Harmonizing Universities With Globalization by Creating Institutional Adaptable to Internationalization Approaches in Higher Education

"A Case Study in Nawroz University"

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Abstract

Institutional internationalization arose as a globalized cross-cultural organizational practice in all social sectors. Popularity of the concept in the higher education sector urged authors to present numerous descriptions of internationalization approaches, which differed according to the philosophical references, circumstances of applying in the academic environments, and means–ends analysis. In the Third World countries, universities used to confront enormous challenges hindering internationalization ambitions in the context of structural and functional obstacles facing development in general. Perhaps it can be said that their internationalization is almost impossible in light of the complex socio-economic environments in those countries, political crises, obsolete bureaucracy, institutional inertia, and restricted academic freedoms. In any case, universities around the world are currently dealing with internationalization as an undebatable issue and must be working on it as a competitive requirement and substantive standard for quality assurance in higher education. In this article, the authors argue the success potential of an organizational transformation-based strategy to internationalization established on institutional adaptation and capacity building. This strategy has been adopted as a transitional stage between localization and internationalization in Nawroz University (NZU) which is presented here as a case study. NZU, as one of the private universities that following the local academic administration system in Kurdistan region of Iraq, has been faced complications resulted from the responsibility of tracking balance between fostering international values and policies, on the one hand, as well as maintaining institutional stability and human resources’ positive response to the change, on the other hand. The article discusses how this university dealt with the idea of harmonization as a result of awareness of the difficulties implied in the task of internationalization. Therefore, it adopted what it had considered as a consistent, sustainable, and gradual institutional transformation during the period (2016-2019). The article also highlights plans taken up to support skill up-gradation to consolidate implicit transformation without affecting everyday workflow. In addition, it refers to some simulated international approaches and rankings standards which were used as a guide to direct the transformational process. Finally, the article illustrates some preferable outcomes that the university has been achieved.

Keywords: university internationalization, institutional transformation, webometrics, change management, academic reform

1. Introduction

The strong interrelations between socioeconomic prosperity and education are indisputable. For instance, higher education institutions significantly contribute to growth and development by providing societies the quality human resources required for the labor market and entrepreneurship, as well as scientific research linked to societal needs. Such a self-evident vision has achieved a renewed global consensus as a result of the economic, technological, and social transformations associated with globalization on the one hand, and consequently, the
emergence of the concept of knowledge economy which deals with information and skills as implicit assets for economic actors nationally and internationally, on the other. Globalization has made the national development an international issue and the concept of institutional internationalization has arisen as an urgent necessity in different social socioeconomic sectors. In higher education, institutional internationalization has been interpreted and applied as a methodological attempt to integrate national universities in the universal context in terms of pedagogical theories and academic practices in view of a conception that higher education as a cross-cultural process.

From a practical perspective, institutional internationalization today seems to be a framework for harmonizing the national environment questions with the international experience outcomes regarding universities’ organizational and academic development. This process aims to enhance universities’ efficiency as institutions that think globally and act nationally in terms of investing in human capital, making quality knowledge, supporting communities, creating a moral identity for the institution, building a competitive reputation, and participating in the world issues.

Hence, scholars have suggested various definitions for the universities. Among them was Qiang (2003), who described the concept as a country’s response to the influence of globalization alongside respecting the nation's personality. Appreciating the national identity is vital to enrich the desired identity and maintain multiculturalism. In addition, pursuing balance between the two identities is essential to facilitating the transformation operations to an internationalized institution. On the other hand, Knight (1993) considered the internationalization of higher education to be the process of integrating the international multicultural dimension in teaching, research, and service functions of the institution. Multiculturalism in higher education signifies the institutional capacity to understand and assimilate the challenges and issues of different cultures apart from the cultural biases of individuals or groups.

In the same vein, Alpenidze (2015) referred to different models and notions of internationalization in higher education, illustrating that authors discuss many dependencies of internationalization frameworks and processes. These theories have a dual purpose: first, they provide universities with informative tools for the internationalization process itself, and second, they offer the theoretical backgrounds required for further experimental research.

Research approaches of internationalization, first proposed by Jeffrey in 1997, have been summarized by both Delgado et al. (2011) and Qiang (2003), and cover four directions.

The first is the Activity Approach, which promotes internationalization actions regarding curricula, student/faculty exchange, technical assistance, and international students. This approach is the most widespread.

The second is the Competency Approach, which emphasizes enhancing skills, knowledge, attitudes, and student, faculty, and staff values.

The third is the Culture Approach, which establishes a cultural and value system that supports organizational development to create an atmosphere that supports international initiatives and cultural interactivity.

Finally, the fourth is the Diversity Approach, which stresses the integration of multiculturalism in scientific and administrative practices.

As a result of the variation in approaches, internationalization models and methods differ across countries. For example, in 2005, the University of Tokyo elaborated five development strategies: providing efficient education, strengthening international research partnerships, enhancing international cooperation, improving infrastructure, and formulating a long-term internationalization plan (Zolfaghari et al., 2009). This means that the institutional internationalization is part of the development plan which includes institutionalization (providing efficient education and improving infrastructure) and internationalization (strengthening international research partnerships, enhancing international cooperation, and formulating a long-term internationalization plan).

In a similar fashion, (Cantu, 2013) summarized internationalization strategies in American universities in three dimensions: study abroad programs, international students, and the internationalization of universities and colleges.

The connotation of internationalization is no longer limited to a set of options or general criteria for developing universities but now involves models with strategic directions to improve the capabilities of competition, survival, and progress. Institutional internationalization has become an existential necessity for universities during the last 25 years due to the dominant impact of globalization and the evolution of the concept itself theoretically and practically. According to Knight and Wit (2018), internationalization transformed from a marginal component in development plan to a core factor with strategic influence in higher education. However,
this is not the situation all over the world due to the gap between the developed and undeveloped countries. As stated by Wit (2020), the problem is that, compared to the recognition of its strategic importance in advanced economies, the internationalization of universities has not been given much attention in emerging economies. Non-international universities suffer from not only defects in their infrastructure and organizational structures, e.g., education, administration, employment, finance, but also lack academic freedoms and are overly dependent on governmental and community authorities that undermine their institutional independence, scientific mission, and social role. In these societies, administrative slackness, dependence on rentier funding from the state, the impact of clientelistic relations and political interference are all factors that hinder the institutionalization in all social sectors including higher education. Therefore, institutional internationalization confronts enormous constraints in these environments and needs to rely on a creative vision that adopts harmonization between nationalization and internationalization. Nationalization here means to rediscover the opportunities and resources within the non-internationalized university itself, and to recommit to the old traditional ways in order to pave the road towards institutional internationalization. The more nationalized the university and the more expressive of the needs of the local community scientifically, socially and culturally, the more qualified it is for internationalization since institutional internationalization basically means the ability to show elevation, openness, flexibility, assimilation and adaptation. When an institution is unable to embrace and practice these values at the national level, it will not be able to embody them at the international level.

