Journal of Research

— in —

Higher Education

Centre for University Strategy and
Quality Management

Journal of Research
in
Higher Education

- **Vol. III, No. 1, 2019**

Contents

The Effect of International University Rankings on King Khalid Universities' Performance

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Abstract: This paper seeks to describe as a case study the current objective of King Khalid University, Saudi Arabia, of improving its global ranking in higher education league tables. As stated in the *Saudi Vision 2030*, a broad governmental plan to diversify the Saudi economy and develop aspects of the social sector, an increased emphasis on education is paramount to meeting demands of a changing workforce. This paper examines the situation of King Khalid University (KKU), a public research university, as the institution pursues a spot in the QS top 100 of globally ranked universities. The criteria considered in the construction of global ranking are discussed, as are the steps KKU has taken to improve its ranking position as well as the consequences of this pursuit on the climate and culture of the institution. Several recommendations are presented which seek to inform the university's goal of academic excellence in both Saudi Arabia and at a global level.

Keywords: university rankings, league tables, vision, higher education, excellence

Introduction

The *Saudi Vision 2030* is a government plan whose objective is to diversify the Saudi Arabian economy, predominantly aimed at utilizing the nation's range of natural resources rather than depending solely on its oil. The plan seeks to further develop much of the public sector including an increased emphasis on services such as health, infrastructure, tourism, and, most salient to this study, education.

Ultimately, the *Saudi Vision 2030* seeks to enhance the nation's economy through the preparation of future leaders in business and infrastructure and emphasizes improved education standards in the pursuit of such goals. One such objective is "an education that contributes to economic growth" through the creation of new and innovative benchmarks for the schooling of the youth of Saudi Arabia. Such elements are vital to achieving the *Saudi Vision 2030*, "an ambitious yet achievable blueprint which expresses our long-term goals and expectations and reflects our country's strengths and capabilities." While the Saudi economy is currently focused on crude oil production, a host of other natural resources including gold, phosphate, uranium, and other valuable minerals remain largely underexploited (Chairman of the Council of Economic and Development Affairs, *Saudi Vision 2030*, 2017).

An emphasis on educational policies demands the investment of intellectual and economic resources from various sectors of Saudi society, and in turn, will ultimately better prepare Saudi citizens to address a changing national and geopolitical climate. The 2030 Plan outlines strategic parameters which, in regards to curriculum reform and revamped pedagogical practices, seek to ultimately elevate the entire Saudi system of education to the status of "global leader." The plan uses several quantitative measures to meet this outwardly qualitative goal, including a series of well-established global ranking systems for universities and post-secondary schools.

As such, the stated aim of the Kingdom of Saudi Arabia (KSA) is to place at least five Saudi universities in the top 200 universities in international rankings (*Saudi Vision 2030*, 2017). The application of new teaching strategies and methodologies, better access to learning resources, and an emphasis on accreditation programs will ideally help Saudi students achieve results, which, in turn, will lead to inclusion in such rankings. King Khalid University (KKU) aspires to be one of the five Saudi Universities ranked in the top 200 at global level. As such, KKU has recently established a department dedicated to the study of performance indicators for international rankings. Among the ranking systems outlined in the 2030 Strategic Plan are *QS World University Rankings, Academic Ranking of World Universities (ARWU), US News Education*, and *Webometrics*.

The Saudi Ministry of Education (which also includes higher education) was established in 1975, to execute the kingdom's policy on higher education. The Minister of Education is responsible for the implementation of the government's educational policy. There are currently 30 public universities in KSA which are geographically distributed in different regions of KSA. While all these universities are governed by the Ministry of Education (MoE), they now enjoy a great deal of administrative and academic autonomy. There are also 13 private universities and 42 private higher education colleges, as well. Support for these institutions is provided by specialized research institutes; moreover, several scientific seminars and conferences are organized in these universities for knowledge dissemination. The MoE aims to provide opportunities for the teaching staff members in Saudi universities for participating in specialized scientific activities (Ministry of Education, 2019).

King Khalid University (KKU) is considered one of the best educational institutions in the Kingdom of Saudi Arabia. Since its establishment in 1998, it has been offering the best higher education programs; many of the top leaders in Saudi Arabia are graduates of KKU and have contributed to the development of the country. KKUs' vision is

to be in the top 200 universities worldwide by 2030 (King Khalid University, 2019).

The KKU department has determined the major criteria that factor into each ranking system: teaching quality, research performance, graduate employability, and internationalization. In its pursuit of an improved ranking position, KKU is determined to develop and enhance the quality of teaching by offering cutting-edge methodologies which, in turn, develop the capabilities of students and offer them the tools necessary to adapt to a changing job market. The hiring and employment of qualified faculty members is also a priority, as is ensuring that current KKU faculty and staff are all of the highest qualified backgrounds and have an experience that enriches the quality of education offered at the university. Additionally, internationalization and diversity are among the pillars of the *Vision 2030* plan. An emphasis on diversity will help expand students' knowledge of the world and create an environment that will support creativity and unity in both the classroom and in the workforce. In addition, KKU has commenced an overhaul of its academic curriculum with the objective of becoming a standard-based curriculum, while dedicating resources to achieving rigorous standards in literacy, numeracy, skills, and character development.

