives to optimize results and alignment of all subsystems to achieve the overall results of the organization, any focus of performance management within the organization (whether on department, process, employees, etc.) should ultimately affect overall organizational performance management as well.

Achieving the overall goal requires several ongoing activities, including identification and prioritization of desired results, establishing means to measure progress toward those results, setting standards for assessing how well results were achieved, tracking and measuring progress toward results, exchanging ongoing feedback among those participants working to achieve results, periodically reviewing progress, reinforcing activities that achieve results and intervening to improve progress where needed. Note that results themselves are also measures.

Note that these general activities are somewhat similar to several other major approaches in organizations, e.g., strategic planning, management by objectives, Total Quality Management, etc. Performance management brings focus on overall results, measuring results, focused and ongoing feedback about results, and development plans to improve results. The results measurements themselves are not the ultimate priority as much as ongoing feedback and adjustments to meet results.

2.2.3. Performance Management Applies to More than Employees

Typically, we think of performance in organizations, we think on the performance of employees. However, performance management should also be focused on:

1. the organization
2. Departments (computer support, administration, sales, etc.)

3. processes (billing, budgeting, product development, financial management, etc.)
4. programs (implementing new policies and procedures to ensure a safe workplace; or, for a nonprofit, ongoing delivery of services to a community)
5. products or services to internal or external customers
6. projects (automating the billing process, moving to a new building, etc.
teams or groups organized to accomplish a result for internal or external customers)

2.2.4. Suggested Aspects for Performance

James A. Blumenthal (Blumenthal (2003), Field Guide to Consulting and Organizational Development) suggests improved performance might result from improvements in one or more of the following four aspects:

2.2.4.1. Organizational stability

is in regard to whether services are consistently delivered and the organization survives.

2.2.4.2. Financial stability

is based especially on short-term survival.

2.2.4.3. Program quality (products and services)

is based on indicators of impact, including adequate research about effective programs and an outcomes management system.

2.2.4.4. Organizational growth

is based on attracting resources and providing more services. Blumenthal adds that growth alone is not an indicator of performance.

2.2.5. Four Key Benefits of Performance Management

2.2.5.1. PM focuses on results, rather than behaviors and activities

A common misconception among supervisors is that behaviors and activities are the same as results. Thus, an employee may appear extremely busy, but not be contributing at all toward the goals of the organization. An example is the employee who manually reviews completion of every form and procedure, rather than supporting automation of the review. The supervisor may conclude the employee is very committed to the organization and works very hard, thus, deserving a very high performance rating.

2.2.5.2. Aligns organizational activities and processes to the goals of the organization

PM identifies organizational goals, results needed to achieve those goals, measures of effectiveness or efficiency (outcomes) toward the goals, and means (drivers) to achieve the goals. This chain of measurements is examined to ensure alignment with overall results of the organization.

2.2.5.3. Cultivates a system-wide, long-term view of the organization.

Richard A. Swanson, in *Performance Improvement Theory and Practice* (Swanson. *Advances in Developing Human Resources*, 1999), explains an effective performance improvement process must follow a systems-based approach while looking at outcomes and drivers. Otherwise, the effort produces a flawed picture.

2.2.5.4. Produces meaningful measurements

These measurements have a wide variety of useful applications. They are useful in benchmarking, or setting standards for comparison with best practices in other organizations. They provide consistent basis for comparison during internal change efforts. They indicate results during improvement efforts, such as employee training, management development, quality programs, etc. They help ensure equitable and fair treatment to employees based on performance.

2.2.6. Concerns About Performance Management

Typical concerns expressed about performance management are that it seems extraordinarily difficult and often unreliable to measure phenomena as complex as performance. In addition today's organizations are rapidly changing, thus results and measures quickly become obsolete. And translating human desires and interactions to measurements is impersonal and even heavy handed.

2.2.7. Performance Management During Rapid Change

Today's organizations seem to change much more rapidly than in the past. Consequently, many experts have strong reservations about the numerous

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measurements that must be taken in performance management. They assert that no sooner is a measurement identified than the measurement becomes obsolete because the organization has changed substantially.

There are numerous measurements to consider when adopting a performance management system. However, the measurements themselves are not the major purpose of the performance management process. The purpose of the process is to provide a consistent frame of reference during ongoing feedback about performance, whether the organization is entirely stable or in the midst of rapid change. Measurements ensure that everyone involved is working and talking from the same script. The measurements themselves may change. However, organization members should be able to recognize and explain the change. This assertion is true whether one is addressing the performance of an organization, process, subsystem or employee. (McNamara, C.A. (2008) "Performance Management – Basic Concepts –")

2.2.8. Educational institution performance

The environment within which higher education institutions operate has changed considerably over the last decade and is likely to sustain this rate of change in the future. Demographic trends, changes to funding arrangements, globalization and technological change are but a few of the factors which will affect institutions. Over the past decade the higher education sector has undergone dramatic changes to its size, structure, funding arrangements and focus.

It is important for the success of educational institutions to have a performance measurement system based on a clear vision on a specified mission. Without performance measurement systems and performance indicators educational institutions cannot improve and more importantly cannot cope with the changing environment in the market and advances in knowledge. Performance measurement is needed in benchmarking

performance and setting the direction for the future. Therefore it is required to develop a performance measurement system that effectively captures all aspects and characteristics of educational institutions.

2.2.9. Principles of High Performance Organizations

Research and experience indicates that a web of common values permeates colleges and universities that have achieved a systematic approach to continuous quality improvement. (Academic Quality Improvement Program. "Principles of High Performance Organizations")

Focus	Collaboration
Involvement	Agility
Leadership	Foresight
Learning	Information
People	Integrity

Table 2-1

- **Focus.** A mission and vision focused on students' and other stakeholders' expectations provides the quality-driven higher education organization with the foundation it needs to shape its communication systems, its organizational and decision-making structures, and its planning and improvement processes. The institution earns the trust, confidence, and loyalty of its current and potential students and its other stakeholders, both external and internal, including faculty, staff, administrators, and trustees, by actively developing and regularly employing listening tools essential for gathering and understanding their diverse and distinctive perspectives. The institution interprets and weighs these expressed needs, preferences, hopes, and requirements to frame ongoing communication, discussion, and refinement of a common mission and vision. Faculty,

staff, and administrators integrate this shared focus into their individual work goals and decision-making strategies.

- ***Involvement.*** Broad-based faculty, staff, and administrative participation encourages better decisions and strengthens individual and group ownership of systems, activities, and initiatives. Individuals understand how what they do affects others within and outside the organization, and appreciate how their work helps further the institution's mission. A culture of involvement draws on the expertise and practical experience of people closest to a situation and helps leaders across the organization anticipate the complex implications of decisions. Such collaboration often helps initiate and implement improvements that better meet student and stakeholder needs. A culture of involvement requires ongoing development of people's skills in making fact-based decisions, working with diverse groups, resolving conflicts, and using quality based tools to build consensus.
- ***Leadership.*** An institution thrives when its leadership actively creates and supports a quality-driven culture, modeling values and behaviors that communicate a comprehensive and focused vision to all constituents. Leaders have a responsibility to make sure that everyone understands and values the institution's mission, goals, and directions— and uses this understanding to inform their individual work goals and decision-making strategies. Leadership must work to help students and other stakeholders share this understanding as well. Further, leadership must ensure that the institution's systems and processes align with its mission and vision, making certain that the necessary resources — people, funds, facilities, equipment, supplies, time, energy, and other assets — are allocated and used in support of the overall mission and vision.
- ***Learning.*** The quality-driven institution dedicates itself to developing everyone's potential talents, centering its attention on learning. It

continually seeks more effective ways to enhance student achievement through careful design and evaluation of programs, courses, and learning environments. The institution and staff both demonstrate an enthusiastic commitment to organizational and personal learning as the route to continuous improvement. Seeing itself as a set of systems that can continuously improve through measurement, assessment of results, and feedback, the institution designs practical means for gauging its students' and its own progress toward clearly identified objectives.

- **People.** The quality-driven higher educational institution prizes and supports the systematic development of its individual faculty, staff, and administrators, recognizing that fully developing and using their abilities constitutes its most valuable resource. It consciously invests in all its people as leaders and learners through ongoing education, training, and opportunities for continuing development. Leadership encourages individuals to take responsibility in crafting and following through on professional and personal growth plans aimed at acquiring, practicing, and using new skills and knowledge to better serve students and other stakeholders. It nourishes a sense of responsibility and ownership in which all individuals understand how their role contributes to the measurable success of the institution and how they can become engaged as full participants in its improvement processes

- **Collaboration.** The quality-driven institution encourages active collaboration among and within different internal departments and operational areas, and, externally, between the institution and other institutions or organizations. It removes internal barriers to collaboration, such as the constraints individuals often experience within a hierarchical chain of command or when they find themselves working for a sub-unit rather than the larger organization. The institution promotes shared support for a common mission among its faculty, staff, and administrators

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by providing them with the training and resources successful collaboration demands. It rewards effective cooperation and celebrates model collaborative efforts with internal or external partners.

- **Agility.** While it has been true that higher education institutions have regularly existed in a more reflective and deliberative environment than the rest of society, the rapid development of new knowledge and technologies, and the rising expectations of external stakeholders, is greatly altering this condition. As the pace of change quickens and competition becomes commonplace in higher education, the quality-driven institution develops the flexibility to respond quickly to opportunities, threats, and changing needs, and practices, focusing its attention on the allocation of resources, when needed, in response to pressures for change, and measuring its performance in responding to such demands.
- **Foresight.** The quality-driven institution thinks into the future, tracking trends in order to better predict how conditions will change, and anticipating how those changes may affect the institution's students and other stakeholders, operations, and performance. In dynamic or trying situations, foresight enables the institution to innovate, making meaningful changes to improve its services and processes in ways that create new or additional value for its students and other stakeholders. While it remains open to new approaches and techniques, the institution designs, tests, and improves its planning structures and processes through practical use and experience.
- **Information.** The quality-driven institution and its personnel seek and use data and information to assess current capacities and measure performance realistically. Faculty, staff, and administrators track progress concretely and consistently, and use performance results to set ambitious but attainable targets that increase and improve the institution's capability

to meet its students' and other stakeholders' needs and expectations. Data-enriched thinking nurtures evaluation and a results-orientation concentrated on increasing the benefits and value produced for students and other stakeholders. The institution develops and refines systems for gathering and assessing valuable feedback and data, and continually seeks better methods for obtaining the most useful information on which to base decisions and improvements.

- **Integrity.** The quality-driven institution recognizes and fulfills its public responsibility and demonstrates responsible institutional citizenship. It treats people and organizations with equity, dignity, and respect, and models its values in words and deeds. It anticipates and takes into account the consequences of its actions upon the various larger communities to which it belongs, and upon the higher education system, regionally, nationally, and globally. Mindful that education serves society, the institution continuously examines its practices to make certain its effects and results actively contribute to the common good.

2.2.10. CHARACTERISTICS OF ADEQUATE PERFORMANCE MEASURES

Performance measures should be based on a clear purpose linked to the goals and objectives of the department. The purpose should be to stimulate internal quality improvement and to benchmark performance with the leading educational institutions. Performance measures should be clearly defined qualitatively and quantitatively and communicated to all concerned. Umar (Al-Turki and Salih Duffuaa The 6th Saudi Engineering Conference, KFUPM, Dhahran, December (2002) "PERFORMANCE MEASURES FOR ACADEMIC DEPARTMENTS")

Therefore, the characteristics of performance measures can be summarized as follows:

- **Relevance:** Include data that are essential to provide a basis for understanding the accomplishments of goals and objectives of the organization.
- **Interpretability:** Communicate in a readily understandable manner that is concise, yet comprehensive.
- **Timeliness:** Report in a timely manner so that it will be available to users before it loses its value in making decisions.
- **Reliability:** Report consistency from period to period.
- **Validity:** The measure should measure the intended quality indicator

In this section we will give a set of detailed performance measures that can be utilized to assess whether the institution is accomplishing its mission and educational objectives. The performance measures cover outputs, processes and inputs. On this basis the performance measures are divided into three categories. The categories are:

1. Outcomes performance measures
2. Processes performance measures.
3. Input performance measures.

Outcome Performance Measures

Any academic department has three major outputs (outcomes). These are: Graduates, research and scholarship and services to the community in terms of training, projects and consultation. The outcome measures must reflect the quality of the output.

Processes Performance Measures

There are key processes in the academic departments by which key activities are delivered. There are three key processes that need to be evaluated periodically and measure their

performances. These processes are:

1. Teaching and learning process
2. Research administration process
3. Administration process

Input Measures

The input performance measures deal with the efficiency and utilization of the department resources in addition to the quality of incoming students, research assistants and support staff.

The measures are divided in five groups according to the type of resource.

The groups are:

1. Faculty utilization
2. Course offering and laboratory utilization
3. Quality of incoming students
4. Quality of research assistants
5. Support staff capabilities

2.2.11. The balanced scorecard

A new approach to strategic management was developed in the early 1990s by Drs. Robert Kaplan (Harvard Business School) and David Norton. They named this system the 'balanced scorecard'.

The Balanced scorecard is a conceptual framework for translating an organization's vision into a set of performance indicators distributed among four perspectives: Financial, Customer, Internal Business Processes, and Learning and Growth. Balanced scorecard indicators are maintained to measure an organization's progress toward achieving its vision; other indicators are maintained to measure the long term drivers of success.

Through the Balanced scorecard, an organization monitors both its current performance (finances, customer satisfaction, and business process results) and its efforts to improve processes, motivate and educate employees, and enhance information systems - its ability to learn and improve.

The BSC provide institutions with tool to observe financial measures while at the same time monitoring investments in areas such as staff development or customer relations that will allow the institution to grow and remain competitive in the future. The BSC organizes performance measures related to the institutions mission and strategy in a framework. As a result it creates strategic measurement system which is "balanced" because it evaluates performance beyond regular outcome and financial measure.