Reading internationalization as an unattainable goal in the developing countries case, is what makes it necessary to use the term "simulating" or "creating adaptability" to describe a process of gradual institutional internationalization or the transitional period in which a university transforms itself from the local to the international status. It should not be assumed that the inability to comprehensively fulfill all the internationalization requirements would absolutely restrain universities’ ambitions or to make them give up on employing internationalization approaches as a horizon of guidance, inspiration, motivation, and measurement for academic advancement and institutional reform. Rather, in this context, we believe that the use of the approach of "simulation" may be more consistent with interim aspirations. Specifically, we call for the development plans of aspiring universities to be sustainable and far-reaching to the extent that they make them at least gradually converge or align with the core principles of institutional internationalization.

Nowruz University (NZU) is one of several private universities in Kurdistan region of Iraq. It was established in 2004 and includes five colleges and 13 scientific departments, as well as centers for research, development, training, quality assurance and academic accreditation. The university offers 12 study programs in various humanitarian, scientific, and engineering disciplines and ten parallel evening study programs. For all programs, the university grants a bachelor’s degree after a study duration ranging from four to five years. The university adopts the annual education system, as the academic year begins on September 1st of each year and ends on the June 30th of the following year. In the academic year of 2019/2020, the university started applying semester system for the first year classes. NZU was the first private university to be established in Kurdistan in a period when there was no previous local experience that could be followed or legislation regulating private higher education affairs. This prompted the founders to be guided by the components and elements of traditional administration adopted in public universities.

1.1 The Value of the Topic

This article presents methodological documentation of the contribution of the Scientific and Academic Affairs Sector (ASAS) in NZU in planning and coordinating the institutional internationalization strategy for the period 2016–2019. In addition, the article demonstrates how ASAS organized and established pathways to create consistency of performance in line with the standards of both of the National University Ranking of Kurdistan region of Iraq (NUR) and the Webometrics Ranking (WR), and how those efforts - from ASAS’s point of view - have participated in building up the university’s institutional adaptability to internationalization approaches, which resulted in the formation of a new organizational philosophy and culture in the university. Moreover, the article analyzes and evaluates the NUZ’s plans for self-change with the aim of presenting its experience as an applied model to enrich the agenda of empowering universities in the age of globalization, which is the era of appreciating mind power, investing in knowledge, encouraging imaginative and innovative capacities, and widely computerizing human life. Globalization is not only an economic and technological phenomenon, but it is primarily an epistemological and cognitive phenomenon, and it is a social, cultural and political phenomenon as well. Concurrently, the university community is not a group of robots, but rather a community composed of humans, and therefore the cultural, social, and behavioral aspects play a key role in directing this community towards institutionalization and internationalization as the two essential components of institutional internationalization. This reality imposes on the university administration to simulate the institutional
internationalization approaches gradually by building institutional adaptability, providing individuals with cultural flexibility, creating an interactive academic environment; rather than applying standards mechanically and directly.

1.2 Hypotheses and Research Questions

In the emerging countries, the institutional internationalization mission is harder as universities face obstructive circumstances such as a complex socio-political environment, cultural and bureaucratic obsolescence, resistance to change, priorities disturbance of state and society, and the absence of good governance. Accordingly, the authors of this article believe that the task of the institutional internationalization is arduous, if not impossible, in the foreseeable future due to the considerable gap between universities in developing and developed countries concerning the burden of the subjective and objective challenges suffered by the academic environment. In addition, this article proposes to focus on considering institutional internationalization as a structural process based on an actual cultural interaction with the world and globalization, and also as an institutionalization of universal values at the core of the educational process, not just superficial measures such as holding conferences to which foreign guests are invited in order to be called “international events”, signing academic agreements with foreign universities then they are not activated, or the exchange of scientific visits which are more like tourist trips. This article assumes that a preliminary development process must precede the actual internationalization process. This initial process involves the process of re-institutionalizing and harmonizing with traditional values and methods. We can call it national resettlement or “renationalization.” This proactive process is necessary to create the adaptive capacity of the university since an institution which is lagging at the national level will not be able to succeed when moving to the international level. Then comes the process of entering into institutional internationalization through the method of simulation and adaptation. The central questions in this article include: In light of globalization, how do we create responsive universities that think globally and act nationally taking into consideration the political and economic uncertainty in societies facing existential challenges? How can the concept of institutional internationalization be developed to allow more universities in developing countries to engage in it? How can a national university be internationalized in a non-globalized social context?

1.3 The Challenge and Response

Institutional internationalization is the major challenge that all universities aspiring to develop in the last 30 years have faced, even including those universities that have not conceptualized internationalization in their strategies. The need for internationalization arises from the global competition conditions and the renewed needs of labor markets, which has led many governments, boards of trustees, and university leaders to seek solutions that enable these universities to deal with their deep crises. In many regions of the world, reform and reorganization processes are taking place in universities under the same institutional mindsets, regulations, and administrative systems and obstructive work environments that are responsible for their crises. In addition, traditional systems that reinforce the prevailing and rooted institutional values hinder universities’ transformation towards institutionalization and internationalization. This was the situation in NZU when ASAS commenced its plan of development with the same human, organizational, and structural tools. Addressing this reality required withstanding all the repercussions of change and change resistance, as well as restructuring the institutional mentality and rebuilding capacities.

Three main facts can be pointed out here regarding the "shock" that provoked the will to change and redirected NZU’s work compass in late 2015:

- Rapid and renewable labor market needs at the local, national, and global levels.
- Fierce competition to control the higher education market among private, aspiring local and international universities operating in Kurdistan.
- Low status in the national university ranking (NUR) in Kurdistan and the webometrics ranking (WR).

While NZU administrators were aware of the high cost associated with comprehensive or radical change, they also realized that it could be reduced if reforms were undertaken sequentially in two parallel directions:

- Reshaping the university atmosphere and work environment to accept the effects of profound changes in infrastructure, the capacity-building burden, and loads of restructuring the institutional value system.