Research questions

This paper seeks to review the QS World University Rankings standing of KKU between 2015 and 2017 in both the Global and the Arab Regional rankings. This is followed by a discussion concerning the relevance and practicality of performance indicators, and it will conclude with some recommendations concerning KKU's pursuit of a better ranking position.

Literature review

The independent assessment of the status of an institution of higher education is problematic, so much so that in the last two decades, there has been a plethora of university rankings claiming to correctly quantify it, although what actually is being measured is still debatable (Massucci & Docampo, 2019). The major issue with the present university rankings is the absence of methodological details and little information on what actually is measured (Loughran, 2016). Despite their success in the United States, and a frenzied fascination in the institutions of higher education in Asia, universities in Europe are not so obsessed with the ranking systems (Nedeva, Barker & Osman, 2014).

To start with, we will briefly present a discussion of previous research, which discusses the nature and effectiveness of university rankings. Blanca L. (2011) investigates the concept and practice of internationalization in institutions from both theoretical and quantitative perspectives. The study compares the methodology of three widely circulated higher education rankings: Times Higher Education Supplement, Academic Ranking of World Universities, and Webometrics Rankings. The results show that the weight of internationalization in the aggregate or "overall" score is limited and that the scores related to internationalization typically have little emphasis on the final ranking position. Other aspects, such research quality, weigh more heavily in the final ranking or institutions (Vernon, Balas & Momani, 2018). In addition, the metrics used in internationalization rankings, such as the ratio of international to domestic faculty members and the ratio of international to domestic students, do not adequately reflect the main variables involved in their internationalization processes.

Mu-Hsuan Huang (2011) compares the Performance Ranking of Scientific Papers among three ranking systems, namely the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT), Shanghai Jiao Tong University (ARWU) and the QS World University

Ranking (QS). The discrepancy in results shows that each publication compiles a different list of top 20 universities in the three ranking systems. The one exception is the case of Harvard University in Cambridge, USA, which was ranked first in all three rankings. Comparisons also reveal that the QS rankings tend to favor UK universities. Furthermore, differences are obvious between QS and the other two ranking systems, which favor ranking institutions in some European countries (Germany, UK, Netherlands, & Switzerland) and Chinese-speaking regions.

First, it is worth noting the ways in which accreditation may impact the culture of an organization. Manuel P. Teodoro (2012) identifies two factors for which the pursuit of accreditation might impact members: (1) by socializing employees and (2) by signaling the agency's priorities to employees. A positive impact on the employees' professional relationships is one of the benefits of accreditation, as encouraging employees to utilize each other's expertise and experiences creates an opportunity for the exchange of talents and referral of information. Analyzing attitudinal data from officers in six American police departments, this study found no association between accreditation and the officers' personal values but found that accreditation was strongly correlated with the officers' perceptions of the priorities and professional objective of their agencies and therefore encouraged aspects of professional development separate from personal politics.

Among the presupposed tenets of higher education are the quality of teaching, the level of knowledge (i.e. the available intellectual material) provided by the institution, and the methodologies used in conveying such knowledge. From an institutional point of view, the values, skills, and quality of education required to meet the expected outcomes are all among the strategies of higher education ranking; according to Kuh (2008), these are collectively understood as learning outcomes or graduate attributes. Universities in the 21st century seek to produce education that qualifies students to contribute to both the

growth of their domestic economies and the international market; fostering skills in a quality education environment has proven successful in many societies (Malik, 2018).

Although the quality of education provided is essential to both the personal and professional success of a university, the Academic Ranking of World University, also known as the Shanghai Ranking, does not measure university size, student to staff ratio, amount of (student graduate) degree holders, and teaching quality among the factors of ranking whereas these hold an elevated position in the U-Multirank ranking system. Though the quality of teaching is a critical element of education, the Shanghai Ranking, and most of the others, do not include this metric in the ranking of universities (Vernon, Balas & Momani, 2018). As such, the U-Multirank ranking emphasizes more quantitative aspects of the university. This type of ranking includes measuring student satisfaction levels and impressions of programs, program research, evaluation of teaching facilities, quality of courses offered, support by teachers as well as other indicators, these indicators were developed in relevance to validity, reliability, comparability, and feasibility (Van Vught and Ziegele, 2011).

Faculty to student ratios is a well-established factor in the quality of education (Koc & Celik, 2015). Just as the number of students enrolled in a program is vital to the program's ranking and accreditation, the faculty to student ratio is beneficial to the reputation of the institution that they belong to. The transition of a program from granting solely bachelor's degrees to a program that includes doctoral degrees requires a specific quality of teaching. In many cases, a marked increase in the number of students enrolled in a program may correlate to an increase in the number of faculty members in that department, though not necessarily equally balanced to meet the needs of the new number of students. Such transitions of the degree program do not necessarily provide opportunities for the educators in the department to develop adequate training (and, in some cases, opportunities to

further their own education commensurate with the elevated degree-granting program).