The BSC is a management system (not only a measurement system) that enables institutions to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business process and external outcomes in order to continuously improve strategic performance and results. When fully deployed, the BSC transforms strategic planning from an academic exercise into the nerve center of an enterprise.

Benefits of Balanced Scorecard

- Strategic initiatives that follow "best practices" methodologies cascade through the entire organization
- Increased creativity and unexpected Ideas
- the Balanced Scorecard helps align key performance measures with strategy at all levels of an organization
- the Balanced Scorecard provides management with a comprehensive picture of business operations.
- The methodology facilitates communication and understanding of business goals and strategies at all levels of an organization
- Maximized Cooperation - Team members are focused on helping one another succeed
- Usable Results - Transforms strategy into action and desired behaviors
- The Balanced Scorecard concept provides strategic feedback and learning
- A cross organizational team - More open channels of communications - Enthusiastic People
- Initiatives are continually measured and evaluated against industry standards
- the Balanced Scorecard helps reduce the vast amount of information that the organization's IT systems process into essentials
- Unique Competitive Advantage
 - Reduced Time-frames

- Improved Decisions and Better
- Improved Processes

The BSC suggests that we view the institution from four perspectives, and to develop metrics, collect data and analyze it relative to each of these perspectives: the Learning and Growth perspective, the Business Process perspective, the Customer perspective and the Financial perspective. The objective of the BSC is not to be exhaustive, but to present indicators that will be simple, easy to understand and representative of an institutions spectrum of activity. Thus, it ties the vision and strategy of an institution to each of the quadrants and broadens the concept o performance. (Mazuki. Mohd." The Balanced Scorecard and Service Delivery System in Public Universities in Malaysia". University Technology Mara)

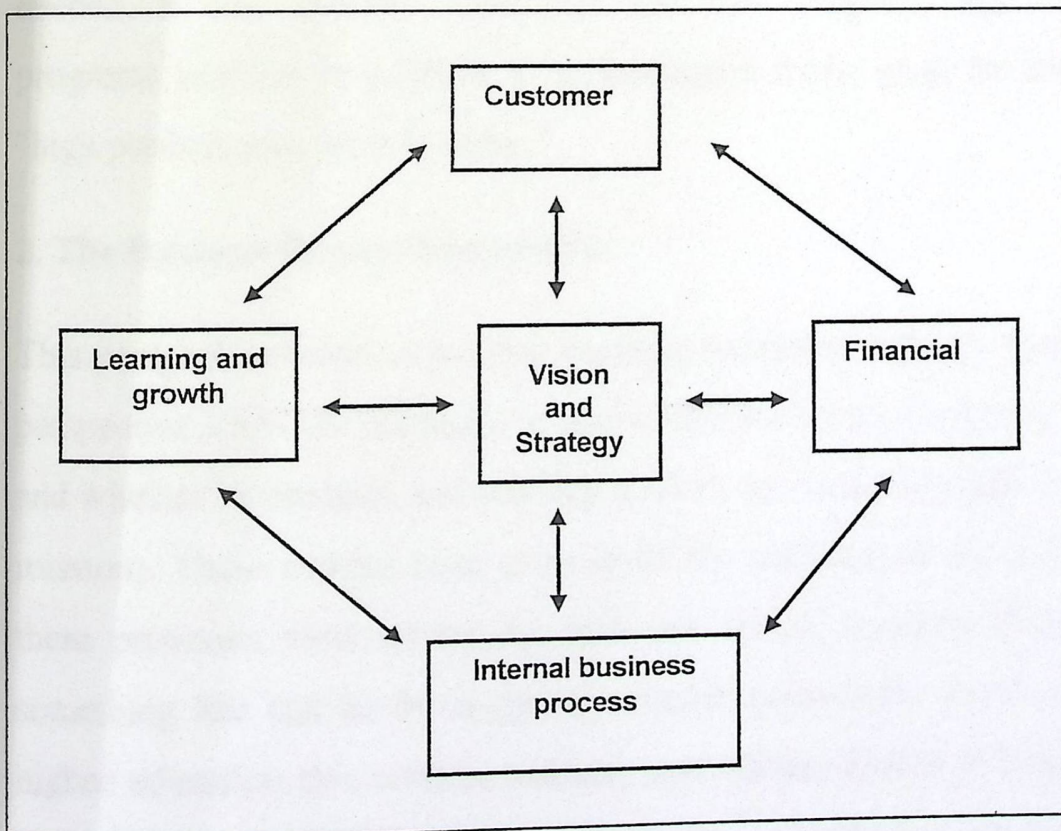


Figure 2-1: Balanced Scorecard Perspectives

1. The Learning and Growth Perspective

This perspective includes employee training and instituted cultural attitudes related to both individual and instituted self-improvement. In a knowledge-worker institutions, people -- the only repository of knowledge - are the main resource. In the current environment of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode. Metrics can be put into place to guide managers in focusing training funds where they can help the most. In any case, learning and growth constitute the essential foundation for success of any knowledge-worker institutions.

Kaplan and Norton(Harvard Business School 1996) emphasize that 'learning' is more than 'training'; it also includes things like mentors and tutors within the instituted, as well as that ease of communication among employees that allows them to readily get help on a problem when it is needed. It also includes researches and new programs and differential programs lunched in addition to technological tools; what the criteria call "high performance work systems."

2. The Business Process Perspective

This perspective refers to internal business processes. Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and services conform to customer requirements (the mission). These metrics have to be carefully designed by those who know these processes most intimately; with our unique missions these are not something that can be developed by outside consultants. In institutions of higher education this contain teaching and administration process and the main engine of these processes "employees ", employees satisfaction and productivity affect those processes.

In addition to the strategic management process, two kinds of business processes may be identified: a) mission-oriented processes, and b) support processes.

3. The Customer Perspective

Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. Poor performance from this perspective is thus a leading indicator of future decline, even though the current financial picture may look good. In developing metrics for satisfaction, customers should be analyzed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups.

4. The Financial Perspective

Kaplan and Norton do not disregard the regular need for financial data. Timely and accurate funding data will always be a priority, and managers will do whatever necessary to provide it. In fact, often there is more than enough handling and processing of financial data. With the implementation of a corporate database, it is hoped that more of the processing can be centralized and automated. But the point is that the current emphasis on financials leads to the "unbalanced" situation with regard to other perspectives. There is perhaps a need to include additional financial-related data, such as risk assessment and cost-benefit data, in this category.

A major consideration in performance improvement involves the creation use of performance measures or indicators. Performance measures or indicators are measurable characteristics of services, process, and operations the institution uses to track and improve performance. The measures should be selected to best represent the factors that lead to improved customer, operational, and financial performance. A comprehensive set of measures tie to customer and/or company performance requirements represents a clear

basis for aligning all activities with the company's goals. Through the analysis of data from tracking process, the measures or indicators themselves may be evaluated and changed to better support goals.

A further key aspect of the balanced scorecard, is that the performance measures must be linked to the strategy that the institution is following and not be created as an unconnected group of financial and non-financial measures. Kaplan and Norton stress that the scorecard is a management system aimed at streamlining and focusing strategy in a way that can lead to breakthrough competitive performance.

When applying the concept of the balanced scorecard, it is important to note that the nature of the linkage between the four perspectives has been at the center of some recent debate in the academic literature. Otley (1999) reflects on the general assumption made that the financial and customer perspective can be viewed as a results measure, whereas the internal business and innovation and learning perspectives can be viewed as the means by which the results will be obtained. Norreklit (2000) is critical of the view that there is a linear causal link between the different perspectives and offers the view that the four perspectives are in fact interdependent. Norreklit also suggests that to be successful, the BSC needs to be rooted in the employee's internal commitment.

2.3. Higher Education in Palestine

"This report "mentioned in supplement" covers students enrolled in the Palestinian higher education institutions (universities and colleges, university and medium), as well as students and new absorption, and their corresponding numbers of graduates, the report focused on a comparison of the numbers and proportions of age groups linked to a community without strict fields of specialization, where there will be a report To discuss the special disciplines and replication."

Palestine has 43 higher educational establishments spread over the West Bank, Gaza Strip and Jerusalem, and there are 10 regular universities and uneven in size and absorptive capacity. In addition to the 13 collages, that number has doubled in the last three years. The latter type of institutions community colleges is the medium which gives Diploma in some programs and disciplines. Total students enrolled in institutions of higher education for the year 2005/2006 almost 149,624 student, 129,694 of them in the bachelor degree, 4363 Postgraduate studies and 15,567 in the diploma. So it is clear that the largest share was for the undergraduate students. But what is missing in our system of higher education is to support the idea of doctoral studies.

It has become clear that the demand for Al-Quds Open University was not a simple thing has won the proportion of 35%, enabling students wishing to study and work during the study period to fulfill their desire. And the reason which has contributed in support of Al-Quds Open University that there are more than 22 different centers in different areas, making it easier for student access and reducing the cost of transportation. Noted the disparity between the proportion of males and females, the percentage of young people (62%) or two-thirds of the students. While we note that recently the number of females is increasing in ten universities and this increase was more than half in most cases. The increase is interpreted by females to males excelled in high school in recent years. It is important that the scale of change in the

number of students enrolled from time to time and again noted the pace of change here. The proportion of the annual increase was 8.3% (11,500 students) and the very large increase. More than half of the increase is in the Al-Quds Open University, and the regular Universities have contributed the equivalent of 28% of the increase.

The report dealt with the distribution of interdisciplinary study was clear that the proportion of female than male ratio in many disciplines, allocate education (two thirds), Arts and Social Sciences (about two-thirds as well), medical and health sciences (over half). The other disciplines than the proportion of males per female. In 2005 to provide general secondary school examinations approximately 63,750 students, about 40,000 of them succeeded students, Two-thirds of students are successful literary section, and the rest were from the scientific section, except 4% were from the professional section. In line with the instruction of the Higher Education Council not to accept university students in regular high rate of less than 65% in the West Bank and 60% in the Gaza Strip and for the difference Platforms, was eligible for admission to universities are about ten 26,500 students. But the important question whether the ten universities able to absorb this quantity and the number of students?

We can say that 61% of students qualified to join the ten universities already been absorbed in these universities, half of the literary section and the other half of the almost scientific section; we should say that more than 60% of them are female. Al-Quds Open University admitted 11,665 students (56%) students with a guideline, which is contrary to the philosophy of open education. The college has accepted 9,084 students, three-quarters of the literary section, and a fifth of the scientific section and the rest (6%) of section career.

According to the report, the proportion and number of graduates for the year 2004/2005 as an example, according to the regular universities indicators

emerged about 9900 students, while it has accepted 18,400 new students in the same year, the proportion of inputs to the annual output worth almost doubled, while the Al-Quds Open University, enter Three times as remove (3751 graduate and enrolled 11,665 new) while the university faculties and colleges produce about half and a third entered, and a very clear increase in the annual rate of input to output in all types of institutions of higher learning valuable say: sit a attribute output to

Input In the same year but that the inputs two years ago in colleges and universities in four years or five engineering programs. Taking into account the number of dropouts during the study period. That is very true especially when talking about efficiency and effectiveness, but that the proportion of annual output to input a clear indication of the volume growth in higher education institutions and the capacity of institutions to pursue a policy of expanding existing programs or opening new programs for harmony with the growing demand and gain more students Fees and revenue premiums.

2.3.1 Palestine Polytechnic University

Palestine Polytechnic University (PPU) is one of the leading polytechnic universities in Palestine. It was founded in 1978 by the University Graduates Union (UGU), which is a non-profit organization in Hebron district. PPU is officially recognized by the Palestinian Ministry of Higher Education and it is an active member in the Rector Conference of Palestinian Universities. There are over 5000 students enrolled in the various areas of specialization at PPU during the academic year 2006-2007.

There are four colleges in PPU: Engineering and Technology, Administrative Science and informatics, Applied Science, Applied Profession

2.3.2 Hebron University

The history of the University dates to 1967, when Sheikh Mohammed Ali Al-Ja'bari realized that the Israeli Occupation of the West Bank and Gaza would eventually lead to isolating the cities and towns. Sheikh Al-Ja'bari and other Palestinian personalities established Hebron (Al-Khalil) University in 1971 pioneering higher education in Palestine. This helped the University overcome Israeli measures, and create a good opportunity for the needy and conservative families who would not otherwise send their daughters out of town to pursue higher education, either due to financial considerations or due to traditions. In 1971, the University started as a small college of Shari' a (Islamic Law) serving a total of 43 students. The University now offers 39 programs leading to Bachelor degrees and 6 programs leading to Master degree. Hebron University awards B.A or B.Sc degrees in each of its 8 faculties: Faculty of Agriculture, Faculty of Al-Shari'a, Faculty of Arts, Faculty of Education, Faculty of Finance and Management, Faculty of Science and Technology, Faculty of Nursing and College of Graduate Studies & Scientific Research offers seven Master degrees in the Arabic Language & Literature, English Linguistics, Business Administration, Islamic Judiciary Law, Plant Protection, Sustainable Natural Resources and Management and History.

2.3.3 Bethlehem University

Bethlehem University of the Holy Land is a Catholic Christian co-educational institution of higher learning founded in 1973 in the Lasallian tradition, open to students of all faith traditions. Bethlehem University, the first university established in the West Bank, and can trace its roots to 1893 when the De La Salle Christian Brothers opened schools in Bethlehem, Jerusalem, Jaffa, Nazareth, Turkey, Lebanon, Jordan, and Egypt.