Starting from where others have left off, since modern and advanced higher education systemization plans are no longer secrets or puzzles but are now characterized by a high degree of availability and can be obtained through global partnerships, international cooperation, and technology transfer.
This vision of problems and solutions is similar to what Guri-Rosenblit (2015) expressed, i.e., that higher education systems must strike a delicate balance between national priorities and adaptive requirements to work in an international environment. Accordingly, the vision adopted was based on the development of processes and procedures in a moderate, balanced, parallel, consistent, complementary and coherent manner to create the subjective environment and objective context needed to initiate a balanced, safe transition to international standards.

2. NZU’S Status in the Period 2004–2015

This stage of NZU’s journey was marked by classic performance in management and education known and common in most Iraq and Kurdistan universities, which mostly does not include any of the components of international approaches of higher education. The sectors of the university (pedagogical, scientific, administrative, and financial) did not differ from its counterparts in public Iraqi universities in terms of the adoption of old-fashioned administration and education systems that had not been developed since the 1970s. This situation caused some features of institutional inertia and functional failure, represented by the following:

- Deficiency of skills among university staff, which causes a gap between the human resources status and the goals of internationalized improvement vision.
- The decline of international research production of faculty members to the lowest level for two reasons, namely 1) the absence of a clear scientific research strategy for the university and 2) the failure to place scientific publishing within an approach specified to university development and internationalization.
- Obsolescence of the curricula and a low education level resulting from using old teaching methods based on indoctrination and discouraging students’ capacities of self-reliance, critical thinking, and creativity.
- Outdated systems of classroom management and exams that lack flexibility, interactivity, and objective evaluability.
- The shortage of extra-curricular classes as a consequence of not recognizing their importance in strengthening students’ relationship with the university, knowledge, and society.

Here, we should point out that early on, NZU decision-makers perceived the obstacles holding back the institution. Therefore, ASAS plans and policies have been operated according to a realistic, rational, and gradual approach that accommodates challenges and implies the principles of maximizing the efficiency of regular performance and achieving excellence in bureaucratic procedures, documentation, and administrative records in fields relating to academic and scientific activities. Besides developing programs to ensure quality of performance to obtain superiority at the local and national levels, enhancing routine performance within the traditional routine itself was a tactic goal that was set without giving up the strategic goal of sustainable advancement and harmonization with global progress in higher education. Consequently, the following set of soft commitments was put in place to compensate for fulfilling standard conformity to better meet the requirements of comprehensive internationalization:

- The university is a safe campus and a place of sanctity to which the meanings of belongingness and professional honor are related.
- The university will maintain its ethical responsibility and moral commitment to the teaching process pillars of the (the scientific department and the teacher) in terms of the sacredness of the joints and tools of the process (the course, course resources, lectures, examinations, and measurement and evaluation systems).
- The university is strictly committed to managing the affairs of the teaching process (lecture schedule, attendance and departure of teachers and students, and the learning environment).

As a result of the above commitments, at the end of 2015, NZU had achieved an excellent level in traditional performance by:

1. Achieving the complete stability of the organizational structure of the university and success in resettling administrative employees and ensuring their permanence in all sectors and divisions.
2. Fully controlling procedures of the administrative operations in a way that does not allow randomness and selectivity and offers sufficient flexibility for the innovation required to develop performance.
3. Setting specific forms to systemize procedures of all administrative processes that take into account achieving streamlining to maintain the work flow, well-classified documentation, and accessible archiving.
4. Issuing organizational manuals of duties and tasks, and accomplishment reports, such as handbooks of curricula, work methods, authorities, annual quality assurance reports, and other instructive or informative reports that explain and clarify the work flow map.

5. Achieving almost complete stability among the administrative cadres who are entrusted with various administrative responsibilities, which led to a good accumulation of experience.

However, these efforts were not reflected at the level of national and international rankings, as the university was ranked 22,499 out of a total of 24,000 universities in the January 2016 version of the WR. Nationally, in the 2015 and 2016 versions of the NUR, the university was ranked as belonging to group C and D, respectively, out of a total of five groups. These results made decision-makers aware of the conditions of strong competition at the national and international levels. Therefore, it was deemed necessary to leave the traditional performance stage, despite the fact that the reasons for it were still affecting the university scene.

3. NZU’S Plans in the Period 2016–2019

The institutional development process cannot be viewed as isolated from the processes of economic growth and social modernization of a society. This is particularly true when it comes to developing institutions such as universities, whose role and mission are linked to the cognitive structure of the society centered at the core of sociocultural reform. Hence, decision-makers perceived the importance of employing the concept of "change management" in planning and carrying out the progressive, partial transformation to internationalization. Consequently, the ASAS team worked to prepare appropriate conditions for the purpose of releasing an action plan to manage the process of balanced and simultaneous university modernization. As detailed by Table 1, the transformation path started with the creation of new directorates and committees for accreditation, curriculum update, scientific research, and training to meet the plan’s needs and requirements and achieve two key elements—effective management and institutional support—which are both linked to internationalization management (Polak, 2016). Accordingly, the organizational structure of ASAS became more flexible, covered all duties, and maintained effective internal communication between units and functions, taking into account the structural and cultural aspects with the aim of stimulating a silent, gradual but influential and tangible change while not provoking an anti-change mentality (Yonezawa, 2016).

Table 1. ASAS’s organizational structure, which has ensured the organization, operations, and workflow of the sector according to the modernization plan since the beginning of 2016