Of course, faculty productivity and student performance are not always related to the faculty to student ratio. In a study of the impact of student-faculty ratio on pharmacy faculty scholarship at the College of Pharmacy, Nova Southeastern University, the student-faculty ratio was shown to not have an impact on faculty scholarships and research. Faculty scholarship is not based on student-faculty ratio, but on other factors that contribute to the process, including faculty clinical presence, lectures and programs in public universities (Benavides, S., 2010).

Accreditation standards and guidelines do not demand a certain student-faculty ratio but emphasize that the faculty of the program are qualified to deliver quality education, which was addressed above in the study cited, showing that the increase in the number of enrolled students was not related to faculty numbers. However, public universities may have different infrastructure when compared to private colleges such as Nova Southeastern.

According to Ronald B. H. (2011), the term "institutional effectiveness" was developed in response to an increased emphasis on accreditation. To a large extent, a focus on accreditation drives institutional effectiveness efforts in community college campuses. Although accreditation is often viewed internally as onerous or as a burdensome external requirement, it confers a number of benefits to an institution. An accredited college or university may more accurately ascertain the value and equivalency of transfer credits and assist in meeting one of several potential criteria for obtaining federal funding and assistance.

In summary, the literature review reveals that there are different aspects of university ranking and that different ranking systems have their own criteria for ranking. The reviewed literature also explored some of the important criteria employed for the ranking system used by King Khalid University (KKU). It is apparent that KKU needs to assess its

quality based upon the requirements of the QS ranking system since another ranking system might have a different set of criteria.

Research Questions:

What are the challenges facing KKU to improve its ranking? How can the challenges be overcome?
What are the factors of success for improving the ranking of KKU?

Data collection

Data was collected from the QS World University Rankings website for the Global and Arab region ranking. QS World University Rankings has different methodologies for the two rankings, one at the global level, and one at the regional level and subject rankings.

In what follows we will discuss the development of the ranking of King Khalid University in what concerns both the global and the Arab region criteria.

QS World University Rankings assesses university in four main areas:

1. Teaching
2. Research
3. Employability
4. Internationalization

Each area has specific performance indicators (PI) and, at the same time, the weight of each indicator changes according to each ranking. *Table (1)* summarizes the performance indicators and their weight in each ranking.

Table (1): Performance indicators and their weights in Global and Arab region rankings

Performance indicators (PI) for Global Ranking	Weight of PI	Performance indicators (PI) for Arab region Ranking	Weight of PI
Academic Reputation from Global Survey	40%	Academic Reputation from Global survey	30%
Employer Reputation from Global Survey	10%	Employer Reputation from Global survey	20%
Faculty Student ratio	20%	Faculty Student ratio	20%
Citation per Faculty from Scopus	20%	Citation per paper from Scopus	5%
Proportion of International Faculty	5%	Proportion of International Faculty	2.5%
Proportion of International Students	5%	Proportion of International Students	2.5%
		Web Impacts from Webometrics	10%
		Proportion of staff with PhD	5%
		Paper per Faculty	5%

Data Analysis

We will discuss data collected from QS World University Ranking according to the type of rankings:

Analysis of Global Ranking

Table (2) shows the position of King Khalid University in the QS Rankings between 2014 and 2017. There is a noticeable improvement from being placed on the 601-650 position in 2014 to 471-480 in 2017. Three performance indicators affected the ranking of KKU, namely faculty-student ratio, the proportional amount of international faculty and the proportional amount of international students. The assessment

of the performance indicator "proportional amount of international faculty" is constant from 2014 to 2017 with the value of 100, so the two other performance indicators must have caused KKU's position in the global ranking to change. In regard to the faculty to student ratio, the level of this indicator increased from 50.9 in 2014 to 77.4 in 2017, which indicates that KKU had clear policies for student admission, which prevented over-enrollment and retained existing faculty members, while successfully hiring new and qualified faculty members.

The second effective performance indicator is the proportional amount of international students. This indicator decreased from 27.1 in 2016 to 24.5 in 2017, which may be due to the competition between Saudi state universities and the establishment of new universities and colleges in the Asia region, along with the regulations of the Education Ministry.

Although one of the three performance indicators decreased, the overall scoring and ranking increased, due to the different weight of faculty to student ratio (20%) and proportion of international students (5%). The increased rate of faculty – student ratio (14.5%) is higher than the rate of decrease in the proportion of international students (–9.6%).

Table (2): Development of the position of King Khalid University in Global Rankings, 2014- 2017

Performance indicators	2014	2015	2016	2017
Ranking	601-650	551-600	551-600	471-480
Academic Reputation from Global Survey	-	-	-	-
Employer Reputation from Global Survey	-	-	-	-
Faculty Student ratio	50.9	62.4	67.6	77.4
Citation per Faculty from Scopus	-	-	-	-
Proportion of International Faculty	100	100	100	100
Proportion of International Students	-	-	27.1	24.5

Analysis of Ranking in Arab Region

The position held in the QS regional ranking by King Khalid University decreased from 17 to 24 between 2015 and 2017 respectively, as shown in *Table (3).* By analyzing the performance indicators, we see that the assessment of four performance indicators decreased. These indicators are:
1. Academic Reputation from Global survey
2. Citation per paper from Scopus
3. Proportion of International Faculty member
4. Web Impacts from Webometrics

There is a noticeable increase in two performance indicators: faculty-student ratio and the proportion of international students.