Bethlehem University was one of the founding members of the Palestinian Council for Higher Education in 1978 and continues membership with the Ministry of Education and Higher Education resulting from the coming of the Palestinian Authority in 1995. In October 1979 a Board of Trustees was established and in May 1981 Bethlehem University became a member of the Association of Arab Universities. Bethlehem University also holds memberships in the International Federation of Catholic Universities, Lasallian Association of Colleges and Universities, and the International Association of Universities

Bethlehem university Faculties: Faculty of Arts, Faculty of Business Administration , Faculty of Science, Faculty of Education ,Faculty of Nursing , Institute of Hotel Management

Table 3-2 research sample distribution according to the position

Academic	23	34.8
Admin	34	51.5
Academic admin	9	13.6
Total	66	100.0

Table 3-3 research sample distribution according to the educational degree

Diploma	4	6.1
B.A.	29	43.9
M.A.	21	31.8

3. FINDINGS AND ANALYSIS

3.1. Questionnaire statistical analysis findings

Palestine Polytechnic University results

Table 3-1 research sample distribution according to the gender

Gender	Frequency	Percent
Male	46	69.7
Female	20	30.3
Total	66	100.0

Table 3-2 research sample distribution according to the position

Position	Frequency	Percent
Academic	23	34.8
Admin.	34	51.5
Academic admin.	9	13.6
Total	66	100.0

Table 3-3 research sample distribution according to the educational degree

Educational Level	Frequency	Percent
Diploma	4	6.1
B.A.	29	43.9
M.A.	21	31.8

PH.D	12	18.2
Total	66	100.0

Table 3-4 research sample distribution according to the years of experience

Experience	Frequency	Percent
Less than 5 years	21	31.8
from 5-9 years	24	36.4
10 years and more	21	31.8
Total	66	100.0

Innovation concepts according to the employees in PPU

Table 3-5 the concepts arranged according to employees understanding and realization, from the highest level to the lowest.

Meaning of Innovation	Mean	Std. Deviation
Innovation is a process that will create value for the university?	4.62	0.54
University need to do a continuous different changes\activities to become an innovative university.	4.20	0.74
Innovation is a new concept help solving previous problems that faced the university	4.15	0.96
Innovation is a concept that do not make a difference whether you adopt it or not in	1.94	0.89

university performance.		
Innovation is limited to productive companies and rarely to service organization	1.83	0.73

This table indicates that the most popular concept is "Innovation is a process that will create value for the university" where its scale (4.62), followed the "University need to do a continuous different changes activities to become an innovative university" at the second level with a scale (4.20), then "Innovation is a new concept help solving previous problems that faced the university" (4.15), then "Innovation is a concept that do not make a difference whether you adopt it or not in university performance" (1.94), and the last concept was "Innovation is limited to productive companies and rarely to service organization" (1.83).

Table 3-6 the sources of innovation at the PPU arranged according to its availability.

Innovation sources	Mean	Std. Deviation
Technology	3.95	1.12
Internal supervising	3.84	1.17
Facilitation for research	3.59	0.79
Supportive culture	3.53	0.93
Collaboration with the market	3.46	1.02
Knowledge sharing	3.44	0.74
Continuous learning environment	3.38	0.76
Financial facilities	3.16	0.98

Employees motivation	3.16	0.79
Training	2.94	0.85

The data in the table indicates that the most available source was technology with scale (3.95), followed by the internal supervising (3.84), then the facilitation of research (3.59) then supportive culture for innovation (3.53).

While the last available sources was the suitable training with a scale (2.94), then employees motivation (3.16), then the financial facilities (3.16).

Table 3-7 the performance levels at the PPU from the highest level of performance to the lowest one.

Performance level	Mean	Std. Deviation
Internal business process	4.08	0.74
Learning and growth	3.88	0.79
Customer satisfaction	3.75	0.75
Financial performance	3.74	0.53

It's clearly that the internal operation has the highest level of performance at the PPU with (4.08) scale, followed by learning and growth (3.88), then the customer satisfaction (3.75), while level for performance was the financial performance with a (3.74) scale.

H1: There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the PPU university.

Person correlation was used to ensure the validity of this assumption which indicates:

Employees motivation	3.16	0.79
Training	2.94	0.85

The data in the table indicates that the most available source was technology with scale (3.95), followed by the internal supervising (3.84), then the facilitation of research (3.59) then supportive culture for innovation (3.53).

While the last available sources was the suitable training with a scale (2.94), then employees motivation (3.16), then the financial facilities (3.16).

Table 3-7 the performance levels at the PPU from the highest level of performance to the lowest one.

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Internal business process	4.08	0.74
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Customer satisfaction	3.75	0.75
Financial performance	3.74	0.53

It's clearly that the internal operation has the highest level of performance at the PPU with (4.08) scale, followed by learning and growth (3.88), then the customer satisfaction (3.75), while level for performance was the financial performance with a (3.74) scale.

H1: There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the PPU university.

Person correlation was used to ensure the validity of this assumption which indicates:

Table 3-8 Person correlation results

Variable	Person correlation	Sig.
Financial performance * innovation sources	0.45	0.000
Internal business process * innovation sources	0.48	0.000
Customer satisfaction * innovation sources	0.55	0.000
Learning and growth * innovation sources	0.73	0.000

according to table (8) the data indicate that there is a significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the PPU, there is a positive relationship between the availability of sources of innovation and the performance level at the PPU.

There is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at the PPU employees due to employee position.

To ensure the validity of this assumption the One Way Analysis Of Variance (AVOVA) was used to find the differences between the realization of innovation concept for the employees at the PPU due to employees position, that clear in table (9)

Table 3-9 the Way Analysis Of Variance (AVOVA) results to find the differences between the realization of innovation concept for the employees at the PPU due to employees position

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.194	2	0.097	0.764	0.470
Within Groups	7.991	63	0.127		
Total	8.185	65			

The table finding indicate that there is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at the PPU employees due to employee position, as they clear through the standard deviation in table (10)

Table 3-10

Position	N	Mean	Std. Deviation
Academic	23	3.36	0.32
Admin.	34	3.30	0.38
Academic admin.	9	3.46	0.30

Hebron University results

Table 3-11 research sample distribution according to the gender

Gender	Frequency	Percent
Male	49	77.8
Female	14	22.2
Total	63	100.0

Missing values = 2

Table 3-12 research sample distribution according to the position

Position	Frequency	Percent
Academic	32	50.8
Admin.	17	27.0
Academic admin.	14	22.2
Total	63	100.0

Missing values = 2

Table 3-13 research sample distribution according to the educational
degree

Educational Level	Frequency	Percent
Diploma	3	4.6
B.A.	15	23.1
M.A.	25	38.5
PH.D	22	33.8
Total	65	100.0

Table 3-14 research sample distribution according to the years of experience

Experience	Frequency	Percent
Less than 5 years	20	30.8
from 5-9 years	14	21.5
10 years and more	31	47.7
Total	65	100.0

Innovation concepts according to the employees in Hebron University.

Table 3-15 the concepts arranged according to employees understanding and realization, from the highest level to the lowest.

Meaning of Innovation	Mean	Std. Deviation
Innovation is a process that will create value for the university?	4.57	0.58
University need to do a continuous different changes\activities to become an innovative university.	4.31	0.78
Innovation is a new concept help solving previous problems that faced the university	4.22	0.80
Innovation is limited to productive companies and rarely to service organization	2.03	1.00
Innovation is a concept that do not make a difference whether you adopt it or not in university performance	2.00	0.93

This table indicates that the most popular concept is "Innovation is a process that will create value for the university" where its scale (4.57), followed the "University need to do a continuous different changes activities to become an innovative university" at the second level with a scale (4.31), then "Innovation is a new concept help solving previous problems that faced the university" (4.22), then "Innovation is limited to productive companies and rarely to service organization" (2.03), and the last concept was "Innovation is a concept that do not make a difference whether you adopt it or not in university performance" (2.00).

Table 3-16 the sources of innovation at the Hebron University arranged according to its availability

Innovation sources	Mean	Std. Deviation
Internal supervising	3.90	1.01
Supportive culture	3.30	0.96
Continuous learning environment	3.26	0.83
Technology	3.23	1.04
Knowledge sharing	3.15	0.87
Employees motivation	3.11	0.76
Facilitation for research	2.98	0.85
Financial facilities	2.80	0.79
Collaboration with the market	2.76	1.04
Training	2.68	0.80

The data in the table indicates that the most available source was internal business process with scale (3.90), followed by supportive culture (3.30), then the Continuous learning environment (3.26) then the technology (3.23).

While the last available sources was the suitable training with a scale (2.68), then the Collaboration with the market (2.76), then the financial facilities (2.80).

Table 3-17 the performance levels at Hebron university from the highest level of performance to the lowest one.

Performance level	Mean	Std. Deviation
Internal business process	4.02	0.73
Financial performance	3.66	0.60
Customer satisfaction	3.46	0.91
Learning and growth	3.37	0.93

It's clearly that the internal business process has the highest level of performance at Hebron University with (4.02) scale, followed by financial performance (3.66), then the customer satisfaction (3.46), while level for performance was the Learning and growth with a (3.37) scale.

H1: There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at Hebron university.

Person correlation was used to ensure the validity of this assumption which indicates:

Table 3-18 Person correlation results

Variables	Person correlation	Sig.
Internal business process * innovation sources	0.38	0.002
Financial performance * innovation sources	0.43	0.000
Learning and growth * innovation sources	0.46	0.000

Customer satisfaction * innovation sources	0.41	0.001
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according to table (8) the data indicate that there is a significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at Hebron university, there is a positive relationship between the availability of sources of innovation and the performance level at Hebron university.

There is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at the Hebron university employees due to employee position.

To ensure the validity of this assumption the One Way Analysis Of Variance (AVOVA) was used to find the differences between the realization of innovation concept for the employees at Hebron university due to employees position, that clear in table (9)

Table 3-19 the Way Analysis Of Variance (AVOVA) results to find the differences between the realization of innovation concept for the employees at Hebron university due to employees position

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.323	2	0.161	1.216	0.304
Within Groups	7.957	60	0.133		
Total	8.279	62			

The table finding indicate that there is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at the PPU

employees due to employee position, as they clear through the standard deviation in table 3-20

Position	N	Mean	Std. Deviation
Academic	32	3.48	0.41
Admin.	17	3.31	0.23
Academic admin.	14	3.41	0.37

Bethlehem University

Table 3-21 research sample distribution according to the gender

Gender	Frequency	Percent
Male	33	71.7
Female	13	28.3
Total	46	100.0

Table 3-22 research sample distribution according to the position

Position	Frequency	Percent
Academic	24	53.3
Admin.	12	26.7
Academic admin.	9	20.0
Total	45	100.0

Missing values=1

Table 3-23 research sample distribution according to the educational degree

Educational Level	Frequency	Percent
B.A.	11	23.9
M.A.	19	41.3
PH.D	16	34.8
Total	46	100.0

Table 3-24 research sample distribution according to the years of experience

Experience	Frequency	Percent
Less than 5 years	4	8.7
From 5-9 years	20	43.5
10 years and more	22	47.8
Total	46	100.0

Innovation concepts according to the employees in Bethlehem University.

Table 3-25 the concepts arranged according to employees understanding and realization, from the highest level to the lowest.

Meaning of Innovation	Mean	Std. Deviation
Innovation is a process that will create value for the university?	4.35	0.70
Innovation is a new concept help solving	4.07	0.77

previous problems that faced the university.		
University need to do a continuous different changes\activities to become an innovative university.	4.02	0.83
Innovation is a concept that do not make a difference whether you adopt it or not in university performance.	2.54	0.72
Innovation is limited to productive companies and rarely to service organization	2.33	0.63

This table indicates that the most popular concept is "Innovation is a process that will create value for the university" where its scale (4.35), followed the "Innovation is a new concept help solving previous problems that faced the university " at the second level with a scale (4.07), then " University need to do a continuous different changes activities to become an innovative university " (4.02), then " Innovation is a concept that do not make a difference whether you adopt it or not in university performance" (2.54), and the last concept was " Innovation is limited to productive companies and rarely to service organization" (2.33).

Table 3-26 the sources of innovation at the Bethlehem University arranged according to its availability.

Innovation Sources	Mean	Std. Deviation
Internal supervising	3.84	1.21
Continuous learning environment	3.74	0.75
Supportive culture	3.73	0.77

Technology	3.69	1.20
Facilitation for research	3.55	0.82
Employees motivation	3.51	0.73
Financial facilities	3.46	0.87
Knowledge sharing	3.30	0.95
Training	3.01	0.61
Collaboration with the market	2.95	1.19

The data in the table indicates that the most available source was internal supervising with scale (3.84), followed by the Continuous learning environment (3.74), then supportive culture for innovation (3.53) then the technology (3.69).

While the last available sources was the Collaboration with the market with a scale (2,95), then training (3.01), then Knowledge sharing (3.30).

Table 3-27 The performance levels at Bethlehem university from the highest level of performance to the lowest one.

Performance level	Mean	Std. Deviation
Internal business process	3.94	0.74
Learning and growth	3.84	0.66
Customer satisfaction	3.81	0.73
Financial performance	3.04	0.60

It's clearly that the internal operation has the highest level of performance at Bethlehem university with (3.94) scale, followed by learning and growth

(3.84), then the customer satisfaction (3.81), while level for performance was the financial performance with a (3.04) scale.

There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at Bethlehem university.

Person correlation was used to ensure the validity of this assumption which indicates:

Table 3-28 Person correlation results

performance level	Person correlation	Sig.
Customer satisfaction * innovation sources	0.60	0.000
Financial performance * innovation sources	0.34	0.019
Internal business process * innovation sources	0.55	0.000
Learning and growth * innovation sources	0.50	0.000

according to table (8) the data indicate that there is a significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at Bethlehem university, there is a positive relationship between the availability of sources of innovation and the performance level at Bethlehem university.

There is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at Bethlehem university employees due to employee position.