<table>
<thead>
<tr>
<th>Centers &amp; Departments</th>
<th>Committees, Units and Teams</th>
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<tbody>
<tr>
<td>Center of Assessment &amp; Quality Assurance (CAQA) (*)</td>
<td>University Program Effectiveness &amp; Curriculum Committee (UPECC) / College Curriculum Committees (CCC) / College QA Committees (CQAC) / College QA</td>
</tr>
<tr>
<td>Higher Education &amp; Scientific Affairs Department (HESD)</td>
<td>College Scientific Affairs Units / College Scientific Committees (CSC) / Teaching Eligibility Test Committee</td>
</tr>
<tr>
<td>University Journals</td>
<td>NZU Academic Journal (AJNU) (*) / NZU Scientific Journal (PAKO-SJNU) (Under construction-comming soon)</td>
</tr>
<tr>
<td>Information technology Center (ITC)</td>
<td>Ranking Systems Team (RST) (<em>) / Network &amp; Website Team (NWT) / Information &amp; Statistics (</em>)</td>
</tr>
<tr>
<td>NZU Pedagogy &amp; Academic Development Center (NPADC)</td>
<td>Pedagogy &amp; Academic Development Team (*) / Training Unit</td>
</tr>
<tr>
<td>Scientific Research and Development Center (SRDC) (*)</td>
<td>Humanities &amp; Social Studies Dept. / Applied Science &amp; Engineering Research Dept.</td>
</tr>
</tbody>
</table>
The ASAS action plan was comprehensive and complementary, spanning the period from September 1, 2016 to August 31, 2019. Specifically, it was ambitious, realistic, and revolutionary while remaining rational based on scientific measurements. Thus, it included programs with clear objectives that were consistent with implementation and follow-up mechanisms. The plan aimed to redesign the institutional interactions of the university to produce a setting that responds to developments and transformations related to the global concepts of a knowledge society, computerization, intellectual capital investment, and cross-cultural management. It also targeted creating an academic work environment that supports building capacities for integration into the global upgrading context of national universities and strengthens their institutional adaptation to international approaches in higher education.

The plan covers the following five orientations:

- Accreditation and Curriculum Development
- Cultural Relations & Community Service
- Scientific Research & Development
- E-Systems and Automation
- Quality Assurance

The following figure illustrates the orientations plan. It is a roadmap aiming to achieve five main goals that branch out into (42) subgoals (actions).
The university plans were based on essential foundations as governing references, namely:

- The university's vision, mission, goals and core values, which were reapproached in light of dimensions that integrate national and international perspectives.
- NUR standards.
- WR standards.

According to the "Think globally, Act locally" strategy, the university found that it should maintain an advanced rank in the national ranking of universities in Kurdistan as prerequisite to attaining its internationalization target. In addition, the university philosophy considered the advanced ranking results a kind of adaptation to the international approaches since those results reflect its efforts to simulate these approaches and achieve as much as possible the outputs imposed by these approaches even if the university employs national methods that are improved, hybrid, or semi-internationalized rather than pure international methods.

3.1 Accreditation and Curriculum Development

Since its establishment in 2004 until year-end 2015, the university adopted an annual system of study, meaning that the student's academic block is a full academic year. During this period, the curriculum management of the scientific departments lacked essential structural and objective components or existed in a marginal or superficial manner that is deficient in satisfactorily fulfilling international standards or expectations. These components are as follows:

1. Internal & External Program Self-assessments
2. Course Reports and Course Files
3. Curriculum Framework
4. Assessment of Student Learning at the Program Level
5. Program Educational Objectives
6. Program Learning Outcomes

Similarly, the teaching system suffered from obvious shortage in modern education methods and new learning techniques as technology was not being used in the teaching process and the classes were not managed
electronically. In addition, the old system of tests and examinations did not meet basic pedagogical goals such as encouraging students to study, measuring students’ understanding of the scientific material, and consolidating their ability to independently deal with scientific challenges in the academic or professional field. The examination system also did not support the requirements of extracting an objective and fair assessment of students’ level and effort in the different stages of the academic year.

In addition to changing the curricula, which poses a significant challenge for universities due to internal “resistance to change,” the university faced many requirements, e.g., inserting parallel structural changes into the academic life, rebuilding faculty members’ capacities, and completely restructuring teaching operations. Despite the enormity of the overhaul, NZU did not give up on adopting curriculum development as an indispensable introduction to the progressive internationalization approach it had elected to follow. Therefore, the university approved a decision that was considered rational enough by the administration to work on developing curricula by grafting and enriching them with “international content” as a preliminary step forward on the extended path of internationalization. This “academic-institutional transplantation” operation was vital to the reform plan, despite the fact that international curricula are considered more comprehensive, in line with the standards of international professional organizations (Damme, 1999).

Here, it should be noted that the processes of curriculum development in particular and internationalization in general according to the simulation logic followed in this study are not only technical processes related to the methods and policies used in the academic and administrative works but also primarily cognitive operations that aim at harmonizing the local perception with the global awareness of issues and concepts by implementing a "cultural transplantation" strategy on the components and elements of the international academic-institutional culture, which is characterized by transferability and adoptability in a national environment (Malinowska, 2014).

The debate surrounding internationalization and its simulation in NZU was not related to the needs of international students as much as it was concerned about how to prepare local and national students for global competitiveness (Khalid, 2017) citing (Robonson, 2011). In other words, it aimed to make them ready for life in a more globalized world by adapting a curricular structure that provides a wider cultural experience and equips learners with the values and hard and soft skills needed to work in an international context (Hénard et al., 2012). Table 2 clarifies the first goal and the set of objectives taken to incorporate and harmonize international content in the traditional curricula.

Table 2. The 1st goals and objectives of the ASAS plan

<table>
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<tr>
<th>1st Goal</th>
<th>Objectives</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td><strong>Adopt the best of International practices in educational process and developing curricula</strong></td>
<td>Provide the requirements for the success of the accreditation project for the nominated scientific departments and strengthen the tools of supervision, follow-up, and coordination between the university presidency and the deanships of colleges</td>
<td>- CAQA</td>
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<td></td>
<td><strong>Conduct detailed studies to comprehensively review the curricula and evaluate and compare them with the experiences of local, national, regional and international universities</strong></td>
<td>- UPECC</td>
</tr>
<tr>
<td></td>
<td>Address distortions in curricula in light of the detailed studies referred above, provided that this treatment is consistent with the steps of transition to the semester’s system</td>
<td>- CCC</td>
</tr>
<tr>
<td></td>
<td>Transition from the annual system to the semester system, train faculty members and staff on concepts and terminology, and adjust students’ conditions to ensure a smooth, safe, and balanced transition. Our challenge was to reap the positive fruits of this transition, overcome its obstacles, and benefit from it as a practice of observation and measurement in relation to comprehensive</td>
<td>- CCC</td>
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<tr>
<td></td>
<td>Establish institutional performance testing policies and use statistical methodologies in evaluation and assessment to ensure follow-up and consistency between regulations and applications, transparency and accountability. The challenge here was to attain effective involvement in institutional research and development</td>
<td>- CAQA</td>
</tr>
</tbody>
</table>
To consolidate this trend of reform and improvement structurally, the university decided to make work for academic development a bridge to enriching the institutional structure of the university through creating new units to carry out development functions without causing bureaucratic slack. Within this framework, two new centers were founded in the university coinciding with the start of implementing ASAS plan. The first is the Center of Assessment and Quality Assurance (CAQA), which specializes in developing quality assurance and institutional evaluation processes, rebuilding academic curricula in accordance with the standards of international institutions granting accreditation, and maintaining a comprehensive institutional effectiveness process (Ali, 2020). The second center, the Nawroz Pedagogy and Academic Development Center, aims to develop the cognitive and practical capacities of teaching and administrative staff through contributing to the refinement of faculty members’ professional knowledge and values and equipping them with many hard and soft skills related to the process of teaching, pedagogical techniques, and academic administration, as well as the use and practice of information technology and communication in the university’s educational and managerial systems.