Table (3): King Khalid University Regional Rankings, 2014 -2017

Performance indicators / Year	2015	2016	2017
Ranking	17	21	24
Academic Reputation from Global survey	82.1	77.5	71.1
Employer Reputation from Global survey	-	29.4	29.8
Faculty Student ratio	94.9	95.6	98.6
Proportion of staff with PhD	-	93.5	93.8
Paper per Faculty member	-	-	-
Citation per papers from Scopus	70.3	-	34.4
Proportion of International Faculty members	100	100	89.1
Proportion of International Students	-	25.6	42.2
Web Impact from Webometrics	-	44.1	41.7
Overall score	67.8	66.2	63.4

Conclusion

There is an improvement in the QS international ranking position of KKU (as reflected in the jump from 601-650 in 2014 to 471-480 in 2017). In contrast, KKU's ranking in the Arab region decreased from

17th place in 2015 to 24th place in 2017. We will attempt to explain in what follows some of the reasons for this discrepancy.

First and foremost, different performance indicators are employed by the international and Arab region ranking. Performance indicators, such as the ratio of students to faculty members, are weighted differently in the global ranking compared to the Arab regional ranking. There is currently high competition between universities in the Arab region to attract international faculty members and international students; while the percentage metric on the global scale was unchanged during this time period, KKU's percentage of international faculty actually fell as a result of such competition.

A decrease in rank in the Arab regional ranking can also be attributed to the increased emphasis on the "Employer reputation from global survey" metric, which is markedly more important in the regional ranking calculation. Additional emphasis is given to the ranking related to the Webometrics ranking survey, the proportion of staff holding a Ph.D., and the paper per faculty statistics.

While the rankings described above indicate a mixed reaction to changes implemented at KKU, the newfound emphasis on ranking that has been implemented following the launch of the *Saudi Vision 2030* plan has positively contributed to a developmental culture, and a prediction is made that a similar increase in the ranking position on the global scale coupled with relatively lower metrics of growth in the Arab region are probable.

There are several reasons for this outlook. First, with a heightened emphasis on global rankings among Saudi universities, more governmental funding regarding the reforms outlined in the *Saudi 2030* plan, and a greater intra-departmental focus on attaining such metrics means that the pursuit of a better ranking position is being undertaken nationwide. Assuming metrics for the QS World University Rankings and other similar systems do not drastically change, and that the growth/decrease fluctuations typical of the universities of other regions remain constant with what has been observed in the previous years, it

is likely that Saudi universities will continue to improve on the global scale. In regards to the Arab region rankings, Saudi universities face domestic competition. King Fahd University of Petroleum and Minerals and King Saud University are two Saudi schools which have consistently ranked in the top 250 universities globally since 2014. These institutions undoubtedly perform well in the QS metric for "academic reputation" and will continue to work towards improved rankings under recent reforms.

Having analyzed the criteria which inform rankings on both the global and regional scale, several recommendations are offered below which may inform King Khalid University in the pursuit of improved ranking positions.

First, academic and employer reputation are criteria where KKU can further improve. As with any institution undertaking a review and reform of its policies, communication is a critical element: as stated in the Saudi Vision 2030 plan, better preparation for success in a variety of fields is important to the diversification of the Saudi economy. It is suggested that KKU continue to pursue avenues for communication and collaboration between the university and the industrial sector. This includes an ongoing dialogue concerning employer demands and requirements, opportunities for employers to connect with students, and cultivated channels of communication across disciplines and departments including a network of former staff and alumni.

Furthermore, King Khalid University must also continue to emphasize the metrics of faculty research and faculty citations. While connected to an emphasis on better intra-departmental and faculty-administration communication, the improvement of faculty research metrics could be supplemented by an increase in the university budget for research. It is also the opinion of this author that a program of international cooperation, which connects KKU faculty with that of international institutions, would help forge academic affiliations and partnerships. Finally, in keeping with the plans outlined in the *Saudi Vision 2030* plan, KKU should undertake objectives to entice the

industrial sector to provide funding for projects, particularly those which will aid in the expansion of resource management emphasized in the plan.

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The Relationship between Physical Activity and Academic Achievement of University Students

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Abstract: Physical education belongs to the compulsory courses at many universities around the world. While many studies focused on the benefits of physical activity among elementary school pupils or high school students, the literature has been more silent on its effects in higher education. In this paper, we aim to determine what is the relationship between physical activity and academic achievement of university students. The research is based on a sample of 159 students at Master degree level studying at the Faculty of Business Administration, University of Economics, Prague. The results suggest that aerobic exercise has a positive effect on study results, but only among female students. No effects of anaerobic exercise have been found. Study achievement is also negatively influenced by the students' age. The results are in line with prior studies which, however, focused predominantly on pupils and high school students.

Keywords: Physical activity, academic achievement, study performance, universities, Czech Republic

Introduction

A healthy lifestyle and sport activities are widely supported in the current society. Physical education has become a standard part of elementary and high school curricula, but also of universities' study plans. However, in some countries, the number of hours devoted to physical education is declining (Carlson et al., 2008) and in many countries, physical training does not belong to the study plans of higher years of university studies.