To ensure the validity of this assumption the One Way Analysis Of Variance (AVOVA) was used to find the differences between the realization of innovation concept for the employees at Bethlehem university due to employees position, that clear in table (9)

Table 3-29 the Way Analysis Of Variance (AVOVA) results to find the differences between the realization of innovation concept for the employees at Bethlehem university due to employees position

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.207	2	0.104	0.736	0.485
Within Groups	5.905	42	0.141		
Total	6.112	44			

The table finding indicate that there is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at Bethlehem university employees due to employee position, as they clear through the standard deviation in Table 3-30

Position	N	Mean	Std. Deviation
Academic	24	3.47	0.35
Admin.	12	3.40	0.35
Academic admin.	9	3.60	0.44

Regular West Bank Universities

Table 3-31 the distribution of the sample according to the university and gender

Gender University	Male	Female	Total
	PPU	46 69.7%	20 30.3%
Hebron	49 77.8%	14 22.2%	63 36.0%
Bethlehem	33 71.7%	13 28.3%	46 26.3%
Total	128 73.1%	47 26.9%	175 100.0%

Table 3-32 the distribution of the sample according to the university and educational degree

Educational Level University	Diploma	B.A.	M.A.	PH.D	Total
	PPU	4	29	21	12

Table 3-31 the distribution of the sample according to the university and gender

Gender University	Male	Female	Total
	PPU	46 69.7%	20 30.3%
Hebron	49 77.8%	14 22.2%	63 36.0%
Bethlehem	33 71.7%	13 28.3%	46 26.3%
Total	128 73.1%	47 26.9%	175 100.0%

Table 3-32 the distribution of the sample according to the university and educational degree

Educational Level University	Diploma	B.A.	M.A.	PH.D	Total
	PPU	4	29	21	12

	6.1%	43.9%	31.8%	18.2%	37.3%
Hebron	3	15	25	22	65
	4.6%	23.1%	38.5%	33.8%	36.7%
Bethlehem	---	11	19	16	46
		23.9%	41.3%	34.8%	26.0%
Total	7	55	65	50	177
	4.0%	31.1%	36.7%	28.2%	100.0%

Table 3-33 the distribution of the sample according to the university and employees position

Position \ University	Academic	Admin.	Academic admin.	Total
PPU	23 34.8%	34 51.5%	9 13.6%	66 37.9%
Hebron	32 50.8%	17 27.0%	14 22.2%	63 36.2%
Bethlehem	24 53.3%	12 26.7%	9 20.0%	45 25.9%
Total	79 45.4%	63 36.2%	32 18.4%	174 100.0%

Table 3-34 the distribution of the sample according to the university and years of experience

Experience \ University	Less than 5 years	from 5-9 years	10 years and more	Total
	PPU	21 31.8%	24 36.4%	21 31.8%
Hebron	20 30.8%	14 21.5%	31 47.7%	65 36.7%
Bethlehem	4 8.7%	20 43.5%	22 47.8%	46 26.0%
Total	45 25.4%	58 32.8%	74 41.8%	177 100.0%

The innovation concepts according to the employees in the three universities (PPU, Hebron, Bethlehem).

Table 3-35 the concepts arranged according to employees understanding and realization from the highest level to the lowest.

Meaning of Innovation	Mean	Std. Deviation
Innovation is a process that will create value for the university?	4.53	0.61

University need to do a continuous different changes activities to become an innovative university.	4.19	0.78
Innovation is a new concept help solving previous problems that faced the university	4.15	0.85
Innovation is a concept that do not make a difference whether you adopt it or not in university performance.	2.12	0.90
Innovation is limited to productive companies and rarely to service organization	2.03	0.83

This table indicates that the most popular concept is "Innovation is a process that will create value for the university" where its scale (4.53), followed the "University need to do a continuous different changes activities to become an innovative university" at the second level with a scale (4.19), then "Innovation is a new concept help solving previous problems that faced the university" (4.15), then "Innovation is a concept that do not make a difference whether you adopt it or not in university performance" (2.12), and the last concept was "Innovation is limited to productive companies and rarely to service organization" (2.03).

Table 3-36 the sources of innovation at the three universities arranged according to its availability.

Innovation sources	Mean	Std. Deviation
Internal supervising	3.87	1.12
Technology	3.62	1.15

University need to do a continuous different changes activities to become an innovative university.	4.19	0.78
Innovation is a new concept help solving previous problems that faced the university	4.15	0.85
Innovation is a concept that do not make a difference whether you adopt it or not in university performance.	2.12	0.90
Innovation is limited to productive companies and rarely to service organization	2.03	0.83

This table indicates that the most popular concept is "Innovation is a process that will create value for the university" where its scale (4.53), followed the "University need to do a continuous different changes activities to become an innovative university" at the second level with a scale (4.19), then "Innovation is a new concept help solving previous problems that faced the university" (4.15), then "Innovation is a concept that do not make a difference whether you adopt it or not in university performance" (2.12), and the last concept was "Innovation is limited to productive companies and rarely to service organization" (2.03).

Table 3-36 the sources of innovation at the three universities arranged according to its availability.

Innovation sources	Mean	Std. Deviation
Internal supervising	3.87	1.12
Technology	3.62	1.15

Supportive culture	3.50	0.92
Continuous learning environment	3.43	0.80
Facilitation for research	3.36	0.86
Knowledge sharing	3.30	0.85
Employees motivation	3.23	0.78
Financial facilities	3.11	0.92
Collaboration with the market	3.07	1.11
Training	2.87	0.79

The data in the table indicates that the most available source was internal supervising with scale (3.87), followed by the technology (3.62), then supportive culture for innovation (3.50), then continuous learning environment (3.43).

While the last available sources was the suitable training with a scale (2.87), then collaboration with market and society (3.07), then the financial facilities (3.11).

Table 3-37 the performance levels at the three universities from the highest level of performance to the lowest one.

Performance level	Mean	Std. Deviation
Internal business process	4.02	0.73
Learning and growth	3.68	0.84
Customer satisfaction	3.66	0.82

Financial performance	3.53	0.64
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It's clearly that the internal operation has the highest level of performance at the three universities with (4.02) scale, followed by learning and growth (3.68), then the customer satisfaction (3.66), while level for performance was the financial performance with a (3.53) scale.

H0: There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the three universities.

Person correlation was used to ensure the validity of this assumption which indicates:

Table 3-38 Person correlation results

Variables	Person correlation	Sig.
Learning and growth * innovation sources	0.55	0.000
Financial performance * innovation sources	0.28	0.000
Internal business process * innovation sources	0.46	0.000
Customer satisfaction * innovation sources	0.50	0.000

according to table (8) the data indicate that there is a significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the three universities, there is a positive relationship

between the availability of sources of innovation and the performance level at the three universities.

There is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at the three universities employees due to employee position.

To ensure the validity of this assumption the One Way Analysis Of Variance (AVOVA) was used to find the differences between the realization of innovation concept for the employees at the three universities due to employees position, that clear in table (9)

Table 3-39 the Way Analysis Of Variance (AVOVA) results to find the differences between the realization of innovation concept for the employees at the three universities due to employees position

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	0.711	2	0.356	2.721	0.069
Within Groups	22.350	171	0.131		
Total	23.061	173			

The table finding indicate that there is no significant relationship at ($\alpha = .05$) between the realization of innovation concept at the three universities employees due to employee position, as they clear through the standard deviation in table (10)

Table 3-40

Position	N	Mean	Std. Deviation
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Academic	79	3.44	0.37
Admin.	63	3.32	0.34
Academic admin.	32	3.48	0.37

3.2. Analysis

Profile

Table 3-41 the distribution of the sample according to the university and gender.

	Male		Female		Total
PPU	46	20	66		
	69.7%	30.3%			37.7%
Hebron	49	14	63		
	77.8%	22.2%			36.0%
Bethlehem	33	13	46		
	71.7%	28.3%			26.3%
Total	128	47	175		
	73.1%	26.9%			100.0%

This table shows the distribution of the sample among the three universities according to the gender while the PPU sample was the highest between the three university with total 66 and 37.7 percent from the total sample which was contain from 46 male and 20 female, followed by Hebron university with 36 percent and Bethlehem was the last and the least with 26.3 percent from the total sample , contains form 13 female and 33 male. From the total sample the females were 26.9 percent while the males were 73.1 percent/

Academic	79	3.44	0.37
Admin.	63	3.32	0.34
Academic admin.	32	3.48	0.37

3.2. Analysis

Profile

Table 3-41 the distribution of the sample according to the university and gender.

	Male	Female	Total
PPU	46 69.7%	20 30.3%	66 37.7%
Hebron	49 77.8%	14 22.2%	63 36.0%
Bethlehem	33 71.7%	13 28.3%	46 26.3%
Total	128 73.1%	47 26.9%	175 100.0%

This table shows the distribution of the sample among the three universities according to the gender while the PPU sample was the highest between the three university with total 66 and 37.7 percent from the total sample which was contain from 46 male and 20 female, followed by Hebron university with 36 percent and Bethlehem was the last and the least with 26.3 percent from the total sample , contains form 13 female and 33 male. From the total sample the females were 26.9 percent while the males were 73.1 percent/

Table 3-42 the distribution of the sample according to the university and employees position.

	Academic	Admin.	Academic admin.	Total
PPU	23 34.8%	34 51.5%	9 13.6%	66 37.9%
Hebron	32 50.8%	17 27.0%	14 22.2%	63 36.2%
Bethlehem	24 53.3%	12 26.7%	9 20.0%	45 25.9%
Total	79 45.4%	63 36.2%	32 18.4%	174 100.0%

Table 3-43 the distribution of the sample according to the university and educational degree

	diplo a	B.A.	M.A.	PH.D	Total
PPU	4 6.1%	29 43.9%	21 31.8%	12 18.2%	66 37.3%
Hebron	3 4.6%	15 23.1%	25 38.5%	22 33.8%	65 36.7%
Bethlehem	—	11 23.9%	19 41.3%	16 34.8%	46 26.0%
Total	7 4.0%	55 31.1%	65 36.7%	50 28.2%	177 100.0%

According to data that show the education degree among the three university has the best numbers of higher education degrees ,with 22 P.H.D degree, while PPU has 12 and Bethlehem 16 and the same going according to M.A degree with 25 degree and PPU the second while Bethlehem the last these information gives Hebron university preferably between the three university.

Table 3-44 the distribution of the sample according to the university and years of experience

	Less than 5 years	From 5-9 years	10 years and more	Total
PPU	21 31.8%	24 36.4%	21 31.8%	66 37.3%
Hebron	20 30.8%	14 21.5%	31 47.7%	65 36.7%
Bethlehem	4 8.7%	20 43.5%	22 47.8%	46 26.0%
Total	45 25.4%	58 32.8%	74 41.8%	177 100.0%

This table gives advantage to Bethlehem university which is the highest number of years of experience are there's is 47.8% of the sample has 10 and more years of experience and the same thing with experience years from 5-9 years, where 43.5 % of the sample are. Hebron university comes as the second while PPU was the last

Concept of innovation

Table 3-45 the concepts arranged according to employees understanding and realization among Southern West Bank regular universities.

	PPU	Hebron	Bethlehem	Total
Innovation is a process that will create value for the university	4.26 .54	4.57 .58	4.35 .70	4.53 .61
Innovation is a new concept help solving previous problems that faced the university.	4.15 .96	4.22 .80	4.07 .77	4.15 .85
Innovation is a concept that do not make a difference whether you adopt it or not in university performance.	1.94 .89	2.00 .93	2.54 .72	2.12 .90
Innovation is limited to productive companies and rarely to service organization	2.12 .73	2.03 1.00	2.33 .63	2.03 .83
University need to do a continuous different changes\activities to become an innovative university	4.15 .96	4.22 .80	4.02 .83	4.15 .85

As for the average for the employee realizing for innovation as concept there was a preferable to Bethlehem employee with average 3.46 followed by Hebron university at the second place with average 3.04 , while PPU had the least scale with average 3.032.

Sources of innovation

Table 3-46 sources of innovation arranged according to its availability among Southern West Bank regular universities.

	PPU	Hebron	Bethlehem	Total
Internal supervising	3.84	3.90	3.84	3.90
	1.17	1.01	1.21	1.01
Supportive culture	3.53	3.30	3.73	3.30
	.93	.96	.77	.96
Continuous learning environment	3.38	3.26	3.74	3.26
	.76	.83	.75	.83
Technology	3.95	3.23	3.69	3.23
	1.12	1.04	1.20	1.04
Knowledge sharing	3.44	3.15	3.30	3.15
	.74	.87	.95	.87
Employees motivation	3.16	3.11	3.51	3.11
	.79	.76	.73	.76
Facilitation for research	3.59	2.98	3.55	2.98
	.79	.85	.82	.85
Financial facilities	3.16	2.80	3.46	2.80
	.98	.79	.87	.79
Collaboration with the market	3.46	2.76	2.95	2.76
	1.02	1.04	1.19	1.04
Training	2.94	2.68	3.01	2.68
	.85	.80	.61	.80

According to the table above about the scores for the availability for sources of innovation among the three universities from the employees view point as follow:

Bethlehem has the highest number of the sources of innovation which is :

- Supportive culture

Table 3-46 sources of innovation arranged according to its availability among Southern West Bank regular universities.

	PPU	Hebron	Bethlehem	Total
Internal supervising	3.84	3.90	3.84	3.90
	1.17	1.01	1.21	1.01
Supportive culture	3.53	3.30	3.73	3.30
	.93	.96	.77	.96
Continuous learning environment	3.38	3.26	3.74	3.26
	.76	.83	.75	.83
Technology	3.95	3.23	3.69	3.23
	1.12	1.04	1.20	1.04
Knowledge sharing	3.44	3.15	3.30	3.15
	.74	.87	.95	.87
Employees motivation	3.16	3.11	3.51	3.11
	.79	.76	.73	.76
Facilitation for research	3.59	2.98	3.55	2.98
	.79	.85	.82	.85
Financial facilities	3.16	2.80	3.46	2.80
	.98	.79	.87	.79
Collaboration with the market	3.46	2.76	2.95	2.76
	1.02	1.04	1.19	1.04
Training	2.94	2.68	3.01	2.68
	.85	.80	.61	.80

According to the table above about the scores for the availability for sources of innovation among the three universities from the employees view point as follow:

Bethlehem has the highest number of the sources of innovation which is :

- Supportive culture

- Continues learning environment
- Employees motivation
- Financial motivation
- Training

PPU was the second as it was number one in the availability of :

- Technology
- Collaboration with the market
- Knowledge sharing
- Facilitation for research

While in order to the total average for the availability for the sources of innovation PPU had the higher score with 4.05 followed by Bethlehem 3.087 which tells us that even the sources that Bethlehem was the first in its availability the deference was too small compared to the sources PPU was first in and Hebron was the last with the least scores Between the three university.