CAQA has developed a number of plans and procedures, which are detailed below.

1. Reframing the university’s vision, goals, mission, and core values (Shalal, 2017).

2. To achieve the international harmonization of the curricula, as referenced by Damme (1999), a group of curriculum development committees was founded with broad authority that included a major central committee (the University Program Effectiveness and Curriculum Committee) and a set of sub-committees (College Curriculum Committees). These committees are responsible for the design, management, and evaluation of program curricula at NZU, under the condition that program proposals will be evaluated on the basis of their alignment with the university’s strategic plan, goals and objectives, quality controls, job market needs, budget, consistency with programs in other departments regarding material and human supplies, and accuracy and duplication of existing academic course content.

3. Mapping a two-phase work plan for a period of five years (Shalal, 2017) to obtain international accreditation for some scientific departments that grant specializations related to engineering and computer disciplines and instituting curriculum development programs for all scientific departments (Shalal, 2018).

3.2 Quality Assurance

One of the undisputable principles in the higher education literature is that quality assurance is a sustainable motivation source for academic institutions to achieve excellence (Ryan, 2015). However, at present, globalization has sparked international discussion about a controversial issue, i.e., how can universities accomplish a high level of quality and simultaneously maintain the capacity of international competitiveness? In other words, how can the university’s view be internationalized to reflect quality assurance using a set of different international strategies? (Hou, 2010) The challenge here is no longer how to just achieve quality but how to achieve it on international bases. Interestingly, the concept of “internationalized quality” is characterized by a high degree of rapid changeability due the fast pace of developments and a powerfully competitive race in higher education that result from the contemporary social, economic, political and technological transformations.

However, the problematic point here is how we can manage quality assurance operations efficiently and effectively while the university institutional destination is not clearly decided nor determined and it is still moving in a pendular style between the national (local) reality and international ambitions. What is more, the institutional identity of the university has not yet been specified and is still fluctuating between the less effective obsolete traditional style and looking forward to the more effective renewed modernized style.

Obviously, regarding the interrelation between quality assurance and digitalization, if a traditional institution lacks the capacity to fulfill the adequacy and productivity standards in manual performance according to the traditional standards, there is little hope for this institution to accomplish eligibility or proficiency in electronic and computerized performance according to modern standards. Hence, the universities that fail to satisfy and sustain quality in their paper work are not expected to become digital success stories as the digital transformation itself in this case would be superficial and merely a kind of decoration or propaganda.

Based on this reading of the traditional institution situation and the challenges associated with quality assurance in this setting, and with the aim of not failing in the initial reform stages, causing the elements or stages of the organizational development process to overlap, be overly complicated, or confuse the implementing actors, NZU elected to apply quality assurance standards to its traditional setting before jumping into a digital transformation adventure for which it was ill-prepared.

This chosen policy was accomplished through the establishment of an integrated quality assurance system that comprises a group of components covering different aspects of overall institutional evaluation, including faculty
evaluation, scientific department head evaluation, external evaluation of selected study materials from each academic level, and a system for surveying students’ opinions of teaching staff (student feedback). The system also offered a comprehensive evaluation of the stages of teachers’ continuous academic development (CAD) depending on the portfolio of teaching efforts during the academic year (teacher portfolio). Table (3) illustrates the second goal and objectives followed for designing, establishing, operating, and sustaining an integrated quality assurance system in the university.

Table 3. The 2nd goals and objectives of the ASAS plan

<table>
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<tr>
<th>2nd Goal</th>
<th>Objectives</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>Re-engineering the education and management QA system to achieve a professional &amp; effective model</td>
<td>Develop the components of the education quality assurance management system of the university and update QA’s work models (Teaching Portfolio, Assessment of the Quality of Teaching Performance, Continuous Academic Development (CAD), Faculty Member Evaluation of the Head of the Scientific Department, Student Opinions about Instructors, and External Evaluator)</td>
<td>- CAQA ITC</td>
</tr>
<tr>
<td></td>
<td>Add new components to the education QA system that comply with the standards of international accreditation institutions</td>
<td>- CAQA CQAC</td>
</tr>
<tr>
<td></td>
<td>Work to develop rules and procedures to monitor the quality of services provided to students to improve them</td>
<td>- HS</td>
</tr>
<tr>
<td></td>
<td>Develop and expand the university's QA system to cover the following areas that were not previously included in the system: Efficiency of Human Resources Performance, Quality and Effectiveness of Human Resources Management, and Financial Management</td>
<td>- CAQA HR</td>
</tr>
<tr>
<td></td>
<td>Establish an effective policy for adopting the best empirical research in the field to measure the efficiency of the university's institutional performance</td>
<td>- CAQA SRCD</td>
</tr>
<tr>
<td></td>
<td>Study and analyze the world university ranking systems’ standards and elements to determine the appropriate systems for NZU’s circumstances and aspirations and set the mechanisms needed for the university’s participation in those international competitions, which can give a perception of the university’s position on the global map of higher education</td>
<td>- RST</td>
</tr>
</tbody>
</table>

3.3 E-Systems and Automation

Before 2015, the university was characterized by limited utilization of electronic systems in managing, directing, and organizing the teaching and learning processes. This situation was a result of adaptation to the undeveloped, uncomputerized, and pre-international reality as the will for change had not yet been crystallized due to many factors, including deficiencies in teaching staff’s skills relating to the use of digital technologies and the need to boost the competence and interactivity of the teaching process, despite the specialized knowledge and extensive teaching experience possessed by many teachers in their fields.

In addition, the poor maintenance of the few electronic programs and applications that were already in service serves as an example of the lack of sustainability in reaping the benefits of computerized systems in higher education in Iraq and Kurdistan. This is also a reflection of the culture of approaching these systems as a kind of supplementary systems for traditional education systems but rather as a luxury or accessory. This phenomenon was due to what is called “internal resistance” to the adoption of information and communications technology (ICT), which itself resulted from the shortage of adequate training of university leadership to manage and activate academic work digitally (Hénard et al., 2012).