Due to the importance of physical activity for the development of human body and brain, many authors tried to find out whether physical activity positively affects learning outcomes. The positive effect of physical activity on psychical well-being is undebatable; however, it is also reasonable to assume that the time devoted to leisure will negatively affect the number of hours spent learning, and hence, negatively affect the overall academic achievement.

The vast majority of past studies focused on the academic achievement of pupils and students in high schools. At the same time, physical education has become a compulsory part of university study plans. The aim of this paper is to determine if the physical activity positively affects the study results of university students.

The remainder of this paper is organized as follows. The first part summarizes the existing state-of-the-art. Subsequently, we present the methods and data used in the study. Then, the discussion and concluding remarks are presented.

Theoretical Background

Physical activity is closely related to human development. It is one of the factors affecting the process of growth and development of mental skills and physical abilities. The importance of physical activity has also been a subject of interest of the European Union working group entitled

"Sport & Health" (EU, 2008). According to their report, physical activity, health and life quality are closely related; in order to function properly and to prevent diseases, the human body needs to exert regular physical activity.

The positive impact of physical activity on the development of human brain can be considered to be empirically proven. The authors mention its positive effects on self-confidence and feeling of security, reduction of anxiety or mood improvement (Mutrie et al., 2010), or reduction of the risk of depression (Paluska & Schwenk, 2000). As a result, many authors also agree on the fact that the physical fitness positively affects study performance, both in the case of young children and older pupils (Etnier et al., 2006; Stevens et al., 2008; Chomitz et al., 2009). Sallis et al. (1999) found that children who are more physically active and enjoy a better physical condition may become better pupils. Similarly, Fox et al. (2010) found that students who were active in sport teams had better study results than their non-active counterparts. According to Rajic et al. (1997), regular physical activity carried out at least three times a week improves the activity of pupils in the classroom.

Consequently, physical activity positively affects not only organizational abilities and time management, but also reduces the level of stress (Rajic, 1997) and teaches the students discipline and perseverance, which may become useful when performing study-related tasks.

Sport activity is often divided into aerobic and anaerobic. Aerobic activity (aerobic fitness) is based on long-term exercise with middle intensity, typically accompanied by a high stroke frequency. On the other hand, anaerobic activities (muscular fitness) are focused on high performance in a short period of time. According to the existing studies, the two types of physical activity may have different effects on study performance.

In a sample of preadolescents in Illinois, Castelli et al. (2007) found that the aerobic capacity and body mass index (BMI) were closely

related to the success in reading and mathematics, while muscle fitness had no significant effects. Positive effects of aerobic fitness on academic achievement have also been reported by Fedew and Ahn (2011) and So (2012). However, So (2012) points out that when psychical activity is carried out too often, academic achievement may deteriorate as too much time is devoted to sport at the expense of study obligations.

As to anaerobic activity, the positive effects on academic achievement are at least debatable. In a large survey among teenagers, So (2012) found that anaerobic activity had no effect on academic achievement. Similar findings have also been presented by Castelli et al. (2007).

Carlson et al. (2008) found that physically active girls performed significantly better in mathematics and reading than non-active girls; however, no effects have been found in the sample of boys. The fact that gender significantly affects the results of comparative analyses was acknowledged by multiple other authors (e.g, Jago et al., 2009; Salvy et al., 2009). Based on the Carlson et al.'s (2008) study, we expect that gender will have moderating effects on the relationship between physical activity and academic achievement.

To sum up, most of the existing studies agreed on the fact that sport and physical activity have positive effects on study achievement, while a significant effect has been mostly observed in the case of aerobic activity. Moreover, the literature suggests that the effect of physical activity on academic achievement may depend on gender. At the same time, to the best of our knowledge, little attention has been devoted to the relationship between physical activity and academic outcomes of university students. Considering the above arguments, then, we hypothesize that:
- H1: Aerobic activity has positive effects on the academic achievement of university students.
- H2: Anaerobic activity has no effects on the academic achievement of university students.

• H3. There is a moderating effect of gender on the relationship between physical activity and academic achievement.

Methods and Data

Participants

The research sample consisted of the students enrolled in a Master degree at the Faculty of Business Administration (FBA), University of Economics, Prague, in the Czech Republic. To select respondents, we used a list of students of Management and Arts Management enrolled in the 2017 summer semester. We asked 403 students to fill the questionnaire using an e-mail request; 162 questionnaires were returned, which corresponds to the response rate of approximately 40.2%. Subsequently, three respondents were removed from the sample due to inconsistencies in answers (incorrect degree of studies), thus the final sample contained 159 respondents.

By using the CAWI method, we guaranteed the anonymity of respondents and reduced the time effort required, as the respondents were provided a direct link to their Study Information System together with instructions where to find relevant information about their studies.