Performance

Table 3-47 performance levels among Southern West Bank regular universities.

	PPU	Hebron	Bethlehem	Total
Internal business process	4.08	4.02	3.94	4.02
	.74	.73	.74	.73
Financial performance	3.74	3.66	3.04	3.66

	.53	.60	.60	.60
Customer satisfaction	3.75	3.46	3.81	3.46
	.75	.91	.73	.91
Learning and growth	3.88	3.37	3.84	3.37
	.79	.93	.66	.93

The data which table 7 gave us about the performance level among the three university was a reflection for that positive relationship between the availability of the sources of innovation and the performance , that was clear where the PPU had the Highest average of the scores of the availability of sources of innovation with 4305.PPU also was the first in the scores of the performance levels between the three university as it has the highest scores in three criteria of performance form four which is :

- Internal business processes
- Financial performance
- Learning and growth

While it was the second after Bethlehem university in customer satisfaction but in average small difference.

So in regards to table 6 we can find that the sources that Bethlehem was higher than PPU in were the sources the reflect the customer satisfaction which is :

- Supportive culture
- Continuous motivation
- Financial facilities
- Trading

H0: There is no significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the three universities.

Person correlation was used to ensure the validity of this assumption which indicates:

Table 3-48 Person correlation results to find the relationship between the availability of sources of innovation and the performance level Southern West Bank regular universities.

	PPU	Hebron	Bethlehem	Total
Learning and growth * innovation sources	.73	.38	.50	.55
Financial performance * innovation sources	.45	.43	.34	.28
Internal business process * innovation sources	.48	.46	.55	.46
Customer satisfaction * innovation sources	.55	.41	.60	.50

according to table (8) the data indicate that there is a significant relationship at ($\alpha = .05$) between the availability of sources of innovation and the performance level at the three universities , there is a positive relationship between the availability of sources of innovation and the performance level at the three universities.

4. ADMINISTRATIVE SCIENCE AND INFORMATICS COLLEGE CASE STUDY

Abstract:

This case study highlights the question of how can one of PPU colleges improve its performance and how it can reach the ideal situation to achieve innovation. This case study based on interviews with decision makers, academic and administrative staff that have been involved in PPU university.

Innovation is the prime strategy for the first decade of the twenty-first century, from this time a move to an information economy grew rather than an industrial economy. Industrial are being created and/or transformed by innovation in understanding and application of those innovation to our world and there is no place better than universities to bring innovation to the world. The fact that innovative universities contribute significantly to the growth and development of the community and economy through the university's distinguished graduates, that inspired us to start with PPU as a starting point.

About Palestine Polytechnic University

Palestine Polytechnic University (PPU) is one of the leading polytechnic universities in Palestine. It was founded in 1978 by the University Graduates Union (UGU), which is a non-profit organization in Hebron district. PPU is officially recognized by the Palestinian Ministry of Higher Education and it is an active member in the Rector Conference of Palestinian Universities. There are over 5000 students enrolled in the various areas of specialization at PPU during the academic year 2006-2007.

There are four colleges in PPU:

- Engineering and Technology

- Administrative Science and informatics
- Applied Science
- Applied Profession

The PPU campus is distributed on a number of locations:

- General Administration Headquarter
- Abu-Ketila Campus
- Wadi-Alharia Campus
- Abu Romman Campus

University considering several disciplines: applied science, engineering and technology, information technology and management and others.

PPU strategic plan:

Vision

Towards a Science, Technology, and Innovation Global University by the year 2016.

Mission

To graduate qualified labor forces able to make a positive change and fulfill the needs and requirements of the community in scientific, technological, and research fields.

To provide innovative ideas and solutions.

To strengthen the role of the scientific research and development in accomplishing sustainable and substantial national growth.

To attract qualified and ranked human resources.

To reform the university environment and atmosphere.

Main objectives

Assuring quality in academic programs.

Assuring quality in administrative issues.

Encouraging the scientific research.

Communicating efficiently with local community.

Achieving full financial self – dependency.

Enhancing the university atmosphere and the extracurricular activities.

From PPU vision statement - as mentioned earlier -, PPU must make every effort to achieve it - " Toward a Science, Technology and Innovation Global University by the year 2016"-.

This case study focus on innovation aspect of PPU vision statement, that stems from the fact of innovation importance, many of scientists and writers urged the innovation importance.

"innovation drives productivity which increases wages and returns to capital"
(Porter, Michael, 2001).

"Just as energy is the basis of life itself, and ideas the source of innovation, so is innovation the vital spark of all human change, improvement and progress". (Theodore levitt).

" Innovation is the specific instrument of entrepreneurship. The act that endows resources with a new capacity to create wealth" (Peter F. Drucker).

" If you want to increase initiative and innovation, you have to encourage and embrace failure. A culture that punishes less-than ideal risk-related outcomes will stifle both initiative and innovation". (Jim McCormick).

Those and many others urged of innovation, so a good question to ask how Administrative Science and Informatics college improve its performance through innovation adaptation so innovation become as a part of the university strategy.

For this purpose, the research team had conducted interviews for some of the university staff, Mr. Ahmad Saeed Bayoud (Chairman of the Board of Trustees of the University of Polytechnic Palestine) and Dr. Ibrahim Al-Masri (President of the University of Polytechnic Palestine) to represent the senior management view of the University. For Administrative Science and Informatics college was covered by Dr. Mohammed Hassouna (Dean of the Faculty of Management Science and Informatics) and Mr. Amjad Natsheh (Chairman of the Department of Administrative Sciences), while Dr. Marwan Jaloud and Mr. Tariq Tamimi were interviewed to spot the academics view point, in addition to the Dr. Imad al- Khatib (Deanship of the scientific research). We will talk in detail about the point of view for each of them the concept of innovation.

The main questions the research team asked the interviewee were What is the concept of innovation from their point of view?. What is the most important aspect of innovation, which they see in the university?. What are the obstacles facing them to achieve the goal to be an innovative university?.

Does they classified PPU as innovative university? And Why ?. What are the procedures the follow to ensure that they are in the right path to achieve the goal to be an innovative university?. How can walk forward to be an innovative university?.

Senior management view

The research team interviewed each of Mr. Ahmed Saeed Bayoud (Chairman of the Board of Trustees of the University of Polytechnic Palestine) and Dr. Ibrahim Al-Masri (President of the University of Polytechnic Palestine), representatives of the senior management of the University. Mr. Ahmed Saeed Bayoud had explained the directions of Polytechnic Palestine for innovation and excellence from the foundation of the university, and distinguished by scientific and technological disciplines on the time which other Hebron universities directed to the disciplines of humanities, in addition to that Mr. Ahmed Saeed Oviparous move (jump) got the quality of the University during the previous ten years in terms of expansion of the university and increase the diversity of disciplines and the number of students, faculties, academic and administrative experience as the excellence and innovation lies in his opinion in continuous and consistent development.

Dr. Ibrahim added that the University of Polytechnic constantly endeavor to achieve the vision and mission of the University as a distinguished University of creative and innovative excellence and has attributed the creation of the University of Polytechnic the interest and focus on technical and technological aspects in addition to the corporate culture of encouraging innovation and the university administration welcome new ideas and open, and the mentality of the powers given by the administration higher powers for the management of colleges. Dr. Ibrahim Al-Masri pointed out the role of University of Polytechnic in the service of community and social responsibility borne by the university itself, such as the continuing education

courses and projects of interest groups in society. Dr. Ibrahim emphasized that the University of Polytechnic distinguished from many of other universities in the West Bank as the only university that focused on the integration between the university and the labor market and the private sector, through the establishment of the University Center for integration with the industry.

As for the obstacles faced by the university in the ownership of the innovation Dr. Ibrahim pointed out that the financial constraints one of the biggest obstacles to the adoption of innovation as a very expensive addition to a lack of available human resources. Dr. Ibrahim said the lack of awareness among the society and the private sector on the importance of innovation and the role of the university reduce the effectiveness of the role of Polytechnic in the service of society and the integration with the private sector.

for the university administration awareness to ensure that they are on right track to achieve its mission Dr. Ibrahim Al-Masri explained that a continuous assessment process are maintained at various levels of administrative and academic level by the assistance and the quality control department.

Administration Science and Informatics College members views

The research team interviewed each of the Dr. Mohammed Hassouna (Dean of the Faculty of Management Science and Informatics) and Mr. Amjad Natsheh (Chairman of the Department of Administrative Sciences), and they confirmed the a statement of Mr. Ahmed on the development of and that a quantum leap over the previous ten years has made it clear that the message and the vision of the university and the steps taken to implement and achieve the level of the Faculty of Science and Management Information Systems, through the presence of a supportive and stimulating a culture of

innovation in this college and said that the motivation is not limited to the teacher and the laws, but are mainly dependent on the student, through the encouragement of creative work and effort, in addition stressed that innovation also depends on the teacher and vital to the developments and the selection of courses that encourage innovation and creativity.

As for the obstacles faced by the College for the innovation is the hard-line laws and regulations and bureaucracy, which causes the slow processes and procedures, said Dr. Mohamed Hassouneh and Mr. Amjad Natsheh that one of the factors that hinder innovation is the limited options in human resources for employment and innovation did not take enough weight as a standard of the staff selection process.

To represent the view of the academic, the research team interviewed each of the Dr. Marwan Jalaud and Mr. Tariq al-Tamimi.

Mr. Tariq al-Tamimi confirmed the existence of harmony in the overall management as well as a receptive and supportive of management, and Mr. Tariq al-Tamimi added that the university management making it easier for the decentralization of decision-making process without being bureaucratic steps suppress any idea or activity and Dr. Marwan Jalaud attributed the development to the dedication of staff and teachers free of charge, where there is a bid by them in order to raise the performance level of the college.

As for the obstacles Dr. Marwan Jolaud that, despite the growth and expansion of the university, this increase was not accompanied by the required change and flexibility in the laws of the university, as he added. Dr. Marwan Jaloud that the laws that govern and manage the university since the image of the Institute is governed by the same up to date, in addition he said that the weakness and lack of integration in the fundamental foundations between teacher and learner and the course or educational material and the absence of a continuous work in order to achieve a complementary mission

of the University, The research showed that non-incentive enough and this was confirmed by Mr. Tariq al-Tamimi, the lack of sufficient attention to scientific research in terms of financial facilities and adequate stimulation of the senior management.

Dean of scientific Research at the University of Polytechnic view

As we have previously stated that one of the most important sources of innovation is the scientific research in this research team has access to the Dean of Research at the University of Polytechnic Dr. Imad al-Khatib said that the innovation itself is the use or the development of methods able to produce a product or by the strengthening of administrative and new ways of institutionalizing or regulations, he said. Dr. Imad al-Khatib, the University of Polytechnic in great strides and that it has achieved in the broad areas of innovation and said that the University Polytechnic cooperation with the Ministry of Economy is the measurement of innovation in the service sector and manufacturers of using the program CIS2006 This is a step towards the innovation of all the institutions and society as a whole and commended that the University of Polytechnic is one of the pioneers in innovation, through providing continuous innovation programs, such as Master and the development of programs and systems of scientific research and dissemination of Research Papers and distinct units, in addition to scientific research and the institutionalization of the Deanship of scientific research.

Dr. Imad al-Khatib mentioned that a strategic plan the absent part of innovation at the University of polytechnic additionally, he stressed the support were not sufficient, but this also limits the possibilities, he warned that the culture of the university must be absorbed to the culture of scientific research, whether more or professors from the Department and that there should be an initiative more scientific research by the teachers either by the administration recommended the development of regulations in line with the expansion of interest in the premises of the university and the university

campus since the buildings are equipped with comfortable and convenient than the goodwill of the student and the teacher and the administration and to promote the ideas and innovation for them.

Research team analysis

Based on data obtained from the analysis of the questionnaire results ,segment related to the University of Polytechnic of Palestine, to the results are inline with the parties met.

The results of the questionnaire indicated that the technology came first in the sources available within the university and the subsequent internal control and therefore of scientific research and culture of the university was supporting the fourth source of innovation, the results came close to all levels of the university, where the university is the University of the technology of first-class technology There is strict control and complementary to each employee and the university there, and special units to help ensure the quality of the education system of teacher and learner and material management such as the emphasis on quality and rector of scientific research which has brought about a qualitative leap in the performance of the university and the process by not only to work as a regular university is in the process of educational trend, but one, are applied to the society in which it is through research and studies that are similar to the Dean of the role played by the university developed a leading role for the community and made possible through the integration with the industry, where he interviewed the teachers who have been brought to his role as change in the transmission of the university to become the site of the lead element of change is happening in the market and integrate the industry and labor market within the country .