In our current highly globalized and networked world, it seems impossible to talk about the aspirations of internationalizing concepts, issues, or organizations without discussing the pivotal role that information and
communication technology plays in the interconnectivity and hyper connectivity of our modern life. The modern digital communication revolution has made internationalization an imposed dominant reality in which we all live and not just a process we practice or a goal we seek. Thus, we can do nothing to change this situation and must adapt to it. Undoubtedly, we are no longer privileged with the luxury of choosing between internationalization and localization since the boundaries between the national (local) and the international have become a mere "hypothesis" used for the purposes of understanding and analyzing; as for reality, it is the deep overlap, intertwining, and wide interaction between the private and the public, the national and the universal, and the subjective and the objective.

The discussion of the "university’s internationalization" itself appears not so much as a new innovation as it is an attempt to harmonize with a well-established, historically evolving phenomenon, i.e., the "universality of knowledge," in the sense that the international identity of universities has become an inevitable outcome of the cross-cultural identity of information. Consequently, the relationship between the three elements: university development (internationalization), knowledge (education) and communication and information technology (digitalization), as one of the globalization given facts and contemporary scientific progress outputs, is both an intuitive equation and a foregone conclusion.

The mutual impact between technology and education is a natural result of this relationship, which gave ICT the ability to increasingly influence educational institutions, thus enabling institutions to use these technologies to promote and realize internationalization. The high interactivity between the two improved the means by which this could be achieved on a large scale as ICT enables enterprises and organizations to cooperate and compete (Hénard et al., 2012) while simultaneously facilitating access to resources, services, remote exchange, and cooperation (Sangra & Gonzalez-Sanmamed, 2010). “The medium is the message,” says Marshall McLuhan, meaning that the tool adopted in the process of simulating internationalization is supposed to be international in nature to achieve the desired goal of internationalization, which also applies to ICT.

The main goal of ICT in higher education is to improve the flow and outcomes of the educational process on both sides, teaching and learning, i.e., supporting both faculty and students. In addition, ICT brings about an aspirational opportunity to participate in developing higher education planning and knowledge-making due to its potential to be used to stimulate critical thinking in the development of education and pedagogical sciences in general (Hénard, et al., 2012). These requirements and expectations impose and improve, respectively, the communicative competence of teachers, researchers, and students by integrating ICT in both education and scientific research processes. Therefore, ICT technology has been described as containing powerful enabling tools for change and reform in the educational sector (Kingsley, 2017). Table (4) demonstrates the third goal and related objectives followed to advance the path of digital transformation at the university regarding educational and managerial processes and within the horizon of simulating internationalization approaches.

Table 4. The 3rd goals and objectives of the ASAS plan

<table>
<thead>
<tr>
<th>3rd Goal</th>
<th>Objectives</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferring the university towards the use of E-Systems in all administrative units</td>
<td>Develop electronic systems that are currently in operation and create new digital solutions to cover the following areas:</td>
<td>ITC</td>
</tr>
<tr>
<td></td>
<td>• An E-learning system</td>
<td>CAQA</td>
</tr>
<tr>
<td></td>
<td>• A student database and &quot;student profiles&quot;</td>
<td>HR</td>
</tr>
<tr>
<td></td>
<td>• A central library electronic management system</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td>• A digital repository, as one of the university’s website extensions used to save, archive, and recall information in an accessible way</td>
<td>SRDS</td>
</tr>
<tr>
<td></td>
<td>• An electronic gate for employment on the university’s website</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Electronic portals for conferences and seminars on the university's website</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A web portal for applying and enrolling digitally in capacity-building courses and university compulsory training courses of</td>
<td></td>
</tr>
</tbody>
</table>
teaching methods
- Registration of scientific research
- A human resources database
- An informational platform on the university’s website, which is a statistical and analytical counter of the various activities and events of the university, to facilitate the flow of information to the university’s Information Technology Center. This platform represents a record of the university’s annual activities, which can be supplied and included directly into the NUR database
- A repository of teaching subjects

3.4 Scientific Research & Development

During the period 2004 to the end of 2015, scientific research at the university was a marginal activity, as exemplified by the lack of funding specified for scientific research and being content with local publishing only according to traditional standards. This situation led to the curtailment of university research production in terms of both quantity and quality. Specifically, this was embodied in:

- A limited number of scientific research papers published in local journals that do not have indexing in global containers, as well as with regard to books.
- No legal system for the exchange of teachers and students with global universities.

Based on these data, the Scientific Research and Development Center was established to be an independent administrative entity that manages and coordinates efforts and initiatives relating the university's scientific research plan. A follow-up system for the scientific research plan was founded to supervise and support the plan. Additionally, an administrative system was set up to transparently manage contracts and the financial budgets for scientific research.

Such a shift required two paths of human and institutional development; the first is vertical regarding enhancing teaching staff skills in dealing with information technology for scientific research purposes—at a minimum in terms of preparing and publishing research—and the second is horizontal, related to increasing the amount of university scientific research published internationally. Table (5) shows the fourth goal and objectives followed by the university under the strategy of simulating internationalization to enhance investment in intellectual and human capital by developing scientific research in terms of scientific content and academic framing of the research articles. Furthermore, teaching staff capacities were improved to achieve productive efficiency in teaching and research.