Materials

To test our hypotheses, we employed linear regression analysis. Following most past studies (Keays & Allison, 1995), we used academic achievement as an outcome measure. Following e.g. Sallis et al. (1999), we used teacher-assigned grades as a measure of study achievement. Every participant reported their *average grade*, calculated as the mean grade of all completed courses (grades range from 1 = "Excellent" to 3 = "Good"). Although the grades on individual courses are of ordinal nature, the average grade is a continuous response variable, leading us to the use of the linear regression model. The non-response bias was

reduced as every participant was able to find this value in their university account profile (and was given the instructions how to find it). Using the average grade instead of focusing on individual courses grades also reduces the individual teachers' subjective evaluation.

Following the literature review, we included two key variables in the model; the weekly number of hours devoted to *anaerobic activities* and to *aerobic activities*. To reduce the response bias due to the non-understanding of the question, the participants were given the explanation of these two terms.

In the analysis, we also controlled for *gender*, since it is also known to affect study achievement. As a result, we employed a binary variable taking the value of one if the respondent was a woman, or zero otherwise. To test for moderating effects of gender, we also included interaction terms in the model.

Another factor which we controlled for in the analysis was the *age,* since it also enters into the relationship between physical activity and study results (Castelli et al., 2007). For instance, in a sample of Bocconi university students, Pellizzari and Billari (2012) found that younger students performed better than older students, while emphasizing that in samples of elementary school pupils, the observed effect had been the opposite; better academic results have been achieved by older pupils.

Results

Table 1 presents the descriptive statistics. There were 36% of women in the sample. The mean age was 24.15 years; most respondents were 23-27 years old, however, there were also two older students of 29 and 30 years. The maximum values of the number of hours devoted to aerobic and anaerobic activities on a weekly basis suggested that there were several professional sportsmen in the sample; specifically, five respondents carried out more than six hours of aerobic activities per

week, and four respondents carried out more than six hours of anaerobic activities on a weekly basis. Since these data are not due to measurement error, we did not remove the cases from the analysis.

Table 1 Descriptive statistics

	Minimum	Maximum	Mean	Std. Deviation
Average grade	1.000	2.900	1.830	0.377
Anaerobic	0	18	1.400	2.586
Aerobic	0	10	1.690	2.066
Gender	0	1	0.360	0.483
Age	22	30	24.150	1.213

Table 2 presents the bivariate Pearson correlations among the model variables. The average grade is significantly and negatively correlated with aerobic activities (suggesting that aerobic activities improve the study achievement), while it is significantly and positively correlated with anaerobic activities (suggesting that anaerobic activities reduce the study achievement). There is also a significant and negative correlation between aerobic and anaerobic activities, which suggests that there is a trade-off relationship between the two types of sport activities. Also, older students tend to prefer aerobic activities.

Table 2 Correlation Matrix

	Average grade	Anaerobic	Aerobic	Gender	Age
Average grade	1				
Anaerobic	0.194*	1			
Aerobic	−0.250**	−0.445**	1		
Gender	−0.137	−0.098	0.141	1	
Age	0.129	−0.137	0.193*	0.100	1

Note: ** $p < 0.01$, $p < 0.05$

  Table 3 presents the estimated parameters of two models. First, we tested the main effects, and in the second step, we included the interaction terms. In the first step, we found a statistically significant

and negative effect of aerobic activities on the average grade; in other words, the results suggest that aerobic physical activities improve the study achievement.

However, the test for moderating effects revealed that the above findings applies only in the subsample of women; in the case of men, aerobic activity has no significant effects on study achievement. *Figure 1* displays the interaction plot for gender, illustrating that the positive effects of aerobic activity on academic achievement is significantly higher in the subsample of female students.

Figure 1 Interaction plot for gender
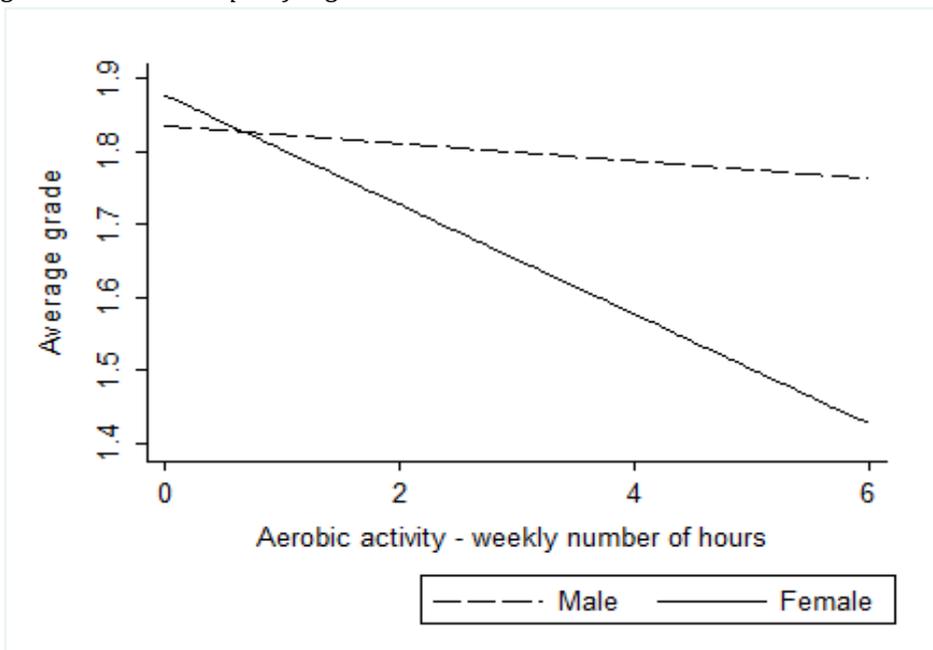
Regarding anaerobic physical activities, neither a statistically significant main effect on academic achievement nor a significant moderating effect have been found. Moreover, we found that age increased the

average grade, thus reducing the academic achievement; gender has no direct effect on academic achievement.