The provided data by the questionnaire on the availability of this source of innovative finishing next to a culture of support. While there were during the previous staff had been interviewed in the both low-and middle-management

and by the dean of scientific research on the level of administrative and financial support, which is supposed to be supported by senior management submitted any project or innovative idea can be left out by those officers and other employees of the same level and that is how data provided by the analysis of the charts to identify where the facilities financial and motivate staff and training levels and the last with the lowest estimate by the curse of Polytechnic among the sources of creativity on the availability of the university, the research team have reached to several reasons that result could be attributed to him, namely:

There is a gap of communication between these levels, so there is no mutual understanding by both sides of the post and the other required; senior management, whose task is to plan long-term and comprehensive of the Foundation is thus the availability of after accusing sufficient background and understanding of the staffing requirements and detailed requirements, but they look staff to the failure of the administration point of view rather narrow understanding of what the other hand, are accused of not understanding the magnitude of the requirements that must be covered in the planning of the University as a whole. For example, when talking about training and specialized courses and the accompanying financial facilities are not satisfied with the administrative level of the minimum of the quality of training and fitness of the disciplines, it is the view of senior management has been ascribed to that there are many, many, many disciplines at the university can not be distributed to all disciplines to suit the individual and therefore are the selection and provision of quality to suit everyone but from the standpoint of the administration are the lowest level of satisfaction with the non-suitability of the employee as well as allocate ADDRESSES continuity.

Innovation as a concept:

As for the innovation as a concept there was a consensus by all parties who have been interviewed that the title carries with it a number of which revolve

around the statements change, innovative thinking, to bring new ideas for application within the university, but there was a difference on the result of the job position for the person who was interviewed was

As follows:

Academics: There was confirmation from them on the side of innovation in the universities is that innovation should be in the educational system in the integration of the University as a whole in terms of teacher and learner and Platform, or the book, all of which should serve the process of continuous learning and to contribute in raising the standard of academic cultural and university graduates through the application of quality programs and non-regular ideas in the educational process.

Administrators: was the concept of creativity is based on the ideas of non-regular administrative and promised a management system or a particular custom, as well as to focus on the technical aspects and availability of culture within the university, and there was support for the idea of the kind of decentralization of administrative decision-making. (Dr. Ibrahim Al-Massri).

Conclusion

Through the above shows, there is no doubt that Palestine polytechnic University of Moving in great strides towards innovation, which would raise the performance of the business but we have noticed that the problem does not lie in the availability of sources of innovation, but in how to exploit these resources in an efficient, effective and optimal way as through the results of a questionnaire to universities south of the West Bank (polytechnic, Hebron, Bethlehem), the University of polytechnic was the most innovative university, especially in technology and internal control, scientific research and a supportive culture in the university, which had a positive impact on the performance of the university (financial, customer satisfaction, internal business process, learning and growth)

Nevertheless, clarified that there was weak communication between senior management, where there is no diversity and difference in the required background which we believe is must be more than an engineering background as the terms of reference of different variety, in addition to the existence of a gap between them and the collages .

Senior management have strategic outlook which is some thing positive, but we must not lose sight of the tactical situation and the needs of the collage, and there is a gap between senior management wide view Between the colleges of short-term planning and without dimensions of the future and with the minimum of the expansion of a strategic view, therefore, on both sides of senior management and the collage members , each of them have provide support to each other.

In addition to some of the proposals aimed activating the role of innovation and thus improve the performance ,in order to give innovation enough weight in the strategic plan , and in the academic and

administrative staff in using their talents , creativity and innovation in selection the courses that have to be supportive to the idea of innovation and stimulate the students and teachers to innovate .

In addition to the need for flexibility in laws and the ongoing in the new programs to create a supportive environment for every thing new and unusual.

Here, note must be understood and to work out that innovation could be sourced from within the university, staff, students or from the local market, or even from global sites like other universities and institutions .so the university have to do what is necessary to translate these ideas and to make it commensurate with the local environment and capacity we have.

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Here, note must be understood and to work out that innovation could be sourced from within the university, staff, students or from the local market, or even from global sites like other universities and institutions .so the university have to do what is necessary to translate these ideas and to make it commensurate with the local environment and capacity we have.

5. RECOMMENDATIONS

1. The staff within the university are in need to increase their awareness and understanding of the concept "innovation", as well as its importance to the University and its role in increasing the University performance and making it distinct .

2. PPU was characterized from other universities in the availability of technologies and unique techniques ; so it needs to maintain this feature through :

- Follow up on all the other universities unique techniques, and the mechanisms in the evolution of teaching process.
- To create a staff capable in using these techniques then in developing it in-house

3. PPU programs needs to maintain the mechanism of development, and change parallel with the change in the labor market in order to satisfy its needs .

4. In order to make the performance of the staff excellent and heading rapidly towards the high quality; The management must ensure their satisfaction, By ensuring the availability of :

- motivating the staff members on an ongoing basis which must include the staff financial and moral needs
- Provide what they need from the training programs on an ongoing basis , and should have be appropriate for the requirements and the functions performed by each employee.

5. Allocating an administrative unit within the university under the name of "innovation unit" to follow up on the implementing of the innovative ideas , in order to maintain the spirit of renewal and change .

6. the University management have to provide all facilities and sufficient flexibility to facilitate the implementation of any innovative idea that will benefit the university .

7. Granting colleges kind of autonomy and empowerment to take the needed decisions , and the implementation of some programs without reference to senior management.

8. Create an atmosphere of competition among the colleges within the university, allocated according to the College programs therefore this will lead to upgrading the performance for all the colleges then the university levels as a whole

9. Focus on scientific research : Motivate students and staff financially , provide adequate funding sources and all the necessary facilities to help them in the completion of quality and applied research that should benefit the university and the community then to supports the leading role, which is supposed to played by the University.

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7. APPENDIX

Contain of:

- Questionnaire
- سلسلة التقارير والدراسات (وزارة التعليم العالي)

استبانة

يقوم فريق البحث من كلية العلوم الإدارية ونظم المعلومات في جامعة بوليتكنك فلسطين بدراسة حول الابتكار وتأثيره على أداء الجامعات في جامعات جنوب الضفة الغربية. وذلك استكمالاً لمتطلب مشروع تخرج للحصول على درجة البكالوريوس في إدارة الأعمال المعاصرة. نرجو التعاون معنا والإجابة عن الاستبيان بدقة وموضوعية. علماً أن المعلومات ستعامل بسرية تامة ولن تستخدم إلا لأغراض البحث العلمي فقط.

شكراً لتعاونكم

فريق البحث:

روان عوني الننتشة

ياسمين إسماعيل أبو هشيش

المشرف:

د. سهيل سلطان

معلومات شخصية: الرجاء وضع إشارة (✓) في المكان المناسب

الجامعة: جامعة بوليتكنك فلسطين

جامعة الخليل

جامعة بيت لحم

الجنس: ذكر أنثى

الوظيفة: أكاديمي إداري أكاديمي إداري

الدرجة العلمية: دبلوم

بكالوريوس (B.A)

ماجستير (M.A)

دكتوراه (PH.D)

سنوات الخبرة: أقل من 5 سنوات

من 5 - 9 سنوات

10 سنوات فأكثر

التخصص:

الرجاء وضع إشارة (✓) في المكان المناسب:

مفهوم الإبداع :

الرقم	السؤال	أوافق بشدة	أوافق	لا أعرف	لا أوافق	لا أوافق بشدة
1	الإبداع عملية تضيف قيمة وفائدة للجامعة.					
2	الإبداع مفهوم حديث يساعد الجامعة في حل مشكلات واجهتها مسبقاً.					
3	الإبداع مفهوم يقتصر على الشركات والمصانع الإنتاجية ولا تستفيد منه المؤسسات الخدمائية والجامعات.					
4	الجامعة بحاجة إلى إجراء تغييرات مستمرة واستحداث أنشطة مختلفة لتسمى جامعة مبدعة.					
5	الإبداع مفهوم لا يحدث فرقا لدى الجامعة على أداءها سواء تبنته وطبقته أم لا.					

مصادر الابتكار :

الرقم	السؤال	أوافق بشدة	أوافق	لا أعرف	لا أوافق	لا أوافق بشدة
1	هناك تمويل كافي للبدء بنشاطات وأفكار إبداعية.					
2	هناك إجراءات مالية مسهلة عند البدء بتنفيذ أي نشاط أو فكرة مبتكرة ومبدعة.					
3	توفر الجامعة التمويل الكافي لأنشطة البحث العلمي وإجراء الدراسات العلمية.					
4	التحفيزات المالية التي تمنح للموظفين كافية ومناسبة.					
5	التحفيزات المعنوية التي تقدمها الجامعة كافية ومناسبة.					
6	هناك علاقة جيدة وبناءة بيني وبين المديرين والمشرفين في الجامعة.					
7	هناك تقدير من قبل المشرفين والمدراء لأدائي في وظيفتي.					
8	كل موظف حصل على حقه في التدريبات والمواد العلمية الضرورية لوظيفته.					
9	تتلقى التدريبات والدورات باستمرار.					
10	تتلقى التدريبات بحسب تخصصك واحتياجاتك.					
11	تقيم التدريبات بمقارنة أهدافها مع نتائجها.					
12	قوانين الجامعة لا تعيق إمكانية تنفيذ برامج مبدعة ومبتكرة.					

					13	اعتقد أن ثقافة الجامعة تشجع خلق بيئة تحفز على التعلم المستمر.
					14	هناك سهولة في الوصول إلى مصادر المعرفة والمعلومات لإجراء البحوث والدراسات.
					15	هناك مشاركة في المعرفة على مستوى المؤسسة ككل والموظفين.
					16	هناك استخدام للتكنولوجيات الحديثة لكل تخصص بهدف إنتاج بحوث علمية ذات جودة.
					17	هناك معايير لجودة التعلم موضوعة من قبل الجامعة وتعمل الجامعة في خطة منهجية بهدف تليبيتها.
					18	هناك تكامل في منظومة التعليم في الجامعة من حيث معلم ومتعلم ومنهاج.
					19	هناك تركيز على استراتيجيات التعلم الذاتي والمستمر سواء للطلاب أو المعلم.
					20	هناك حداثة في الكتب والمراجع العلمية والورقية والالكترونية وتناسبها مع عدد الطلاب.
					21	توفر الجامعة فرق بحثية من كافة تخصصات الجامعة تعمل بمنظومة فريق بهدف دراسة وحل مشكل بيئية ومجتمعية محيطية.
					22	هناك خطط تقوم بها الجامعة بهدف التعرف على احتياجات المجتمع والبيئة وسوق العمل وتعمل على تليبيتها.
					32	هناك رقابة دقيقة وبشكل مستمر لأداء الموظفين وكادر التعليم في الجامعة.

أداء الجامعة :

الرقم	السؤال	أوافق بشدة	أوافق	لا أعرف	لا أوافق	لا أوافق بشدة
1	البيانات المالية التي تعكس وضع الجامعة المالي تمتاز بالدقة وتحسن باستمرار.					
2	هناك استقرار ونمو في وضع الجامعة المالي.					
3	هناك تزايد ملحوظ في عدد الطلاب المنتسبين للجامعة.					
4	هناك تزايد ملحوظ في عدد المشاريع التي تنفذها الجامعة سنويا.					
5	هناك تحسن ملحوظ في مهاراتي والمستوى العلمي والتقني لدي بما يتعلق بمتطلبات وظيفتي منذ بدء عملي الحالي.					
6	لدي رضا حول وظيفتي ولا أراغب في تغييرها.					
7	تعتقد أنك تؤدي وظيفتك بشكل فعال وكفؤ.					

					8	البرامج التي تقدمها الجامعة مواكبة لمتطلبات سوق العمل.
					9	اعتقد أن هناك رضا في سوق العمل عن مستوى خريجي الجامعة.
					10	تعتبر الجامعة جامعة عصرية من حيث إعدادها لطلابها ببرامج مناسبة بما يحقق طموحاتهم ومتطلباتهم سواء الحالية والمستقبلية.
					11	اعتقد أن الجامعة تسير في خطوات كبيرة نحو النمو والتطور.
					12	اعتقد أن الجامعة لديها مكانة عالية ومرموقة.

شكرا لتعاونكم

الإدارة العامة للتطوير والبحث العلمي

يناير 2006



وزارة التربية والتعليم العالي

سلسلة التقارير والدراسات

تقرير رقم 1

الطلبة في التعليم العالي

الإدارة العامة للتطوير والبحث العلمي

أيار 2006

تقديم

تصدر الادارة العامة للتطوير والبحث العلمي سنويا دليلا باحصاءات التعليم العالي الفلسطيني وكذلك تلخيصا لهذا الدليل من عدة صفحات على شكل " مطوية " ارشادية.

في هذا العام، ارتأت الادارة العامة للتطوير والبحث العلمي ان تضيف اصدار جديدا يتمثل بسلسلة التقارير والدراسات حيث يتم فيها قراءة تحليلية للارقام والمؤشرات الاحصائية الصادرة في الدليل أو المطوية.

وعليه، جاء هذا التقرير وهو الاول في السلسلة ويتعلق بملف الطلبة المسجلين والجدد والمتخرجين في مؤسسات التعليم العالي باشكالها المتنوعة. التقرير الثاني من السلسلة سوف يتناول التخصصات وتكراراتها ، اما الثالث فسوف يخصص للعاملين في مؤسسات التعليم العالي، في حين ان الرابع سيعالج الوضع المالي لمؤسسات التعليم العالي ، بينما سيركز الخامس على المرافق وطريقة استعمالها. سوف يتم اصدار التقرير المتعلق بالطلبة والعاملين بشكل سنوي ان شاء الله ، اما الباقي فيعتمد على حجم التغيير في المجال والحاجة.

تستند هذه التقارير والاصدارات على قاعدة بيانات التعليم العالي المركزية والمبنية في الادارة العامة للتطوير والبحث العلمي، والتي تغذى ببيانات تجمع سنويات من مؤسسات التعليم العالي عبر ملفات الكترونية مصاغة جيدا لهذا الغرض وموضوعة على موقع معين على الشبكة العالمية، يتم الوصول اليها من خلال مفاتيح خاصة معرفة لكل مؤسسة من مؤسسات التعليم العالي .

واذ ننشر هذا التقرير، نأمل من القارىء العزيز ان يزودنا بأية ملاحظات تطويرية تتعلق بالمحتوى والاخراج وما شابه ، حتى يكون أداة مفيدة لصناع السياسة وأصحاب القرار في الوزارة الموقرة.