Table 5. The 4th goals and objectives of the ASAS plan

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objectives</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Increase research achievement & develop the performance of Research and training centers | Develop the preregistration system of academic research plans according to the properties of the international preregistration platforms and models by establishing an electronic portal to preregister scientific studies, archive them with serial numbers, and follow up on completion rates | - SRDC  
- ITS |
| | Launch two academic journals for the university in accordance with international standards; one concerned with research in the fields of engineering and science, and the other dedicated to human and social studies. Both journals should accept and publish the approved articles in the English language. | - AJNO  
- PAKO |
Bridge research experiences by setting up instructions and mechanisms to integrate junior teaching staff with a master’s degree in the research activity of senior teaching staff with a doctorate degree

- CSC
- SRDC

Establish policies and procedures to develop the mechanisms and criteria of employing teachers and to ensure the selection of those with the ability to contribute productively to the teaching and research process of the university in accordance with the academic requirements and the advisable international standards

- SRDC
- HR

Develop methods and techniques of training teaching staff and administrative cadres that were implemented by the Training and University Teaching Methods Center (upgraded to Nawroz Pedagogy And Academic Development Center in 2019) during the 2016/2017 academic year) and establish rules that ensure the institutional inclusion of those methods in the regulations of duties and terms of references of the relevant authorities

- NPADC

Demarcate perspectives, regulations, and mechanisms for promoting and marketing consulting and training services that can be provided to the civil, public, or private sectors of the country to diversify the university's financial revenues

- CRD
- SCOs

Create educational and cultural exchange agreements and initiatives that organize the participation of teachers and students in workshops, scientific visits, internships, joint academic activities, and research courses with international universities

- CRD
- CSC

### 3.5 Cultural Relations and Community Service

Throughout the period 2004–2015, the university’s role in “community service” was limited, but the concept and practice of social responsibility had generally started to develop among regional universities, including NZU, in line with the rise of culture, values, and activities related to “civil society” in Kurdistan. This was a reflection of social movement in its political, economic, and class dimensions in the country, which, in turn, arose from the socio-political transformations in Iraq and other nations of the Middle East and North Africa.

NZU responded to this sociocultural change by encouraging students to volunteer and engage in civil participation in the public space. In addition, the university started organizing opportunities to make social contributions by providing professional societal groups, such as lawyers, with capacity-building courses. It also cooperated with service institutions of the public sector to boost awareness of events and meetings.

Further, the university engaged in initiatives to bridge the gap with the community, including sponsoring faculty members with creative, aesthetic, artistic, and intellectual achievements by supporting efforts to present themselves to society and adopting academic discussions about societal issues such as violence against women and traffic accidents.

Table 6 demonstrates the fifth goal and objectives followed by the university to build and sustain academic and civil partnerships at the local, national, regional, and international levels.
Table 6. The 5th goals and objectives of the ASAS plan

<table>
<thead>
<tr>
<th>5th Goal</th>
<th>Objectives</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanding the relationships with the local society and building productive relationships with international institutions</td>
<td>Bridge relations with international organizations and donor agencies with respect to cooperation, coordination, and fundraising</td>
<td>- NGO Teams</td>
</tr>
<tr>
<td></td>
<td>Develop a policy that meets the requirements of creating interlocking bonds with the local community</td>
<td>- CRD</td>
</tr>
<tr>
<td></td>
<td>Promote a policy of building fruitful relations with international universities and organizations concerned with education and research</td>
<td>- CRD</td>
</tr>
<tr>
<td></td>
<td>Rebuild the mental image of the university by redefining and presenting it to the local community and the world</td>
<td>- CRD</td>
</tr>
<tr>
<td></td>
<td>Invest funds to expand the university’s role as a knowledge and scientific experience tank by establishing rules and mechanisms to promote and market the paid services that can be provided to the community's beneficiaries to diversify the university's revenues and funding sources</td>
<td>- CRD</td>
</tr>
<tr>
<td></td>
<td>Build and sustain partnerships with employers to develop the performance of the university's Job Development Center</td>
<td>- CDC</td>
</tr>
</tbody>
</table>

4. The Plan Consistency With Its References

We previously indicated that reformulating the vision and goals of the university was a priority of the 531 CAQA plan, taking into consideration the integration of the national (local) approach with the 532 international approach. Were the designed objectives incorporated into the institutional development plans so that they become 535 long-term goals, they would begin to serve as basic references and later be established as cultural and 536 work values.

In this article, the university’s goals were adopted as one of the most crucial directing guides for the plan 538 and the main controlling component to measure the feasibility of the plan’s objectives and their 539 compatibility with the goals of the development project. The objectives of the plan were chosen according to the relative importance of the university's goals.

Table 7. NZU objectives and alignment matrix of ASAS plan orientations and Sub-objectives (Ali, 2020)

<table>
<thead>
<tr>
<th>NZU Goals</th>
<th>NZU Objectives</th>
<th>Percentage weights of NZU objectives</th>
<th>ASAS plan goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal #1: Provide high-quality &amp; broad-based education</td>
<td>Maintain quality and meet standards in teaching and learning</td>
<td>40%</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Recruit and retain qualified and dedicated faculty and support staff</td>
<td>24%</td>
<td>√</td>
</tr>
</tbody>
</table>
Delgado et al. (2011) noted that the internationalization variables in such rankings are limited and the indicators used by those rankings do not accurately reflect the main variables involved in the processes of internationalization of higher education institutions.

However, rankings could affect the internationalization process. For example, the development of scientific research in Kurdistan, as an international standard, was a result of the competition in NUR Figure (1). This means that the rankings are useful in the internationalization of universities in developing countries as a consequence of allocating financial budgets to this sector and obliging teaching staff to develop their research contributions in terms of quantity and quality to meet the ranking requirements.

![Figure 1](http://jed.julypress.com)

**Figure 1.** The development of scientific research expenditure ($) in the Private universities in Kurdistan region for the period 2016 – 2019

“Considering that the cost of one impact factor is approximately $ 800”

The ranking criteria were important for NZU as a mirror to see the disadvantages and opportunities of the university. Therefore, the university employed the rankings as references to adhere to in the implementation of its requirements and later used them to evaluate its performance. This heuristic commitment towards rankings...
weights and indicators led to interpreting them into scientific, administrative and research processes, activities, and practices that contributed to increasing the university’s institutional flexibility, academic adaptability, and adequacy of international engagement. Tables 8 and 9 illustrate the matching matrix between ASAS orientations and NUR criteria and how all orientations match the criteria with at least two and at most six criteria.