Table 3 Estimation of the model parameters

	Model 1			Model 2		
Variable	Coefficient	p value	VIF	Coefficient	p value	VIF
Intercept	0.419	0.470	-	0.292	0.620	-
Anaerobic	0.016	0.194	1.253	0.021	0.134	1.588
Aerobic	−0.041**	0.010	1.288	−0.12	0.567	2.344
Gender	−0.089	0.138	1.027	0.032	0.750	2.983
Age	0.050**	0.031	1.048	0.065***	0.008	1.078
Gender × Aerobic				−0.061*	0.055	3.681
Gender × Anaerobic				-0.010	0.759	2.031
R2	0.119			0.142		
F statistic	5.177***			4.202***		

Note: *** $p < 0.01$, ** $p < 0.05$,* $p < 0.1$.

To evaluate the presence of multicollinearity, we calculated the variance inflation factors (VIF), which are displayed in *Table 3*. Since no VIF exceeds the value of 5, we can conclude that there were no severe multicollinearity issues in our data (Hair et al., 2010). We also verified the other pre-requisites of the Gauss-Markov theorem: zero mean, normality and autocorrelation of residuals; no severe violations of the regression assumptions have been found.

To verify our linearity assumption, we performed additional tests of non-linearity. Specifically, we included the squared terms for aerobic and anaerobic activities to test for the existence of quadratic relationships. However, neither the squared term for aerobic activities ($\beta = 0.001$, $p = 0.396$) nor the squared term for anaerobic activities ($\beta = 0.001$, $p = 0.917$) were statistically significant.

As anticipated earlier, there are several observations that differ substantially from other cases. Specifically, five respondents carried out more than six hours of aerobic activities per week, and four

respondents carried out more than six hours of anaerobic activities weekly. Professional sportsmen or enthusiastic amateurs may represent potentially influential observations. However, when having removed these cases from the analysis, our conclusions remained unchanged.

Discussion

The results suggest that academic achievement of female university students is positively affected by the number of hours spent doing aerobic physical activity; however, this finding does not apply to male students. Moreover, we observed no significant effect of the anaerobic physical activity on the average grade. Besides, age seems to affect academic achievement negatively; older students perform worse, probably because they are often employed and do not focus on achieving good grades.

Our findings in the female students' subsample are consistent with studies performed in other countries (e.g. Castelli et al., 2007). Aerobic physical activity leads to changes in cognitive functions (Hillman et al., 2005) and to changes in the brain tissue. Individuals who regularly carry out aerobic activities are supposed to enjoy better reaction skills and a better ability to concentrate. Moreover, physical activity seems to positively affect the overall physical well-being (Mutrie et al., 2010). As a result, individuals who are active in aerobic sports may improve their abilities to manage their duties and organize their time; also, they enjoy better perseverance and lower levels of stress (Rajic, 1997). To further elaborate on the explanation of the benefits of physical activity on the academic achievement, we may refer to the meta-analysis of Colcombe and Kramer (2003) who summarized the results of 18 studies. According to the authors, physical activity had the most positive effect on the executive functions, which may be understood as cognitive processes allowing for staying focused and resolving new and unexpected situations. Specifically, executive functions involve self-

control, selective attention, working memory, creative thinking, the ability to incorporate different perspectives and to adapt to new circumstances (Diamond, 2013). The beneficial effect of the aerobic exercise on the executive functions is probably the main reason for a better ability to learn. In the experimental study of Kramer et al. (1999), the adult participants who undertook a training in the aerobic exercises were better able to solve tasks which required the executive functions.

However, according to our results, the above effects are significantly pronounced in the case of female students only. This finding is consistent with Carlson et al. (2008) who argue that gender differences in the effects of physical activity on the overall fitness are due to lower baseline levels of fitness in the case of females. As a result, the physical activity of male students may not produce the same physiological and psychological effects, which we observed in the subsample of female students.

Conclusion

In this study, we found that unlike anaerobic activity, aerobic activity has positive effects on study achievement of female university students. The study complements previous studies and suggests that aerobic activities support the development of executive functions of female students, as well as their organizational skills and the overall wellbeing. Together, these effects may contribute to a better ability to learn. However, we did not find significant evidence on a positive relationship between physical activity and academic achievement among male students.

This study is not free of limitations. One of them is the research sample size. Second, our sample was based on students of a business school. While this may represent a possible source of bias, we cannot be sure that the effect size in the population depends on the field of study. Third, academic achievement may also be influenced by other factors

not included in our model, such as the intelligence or the social, economic or family status of university students.