كل الشكر لمؤسسات التعليم العالي على تعاونها في تغذية قاعدة البيانات بالبيانات السنوية المطلوبة، ونأمل المزيد من التعاون لانجاح إصدار هذه التقارير في أوقاتها.

والله من وراء القصد.

د. فاهوم الشلبي

الادارة العامة للتطوير والبحث العلمي

أيار 2006

المحتويات

1	مقدمة
1	مؤسسات التعليم العالي
2	الطلبة المسجلون في الجامعات والكليات
5	نمو الطلبة في مؤسسات التعليم العالي
6	التخصصات العريضة للطلبة المسجلين
6	القبول والطلبة الجدد
11	الطلبة الخريجون
13	المراجع

1.1 مقدمة:

يُعنى هذا التقرير بالطلبة المسجلين في مؤسسات التعليم العالي الفلسطيني (جامعات وكليات جامعية ومتوسطة) وكذلك بالطلبة الجدد والاستيعاب، وما يقابلهم من أعداد خريجين. وركز التقرير على مقارنة الأعداد ونسبتها الى فئات عمرية مجتمعية دون ربطها بحقول التخصص الدقيق حيث سيكون هناك تقريراً خاصاً لمناقشة التخصصات وتكراراتها.

البيانات الجدولة المستخدمة في التقرير هي نتائج قاعدة بيانات التعليم العالي المبنية في دائرة نظم المعلومات والتي تُغذى سنوياً ببيانات خام تجمع من مؤسسات التعليم العالي عبر آلية إلكترونية متطورة ، ثم تخضع لعملية تدقيق ومعالجة. وترميز قبل ترحيلها الى قاعدة البيانات بمحتواها النهائي. تجمع البيانات الخام بعد نهاية فترة الحذف والإضافة من الفصل الأول من كل عام، وعليه فان الطلبة الجدد المقبولين في الفصل الثاني لم يتم معالجتهم في البيانات ، وهم قلة باستثناء المقبولين في جامعة القدس المفتوحة.

2.1 مؤسسات التعليم العالي الفلسطيني:

يوجد في فلسطين 43 مؤسسة تعليم عالي موزعة على الضفة الغربية وقطاع غزة والقدس. الجدول رقم 1 يعطي توزيعاً لهذه المؤسسات حسب النوع والموقع.

جدول رقم (1)

توزيع مؤسسات التعليم العالي حسب النوع والموقع الجغرافي

النوع	الموقع	ضفة غربية	غزة	مجموع
جامعات تقليدية	7	3	10	
القدس المفتوحة	(16)*	(7)*	1	
كليات جامعية	9	4	13	
كليات متوسطة	14	5	19	
مجموع	30	12	43	

يتبين من الجدول وجود عشرة جامعات تقليدية، تميزاً لها عن جامعة التعليم المفتوح المنفردة والمنتشرة في الضفة الغربية وقطاع غزة عبر مراكز تعليمية عديدة.

قد يجد القارئ أن عدد الجامعات كبيراً قياساً لقطر صغير المساحة والسكان، لكن ذلك يعود للظروف التي نشأت فيها هذه الجامعات والتي هدفت الى توفير فرصة الالتحاق للشباب الفلسطيني بالتعليم العالي للحد من هجرته للخارج في ظل غياب سلطة وحكومة وطنية ووجود احتلال . هذه الجامعات تتفاوت في حجمها وقدرتها الاستيعابية كما سنرى لاحقاً، وتمنح شهادات بمستويات مختلفة ، تبدأ من تعليم فني متخصص انتهاء بماجستير (باستثناء برنامج دكتوراه وحيد في الكيمياء).

يتضح أيضاً ارتفاعاً في عدد الكليات الجامعية (13 كلية) ، فقد تضاعف هذا العدد خلال الثلاث سنوات الماضية بحكم اعتماد برامج بكالوريوس جديدة في كليات كانت تمنح شهادة دبلوم فقط.

اما النوع الاخير من المؤسسات فهو كليات المجتمع المتوسطة والتي تمنح شهادة دبلوم متوسطة لبرامج يفترض انها برامج مهنية وتقنية.

من هذه المؤسسات، يوجد جامعة خاصة وحيدة وهي الجامعة العربية الامريكية في جنين وجامعة تقليدية حكومية وحيدة وهي جامعة الاقصى في غزة والباقي جامعات عامة لا تهدف الى الربح. وعلى صعيد جامعة القدس المفتوحة، فهي حكومية النشأة والرئاسة، لكنها عامة في التوظيف والمالية. أما الكليات الجامعية والمتوسطة، فمنها ثلاثة تحت اشراف منظمة الامم المتحدة لتشغيل واغاثة اللاجئين UNRWA والباقي بين حكومي وعام وخاص.

3.1 الطلبة المسجلون في الجامعات والكليات:

بلغ مجموع الطلبة المسجلون في مؤسسات التعليم العالي للعام 2006/2005 149,624 طالبا كما يشير الجدول رقم 2، منهم في الدراسات العليا (برامج دبلوم عالي وماجستير) 4,363 (حوالي 3%) وفي الدبلوم المتوسط او الفني التخصصي 15,567 (حوالي 10%) ، بينما احتوت البرامج التي تعطي شهادة بكالوريوس 129,694 طالبا وهي النسبة الكبرى 87%.

ان هذا التوزيع للطلبة حسب مستوى الشهادة المطلوبة يشير الى عدة حقائق، منها ان الغالبية العظمى من الطلبة هم طلبة بكالوريوس، بينما طلبة الدبلوم المتوسط او الفني المتخصص يشكلون نسبة ضئيلة، وهذا يعكس ان الاقبال الحقيقي والاهتمام الاول للطلبة هو نيل درجة البكالوريوس حتى ولو كان حقل التخصص غير مرغوب في السوق الاقتصادي المحلي.

توزيع الطلبة المسجلين في مؤسسات التعليم العالي حسب الشهادة والجنس، 2005/2006

جدول رقم (2)

المجموع		دراسات عليا			البكالوريوس			أقل من بكالوريوس			المؤسسة
G. Total		Post Graduate Studies			Bachelor			Below Bachelor			
T	F	M	T	F	M	T	F	M	T	F	M
79878	42777	37100	4363	1673	2690	74932	40698	34233	583	406	177
52914	28029	24885				52685	27908	24777	229	121	108
5785	3317	2468				2077	1346	731	3708	1971	1737
11047	4753	6294							11047	4753	6294
149624	78876	70747	4363	1673	2690	129694	69952	59741	15567	7251	8316
H. E. Institution											
الجامعات التقليدية											
جامعة القدس المفتوحة											
الكليات الجامعية											
الكليات المتوسطة											
المجموع											

جدول رقم (3)

توزيع الطلبة المسجلين في مؤسسات التعليم العالي حسب الشهادة والجنس، 2004/2005

المجموع		دراسات عليا			البكالوريوس			أقل من بكالوريوس			المؤسسة
G. Total		Post Graduate Studies			Bachelor			Below Bachelor			
T	F	M	T	F	M	T	F	M	T	F	M
76650	40250	36400	4020	1484	2536	72012	38439	33573	618	327	291
46453	24055	22398				46200	23912	22288	253	143	110
6034	3353	2681				2068	1180	888	3966	2173	1793
9002	3932	5070							9002	3932	5070
138139	71590	66549	4020	1484	2536	120280	63531	56749	13839	6575	7264
H. E. Institution											
الجامعات التقليدية											
القدس المفتوحة											
الكليات الجامعية											
الكليات المتوسطة											
المجموع											

اضافة ان عدم وجود برامج تمنح شهادة الدكتوراه (باستثناء برنامج دكتوراه في الكيمياء يحوي 3 طلاب وهو شبه مجمد) يعكس ان الوظيفة الرئيسية الاولى لمؤسسات التعليم العالي الفلسطينية هي التدريس ويأتي البحث العلمي هامشيا، حيث ان نيل شهادة البكالوريوس لا يتطلب بحثا وهذا هو الحال أيضا في معظم برامج الماجستير، وعليه، فان البحث في الغالب مقصورا على اعضاء هيئة التدريس والاكاديميين الاداريين دون الطلبة.

ويتضح من الجدول رقم 2 أيضا ان طلبة التعليم المفتوح يشكلون حوالي 35% من الجسم الطلابي. وتشير هذه النسب الى الاقبال الشديد على جامعة القدس المفتوحة خاصة انها تعطي فرصة للالتحاق الجامعي لنيل درجة البكالوريوس لفئات مجتمعية عاملة وتحمل شهادة ثانوية عامة قديمة وبمعدلات نجاح متفاوتة. اضافة، انها تقبل طلبة جدد من خريجي الثانوية العامة لنفس العام وبمعدلات نجاح تقل عن معدلات الحد الأدنى للقبول في الجامعات التقليدية، وأبعد من ذلك، فان لجامعة القدس المفتوحة أكثر من 22 مركز، الامر الذي يسهل وصول الطلبة الى مراكزهم بأقل تكلفة ووقت.

كذلك يشير الجدول الى تفاوت بسيط في أعداد الذكور والإناث بين الطالبة على مستوى الشهادة المطلوبة باستثناء مستوى الدراسات العليا، حيث شكل الطلبة الذكور في الدراسات العليا حوالي ثلثي الطلبة (62%)، وهذا في تقديرنا يرجع الى عامل العمر والزواج فمعظم الإناث في مرحلة الدراسات العليا يصبحن متزوجات وبالتالي تزداد الاعباء عليهن في الحمل والرعاية والعمل وتقل فرص متابعة الدراسة، اضافة الى وجود عامل اخر وهو رأي الزوج الذي قد يشجع او يعارض. اما على مستوى الجامعات والكليات، فقد زادت نسبة الإناث عن الذكور في الجامعات التقليدية العشرة (54% تقريبا)، وكذلك في القدس المفتوحة (52%) والكليات الجامعية (57%) الا انها نقصت في الكليات المتوسطة (43%). وفي تفسير التفاوت الاول يمكن ارجاع ذلك الى التفاوت الحاصل في معدلات الثانوية العامة بين الذكور والإناث حيث فاقت الإناث الذكور بحوالي عشرة نقاط في المعدل بشكل عام، الامر الذي يعزز فرصة التحاق أعلى من الذكور في ظل منافسة قبول شديدة. ومن جهة اخرى فان نسبة الإناث اللواتي يخرجن للدراسة في الخارج أقل من الذكور بحكم النظرة الاجتماعية. اما التفاوت الثاني والمتمثل بنقصان نسبة الإناث في الكليات المتوسطة فقد يرجع الى عدم اقبال الإناث على برامج التعليم التقني والمهني باستثناء برامج معينة، اضافة الى قلة عدد المدارس الصناعية والزراعية الخاصة بالإناث.

وإذا قسمنا عدد الطلبة المسجلين في مؤسسات التعليم العالي الى مجموع عدد السكان في الضفة والقطاع لعام 2005 وهو 3,762,005 (الجهاز المركزي للإحصاء ، 2005) نحصل على معدل الالتحاق الخام والذي يساوي 4 % . اما معدل الالتحاق العام فيمكن حسابه بقسمة عدد المسجلين في التعليم العالي الى مجموع عدد السكان من فئة عمر 18-24 لسنة 2005. (477394 فرداً) ويساوي 31.3 % . ولاغراض تخطيطية، قد يكون مفيداً نسبة مجموع الطلبة الى الفئة العمرية المرشحة للالتحاق بالتعليم العالي بمستوياته المختلفة (18-30 سنة) وهي تساوي 804408 فرداً ، وبذلك تكون النسبة 18.6 % .

4.1 نمو الطلبة في مؤسسات التعليم العالي:

من الأهمية التعرف على حجم التغير في أعداد الطلبة المسجلين بين فترة زمينة وأخرى ومن ثم ملاحظة سرعة هذا التغير. عليه، لخص الجدول رقم (3) أعداد الطلبة المسجلين في مؤسسات التعليم العالي كما كانت عليه العام الماضي 2005/2004. (لم يتناول هذا التقرير أعداد الطلبة المسجلين لاعوام سابقة أخرى حيث ستخصص دراسة لمعالجة ذلك في المستقبل القريب). إن مقارنة معطيات هذا الجدول مع جدول رقم 2 تشير الى ان : حجم الزيادة الكلية خلال عام واحد تمثل بحوالي 11500 طالب وطالبة ، اي بنسبة زيادة سنوية 8.3% وهي زيادة كبيرة.

والسؤال الان: اين يكمن حجم الزيادة الأكبر: هل في الجامعات التقليدية ام في التعليم المفتوح ام في الكليات المتوسطة؟ وعلى اي مستوى شهادة؟ الجدول التالي رقم 4 لخص الاجابة.

جدول رقم (4)

حجم الزيادة خلال عام واحد

(من سنة 2005/2004 الى 2006/2005)

نسبة الزيادة		الزيادة	النوع
28%	4.2%	3228	الجامعات التقليدية
56%	14%	6461	القدس المفتوحة
16%	12%	1796	الكليات الجامعية والمتوسطة
100%	8.3%	11485	مجموع

يتضح ان اكثر من نصف الزيادة تكمن في جامعة القدس المفتوحة وهي ثلاثة اضعاف الزيادة في الكليات المتوسطة ، الامر الذي يتطلب اجراء عكسه على ارض الواقع انسجاما مع متطلبات السوق والتنمية.

اما الجامعات التقليدية فقد ساهمت بـ 28% من حجم الزيادة موزعة على 3% مستوى دراسات عليا وحوالي 25% مستوى بكالوريوس.