Table 8. NZU objectives and alignment matrix of ASAS plan orientations and NUR criteria

<table>
<thead>
<tr>
<th>Main Criteria (weights)</th>
<th>Sub – Criteria</th>
<th>ASAS plan goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Staff (14%)</td>
<td>Student-Teaching staff ratio / Prizes, Medals, Awards / Association Senior Membership</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Scientific Research (35%)</td>
<td>Books &amp; Research / Patents / Google Scholar / Conferences, Symposiums &amp; Workshops</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>International Activities (5%)</td>
<td>Internationalization of Students &amp; Teaching Staff / Student &amp; Staff Exchanges / Projects</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Student Satisfaction (4%)</td>
<td>Student Feedback Surveys</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Quality Assurance (27%)</td>
<td>Spaces: Classes &amp; Green areas / Website / Health &amp; Safety / Teaching e-System / Accreditation</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Cultural &amp; Community Activities (7%)</td>
<td>Sports &amp; Arts / Community Projects / Societal Service / Grants</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Library (4%)</td>
<td>e/Hard Books / Subscription to International Journals / Reading Halls</td>
<td>✓</td>
</tr>
<tr>
<td>Alumni &amp; Private Sector (9%)</td>
<td>Alumni / Private Sector Placement / Learning Outcomes</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>

Table 9. Some components of volume of web indicators and the alignment matrix of ASAS plan goals (Ali, 2020)

<table>
<thead>
<tr>
<th>Missions</th>
<th>Web Contents</th>
<th>ASAS plan goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Strategy</td>
<td>Policies, priorities, resources mentioned/web</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Internal Organization</td>
<td>Reflected in the web hierarchy &amp; (subdomain/direction)</td>
<td>✓</td>
</tr>
<tr>
<td>CMS responsibilities and rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QA &amp; Transparency</td>
<td>Open public reporting</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>
5. Discussion

As the two authors pointed out at the beginning of the article, the internationalization of NZU presented an extremely challenging (if not impossible) process for university decision-makers in the foreseeable future in recognition of the facts on the ground and the nature of the challenges and complications facing the university, which are not necessarily specific to NZU, but rather mostly relate to objective factors common to higher education institutions.

Those factors are related to interactions, relationships, and the existing institutional culture within the university environment, which can be discussed and dismantled through research disciplines that are currently under development, such as the sociology of academic workplace, university management, and the economics of higher education.

Here, the authors recommend conducting interdisciplinary or integrative studies to understand the interrelations among the organizational conflict within the university environment, the psycho-social interactions within the academic settings, and the challenges facing the higher education sector in developing countries from the point of view of the political economy.

In light of this situation, NZU policymakers tended to think and behave realistically by replacing the goal of complete internationalization with developing an alternative vision aimed at reshaping the university environment on the basis of simulation of internationalization, working on approaching typical forms of internationalization to elicit harmonization with it, and modeling an internationalized approach for NZU. This
approach was considered an appropriate, attainable alternative to be adopted in lieu of a fully internationalized university, which represented an unachievable target in the short and medium term.

The decision-makers approach can be regarded as a realistic model suitable for a "developing university" that seeks to achieve advancement, or in more positive words, an ambitious university in a transitional phase working on mixing the national (the local) with the international and balancing between the traditional and the modern.

This university is in the pre-international and post-local phase, that is, a phase that accepts, comprehends, and adapts to a set of internationalization features as an interim alternative to complete internationalization.

It can be said that the university has not entirely neglected the idea of internationalization as the decision-makers and implementing development teams selected extracts from internationalization approaches and applied them to the university throughout the framework of an "academic implantation" process aimed at creating institutional fertilization to reach a degree of cultural and institutional appropriateness between the reality of the university and the internationalization approaches.

Here, reference should be made to the approaches that were mentioned at the beginning of this article, opposite to which we are going to list the steps that were carried out to conduct the process of international component selection, implantation, and fertilization within the NZU’s environment as presented in Table 10.

Table 10

<table>
<thead>
<tr>
<th>International Approaches</th>
<th>Transplanted Components</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First</strong></td>
<td>Activity Approach: promotes internationalization actions regarding curricula, student / faculty exchange, technical assistance, and international students. This approach is the most widespread.</td>
</tr>
<tr>
<td><strong>Second</strong></td>
<td>Competency Approach: emphasizes enhancing skills, knowledge, attitudes and values of students, faculty, and staff.</td>
</tr>
<tr>
<td><strong>Third</strong></td>
<td>Culture Approach: establishes a cultural and value system that supports organizational development to create an atmosphere that supports international initiatives and cultural interactivity.</td>
</tr>
<tr>
<td><strong>Fourth</strong></td>
<td>Diversity Approach: stresses the integration of multiculturalism in scientific and administrative practices.</td>
</tr>
</tbody>
</table>

Until the end of 2016, the activities of the scientific affairs sector were local and limited in terms of research production and publication, conferences, seminars, and training. However, in the context of the development process approved by the university, this sector began to create new diverse internationalized components in research and development (R&D).

Some of these developments arose from the university’s commitment to the faculty, students, and society, while others came to regulate the teaching staff’s obligations to the university.

This development process resulted in the following outputs:

- Research published in journals registered with international contents
- Scientific journals with international standards
- Participation in international conferences, seminars, and workshops
- Scientific books issued by international publishing houses
- Development of skills of teachers and supporting administrative staff
- Exchange of teachers and students with international universities
- International activities (joint projects with international universities and organizations)
- Academic accreditation of educational programs
- Computerization of management and education processes
- Joint projects between the university and the community
- Scholarships for scientific research obtained by the university, faculty, or supporting administrators

The university’s plans achieved transformational successes at the WR and NUR levels. Table (10) illustrates the progress of ranking during the period 2016–2019 as the growth rates are ranked 4%, 4%, 6%, 5%, 3% and 4% according to the world, Iraq, Kurdistan region, Arab World, Asia, and the Middle East, respectively (Ali, 2020). As for the NUR, the university has achieved advancement in the ranking, becoming one of the first-level universities in the 2017, 2018, and 2019 versions after being ranked at the last level in the 2015 and 2016 versions, as indicated in Table 11 below.

### Table 11. NZU ranking in WR according to the world and some regions in the period 2016–2019

<table>
<thead>
<tr>
<th>Editions</th>
<th>World Rank</th>
<th>NZU Ranking in Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Iraq</td>
</tr>
<tr>
<td>Jan. 2016</td>
<td>22,499</td>
<td>53</td>
</tr>
<tr>
<td>Jul. 2016</td>
<td>24,185</td>
<td>60</td>
</tr>
<tr>
<td>Jan. 2017</td>
<td>23,858</td>
<td>63</td>
</tr>
<tr>
<td>Jul. 2017</td>
<td>21,876</td>
<td>56</td>
</tr>
<tr>
<td>Jan. 2018</td>
<td>19,424</td>
<td>48</td>
</tr>
<tr>
<td>Jul. 2018</td>
<td>18,255</td>
<td>47</td>
</tr>
<tr>
<td>Jan. 2019</td>
<td>16,988</td>
<td>42</td>
</tr>
<tr>
<td>Jul. 2019</td>
<td>16,917</td>
<td>44</td>
</tr>
</tbody>
</table>

### References


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