5.1 التخصصات العريضة للطلبة المسجلين:

سوف يبحث موضوع التخصصات في تقرير خاص، وعليه اكتفينا هنا بتوزيع الطلبة المسجلين على التخصصات العريضة في المستوى الاول للتصنيف الدولي ISCED . هذه التخصصات هي : تربية، وآداب وعلوم إنسانية، وعلوم إجتماعية وإدارية، وعلوم بحثه، هندسة، وعلوم زراعية ، وعلوم صحية وطبية، وخدمات. الجدول رقم 5 أعطى توزيعاً للطلبة حسب هذه التخصصات وحسب نوع المؤسسة التعليمية. يتضح من الجدول ان تخصص التربية يشكل 35% من الجسم الطلابي (24% إناث، 11% ذكور) تلاه تخصص العلوم الاجتماعية والادارية 31% (12 إناث، 19% ذكور) ثم العلوم 10% والاداب والعلوم الانسانية 10%، بينما شكل الطلبة في الحقول الهندسية حوالي 6% ومثلهم في الحقول الطبية والصحية. اما العلوم الزراعية فقد احتوت اقل من 1%. هذا يعني ان اقل من ربع الطلبة مسجلين في العلوم التطبيقية.

وعلى صعيد التوزيع حسب الجنس، يتضح من الجدول ان نسبة الإناث فاقت نسبة الذكور في كل من تخصص التربية (حوالي الثلثين) والاداب والعلوم الاجتماعية (حوالي الثلثين أيضا) وفي العلوم الطبية والصحية (اكثر من النصف). وعكس ذلك نجده في تخصص العلوم الاجتماعية والادارية والعلوم الهندسية والزراعة والعلوم البحتة حيث زادت فيها نسب الذكور عن الإناث.

6.1: القبول والطلبة الجدد:

قبل الحديث عن أعداد الطلبة المقبولين في مؤسسات التعليم العالي للعام الاكاديمي 2006/2005، يجدر بنا الوقوف على نتائج امتحان الثانوية العامة في نفس العام. الجدول رقم 6 أعطى توزيعاً للناجحين في الامتحان حسب فرع الامتحان والمنطقة الجغرافية. يتبين من الجدول التالي:

جدول رقم (5)

توزيع الطلبة المسجلين في مؤسسات التعليم العالي حسب التخصص ونوع المؤسسة للعام الدراسي 2005 / 2006

المجموع	غير محدد	الخدمات	الطبية والصحية	العلوم الطبيعية	الزراعة	الهندسة	العلوم	العلوم الإجتماعية والإدارية	العلوم والإنسانية	الآداب والعلوم	التربية	الجنس	التخصص / الجامعة
37100	34	107	3017	451	5554	4732	11102	4494	7609	ذكر	الجامعات التقليدية		
42777	85	52	3140	188	2744	4801	7951	9107	14709	أنثى	الجامعات التقليدية		
79877	119	159	6157	639	8298	9533	19053	13601	22318	المجموع	الجامعات التقليدية		
24885	4			214	1997	14480	14480		8190	ذكر	القدس المفتوحة		
28029	3			34	1132	7226	7226		19634	أنثى	القدس المفتوحة		
52914	7			248	3129	21706	21706		27824	المجموع	الجامعات التقليدية		
2468		27	377		381	277	784	179	443	ذكر	الكليات الجامعية		
3317		27	1116		55	239	871	392	617	أنثى	الكليات الجامعية		
5785		54	1493		436	516	1655	571	1060	المجموع	الكليات الجامعية		
6294		140	1187		738	1233	2766	222	8	ذكر	الكليات المتوسطة		
4753		36	939		147	588	1543	290	1210	أنثى	الكليات المتوسطة		
11047		176	2126		885	1821	4309	512	1218	المجموع	الكليات المتوسطة		
70747	38	274	4581	665	6673	8239	29132	4895	16250	ذكر	المجموع العام		
78876	88	115	5195	222	2946	6760	17591	9789	36170	أنثى	المجموع العام		
149623	126	389	9776	887	9619	14999	46723	14684	52420	المجموع	المجموع العام		

1. تقدم لامتحان حوالي 63,750 طالب وطالبة، نجح منهم حوالي 40,000. شكل هؤلاء الناجحون مصدر طلبات الالتحاق الاول، إضافة الى مصادر أخرى تمثلت في الناجحون من سنوات سابقة والقادمون من الخارج وبنجاح في الثانوية العامة أو ما يعادلها. أما الراسبون فحجمهم كبير جداً (23,750).

جدول رقم 6

الطلبة الناجحون في الثانوية العامة للعام 2005 حسب الفرع والمنطقة

مجموع المتقدمين	المجموع الكلي	الناجحون في غزة			الناجحون في الضفة			الفرع
		مجموع	$60 \leq$	$60 >$	مجموع	$65 \leq$	$65 >$	
	26079	11605	6364	5241	14474	8175	6299	ادبي
	11708	5163	4440	723	6545	6094	451	علمي
	601	39	30	9	562	485	77	صناعي
	1005	18	18		987	781	206	تجاري
	129	19	15	4	110	70	40	زراعي
	5				5	5		فندقي
	7	7	7					اقتصاد منزلي
63737	39534	16851	10874	5977	22683	15610	7073	المجموع

المصدر: لجنة الامتحانات العامة في الوزارة.

2. ثلثي الطلبة الناجحون هم من الفرع الادبي وحوالي 30% من الفرع العلمي، والباقي 4% من الفرع المهني. هذه تشكل المدخلات الحقيقية لمؤسسات التعليم العالي وتعكس نفسها على التخصصات الامر الذي يفسر وجود اعداد كبيرة من المسجلين في الحقول غير التطبيقية. وعليه فان الحلقة الاولى لتغيير خارطة التخصصات وأحجامها هي المرحلة الاساسية في المدارس، وتحديد الصفين التاسع والعاشر كمحطة لتحديد الميول والتوجهات .
3. انسجاماً مع تعليمات مجلس التعليم العالي القاضية بعدم قبول طلبة في الجامعات التقليدية بمعدل ثانوية عام يقل عن 65% في الضفة وما يعادله في غزة 60% لاختلاف المنهاجين، فان المؤهلين للقبول في الجامعات العشرة هم حوالي 26500 طالب وطالبة. اما جامعة القدس المفتوحة، فسمح لها بقبول طلبة

بمعدلات حدها الأدنى 55% سابقا وحاليا رفعت الى 60%، بينما الكليات المتوسطة مفتوحة لكل ناجح في الثانوية العامة. بذلك، يكون ثلثي الناجحون مؤهلين للالتحاق بالجامعات العشرة والثلث المتبقي حوالي (13000) غير مؤهلين وليس امامهم من فرصة محلية لمتابعة دراستهم الا جامعة القدس المفتوحة او الكليات المتوسطة.

والسؤال الرئيس الان: هل الجامعات العشرة قادرة على استيعاب حجم الطلب عليها؟ وما هو الحال في التعليم المفتوح والكليات المتوسطة؟

الجدول رقم 7 يحاول الاجابة على التساؤل السابق حيث اعطى توزيعا للطلبة الجدد الذين تم قبولهم والتحقوا بمؤسسات التعليم العالي في الفصل الاول من العام الاكاديمي 2006/2005 حسب نوع المؤسسة ونوع التوجيهي وحدائته .

يمكن استنتاج التالي من الجدول:

1. التحق 18281 طالب جديد في الفصل الاول من العام الحالي في الجامعات التقليدية العشرة ، منهم 16062 طالبا تخرجوا من الثانوية العامة في نفس العام (توجيهي حديث) والباقي 2219 طالب يحملون توجيهي قديم . هذا يقودنا الى القول بان حوالي 61% من الطلبة المؤهلين للالتحاق بالجامعات العشرة تم استيعابهم فعلا في هذه الجامعات ، نصفهم من الفرع الادبي والنصف الاخر من الفرع العلمي تقريبا. يجدر القول ان اكثر من 60% من هؤلاء هم اناثا.

2. قبلت جامعة القدس المفتوحة في الفصل الاول 11665 طالبا ، منهم 7600 (56%) طالب يحملون توجيهي حديث وهذه في تقديرنا نسبة عالية جدا وتتعارض مع فلسفة ورسالة التعليم المفتوح الموجه لاتاحة فرصة التعليم للفئات العاملة من حملة التوجيهي القديم. اضافة، لا يفوتنا القول بان حوالي 3000-4000 طالبا يتم قبولهم في الفصل الثاني من نفس العام ولم يظهروا في هذا الجدول. حوالي ثلاثة ارباع الطلبة المقبولين هم من الفرع الادبي.

3. الكليات الجامعية والمتوسطة قبلت 9084 طالبا، ثلاثة ارباعهم من الفرع الادبي ، وخمسهم من الفرع العلمي والباقي (6%) من الفرع المهني. وهنا يظهر سؤال : اذا

4. لم تقم جامعة القدس المفتوحة بقبول طلبة حديثي التوجيهي، فهل يتوجه هؤلاء الطلبة وعددهم حوالي 8000 طالب الى الكليات المتوسطة؟ واذا حدث ذلك، هل تستوعبهم الكليات؟ الاجابة تحتاج الى اجراء دراسة.

5. بذلك يكون مجموع الطلبة الذين تم قبولهم والتحقوا فعلا خلال الفصل الاول من العام الحالي في جميع مؤسسات التعليم العالي الفلسطيني هو 39030، وهو تقريبا نفس عدد الناجحين في امتحان الثانوية العامة لنفس العام. لأول وهلة يمكن القول ان كل خريج ثانوية عامه له مقعد دراسي في إحدى مؤسسات التعليم العالي، لكن الامر غير ذلك، فهناك حوالي 9000 مقعد يشغلها طلبة يحملون توجيهي قديم وقادرين على التنافس مع أصحاب التوجيهي الحديث.

5. التوجه العام لخريجي الثانوية العامة في الفرع المهني الصناعي والزراعي والتجاري هو نحو الالتحاق بجامعة سواء تقليدية ام مفتوحة كما يري الجدول. وهذا يقود الى التساؤل: هل التجسير بين الكليات والجامعات يخفف من هذا التوجه؟

ما قيل سابقا يتعلق بالطلبة الجدد الذين التحقوا فعلا لنيل شهادة البكالوريوس أو الدبلوم المتوسط. أما الطلبة الجدد الذين التحقوا في الفصل الاول لنيل شهادة الدبلوم العالي او الماجستير فقد بلغ عددهم 1611 طالبا (81 دبلوم عالي و 1530 ماجستير).

وعلى صعيد حقول التخصص العريض لهؤلاء الطلبة الجدد فيكاد يكون توزيعها شبيها بتخصصات الطلبة المسجلين الوارده سابقا.

7.1 الطلبة الخريجون:

الجدول رقم 8 لخص أعداد الطلبة المتخرجين في مؤسسات التعليم العالي ووزعهم حسب مستوى الشهادة. هؤلاء الطلبة هم خريجو الفصل الاول والفصل الثاني وفصل الصيف من العام الاكاديمي 2005/2004، أي من أنهوا دراستهم في نهاية الفصل الاول للعام 2005 او في نهاية الفصل الثاني او نهاية فصل الصيف من نفس العام. يشير الجدول الى ان الجامعات العشرة التقليدية خرّجت حوالي 9900 طالبا معظمهم بكالوريوس (9710) عام 2005، في حين أنها قبلت حوالي 18400 طالبا جديداً في نفس العام. أي أن نسبة مدخلاتها الى مخرجاتها السنوية تساوي الضعف تقريبا، أما جامعة القدس المفتوحة، فيدخلها ثلاثة أضعاف

ما يخرجها (3751 متخرج و 11665 ملتحق جديد)، في حين ان الكليات الجامعية والكليات المتوسطة تخرج حوالي نصف وثالث ما يدخلها على الترتيب. واضح جداً ارتفاع نسبة المدخلات السنوية الى المخرجات في جميع أنواع مؤسسات التعليم العالي. قد يقال : لا يجوز ان ننسب المخرجات الى المدخلات في نفس العام بل الى المدخلات قبل عامين في الكليات المتوسطة وقبل اربعة اعوام في الجامعات او خمسة لبرامج الهندسة ، مع الاخذ بالاعتبار أعداد المتسربين خلال فترة الدراسة. هذا صحيح جدا خاصة عند الكلام عن الكفاءة والفعالية، الا ان نسبة المخرجات الى المدخلات السنوية مؤشر واضح على حجم النمو الكبير في مؤسسات التعليم العالي وقدرة المؤسسات على انتهاج سياسة توسع في البرامج الموجودة او فتح برامج جديدة للانسجام مع الطلب المتزايد ولكسب المزيد من الطلبة للمزيد من عوائد الرسوم والاقساط.

جدول رقم (8)

توزيع الطلبة المتخرجين في مؤسسات التعليم العالي
حسب القطاع التعليمي والشهادة والجنس للعام الدراسي 2005/2004

الشهادة												القطاع التعليمي
المجموع			دراسات عليا			بكالوريوس			اقل من بكالوريوس			
T	F	M	T	F	M	T	F	M	T	F	M	
10808	6177	4631	*905	360	545	9710	5709	4001	193	108	85	الجامعات التقليدية
3751	1908	1843				3751	1908	1843				القدس المفتوحة
1678	1023	655				434	253	181	1244	770	474	الكليات الجامعية
1798	967	831							1798	967	831	الكليات المتوسطة
18035	10075	7960	905	360	545	13895	7870	6025	3235	1845	1390	المجموع العام

* هذا الرقم تقديري بسبب عدم توفر بيانات من بعض الجامعات

وعلى صعيد اخر، نجد ان نسبة الاناث المتخرجات فاقت نسبة الذكور، وهذا ينسجم مع نسب توزيع الاناث والذكور في الالتحاق والقبول.

اما توزيع المتخرجين حسب التخصصات، فسوف يتم تناوله في التقرير المخصص لمعالجة التخصصات، إلا انه وكنسب مئوية يكاد يكون متشابهها مع نسب المسجلين في التخصصات المختلفة الواردة سابقا في التقرير.

المراجع

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