Our results may be used when designing study plans of universities. If the long-term sport activity with a middle intensity of exercise improves the study predispositions, policymakers may consider increasing the offer of courses focused on aerobic activities. In study plans with no physical education, such courses may even become compulsory study courses. Moreover, according to our results, courses focused on anaerobic activities will not improve the academic achievement. Our findings may also be used by the individual students; we argue that it is worthy to devote several hours per week to aerobic exercise, not only to improve own grades, but especially to improve own overall physical and psychical condition.

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Staff Perceptions on Implementation and Challenges of Student Centered Pedagogy: A Case Study

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Abstract: In today's world, a teacher should remain a facilitator rather than a tutor. Students should be empowered to develop problem-solving, critical thinking and reasoning skills. Student-centred learning (SCL) is the best methodology to aim for the above. The aim of this research is to study the perceptions of staff on implementing student-centred learning and its challenges with reference to the Department of IT, Higher College of Technology, Muscat. The best SCL practices implemented in the department are explored in this research. The study participants were course coordinators from three levels – Diploma, Advanced Diploma and Bachelor. The study used the stratified sampling method to choose a sample size of 24 subjects. Two different approaches (survey questionnaire and a focus group discussion) were used in collecting the data. The objective data related to the experiences of SCL implementation was processed using SPSS and summarized in tables. Google Cloud Speech-to-text API was employed to analyse the recordings of focus group discussion. The research results show that SCL is more effectively implemented in Advanced Diploma & Bachelor levels compared to Diploma levels. Among the challenges reported are: difficulty in English language, cultural differences, decreased reading habits, lack of adequate facilities, students' resistance, etc. This research recommends that all stakeholders in education should encourage students to be self-focused, active and life-long learners.
Keywords: Student centred learning, active learning, student centred learning challenges, Open Education Resources

1. Introduction

"If you tell me, I will listen. If you show me, I will see. But if you let me experience, I will learn" (http://www.nwlink.com/~dondark/hrd/history/chinese.html). These inspiring quotes from the Chinese philosopher Lao-tzu in the 5th century marked the beginning of the first active learning philosophy. Indeed, gaining experience is the most important part of our life. However, the majority of our classrooms have still the traditional pedagogical teaching environment where the student participation is not predominant. One can nevertheless ask: what is wrong with listening to a lecture? It is because that studies dating back to 1885 point out that we forget almost 70 percent of what we have just read, heard, or seen? The old model of passive learning is no longer sufficient to prepare our children in today's world (Edutopia, 2007, "Project Based Learning"). The concept of active learning has deep roots ever since Reg Revans (1907–2003) introduced it (Revans, 1982). But it was only popularized during the 1990s. In student-centred learning (SCL), students actively participate in the learning process rather than just passively listening ("Active Learning", n.d.). Also, there is an important correlation between student attention and the active learning. Anything besides listening to a lecture is considered as active learning, which is a SCL approach (Smith, n.d.). Past research shows that the average attention time of a student in a conventional learning environment is 10-15 minutes, yet most of our lectures last for 50 to 60 minutes (Wilson & Corn, 2007). Few studies support this view but in few other kinds of literature, authors find it difficult to prove that students' attention declines after 10-15 minutes. Because there can be individual differences in attention, this assumption cannot be generalized. The key solution to get student attention is to flip the classroom environment to a student-centred learning environment.

Student-centred learning can also be implemented through blended learning approaches. Blended learning is a combination of

online learning and face-to-face student and teacher interaction. According to Horn and Staker (2014, p.175), online training helps to deliver tailor-made lectures to a classroom of mixed student levels. A multi-model blended learning approach developed by Chen (2018) resulted in the improvement of overall student skills such as reading, listening, speaking, etc. Such skills are very important for student-centred learning. Korte et.al. (2016) suggested that the fundamental thing to have a successful SCL is to teach students how to learn and to make them understand the importance of self-learning. This can be ensured by offering a special course or through other activities. If a student has the ability and motivation to learn, they will succeed in their academic and professional life. Teachers have a significant role in supporting the students to master the skill of learning. The research conducted by Abdel-Sattar (2017) with the aim of improving the involvement of students in an architecture course reported that SCL approaches improved the mathematical and research skills of students and helped them understand the course in a better way. A study was conducted by Kandi & Basireddy (2018) to evaluate the perceptions of implementing problem-based learning (PBL) to teach microbiology to medical students. Their findings stated that the cognitive skills of the students improved as the majority of the students liked PBL, which had been implemented through group discussions and presentations.

The overall objective of this paper is to investigate the perceptions of staff on SCL implementation and its challenges with reference to the Department of IT, Higher College of Technology, Muscat (http://www.hct.edu.om). The subsequent sections of the paper are organized as follows: Section 2 explains the background of the research; Section 3 describes the best practices of student-centred learning approaches in Department of IT, Higher College of Technology, Muscat, Sultanate of Oman. The research methodology is included in Section 4. It includes the details of the participants, research instrument, and data analysis techniques. The demographic characteristics of the participants, their perceptions on implementing student-centred

learning and its challenges are included under Results in Section 5. The discussion is under Section 6. Section 7 includes Conclusion followed by References.

2. Background

Student-centred learning has been seen as a Western idea in the last few decades (Jackson, 2015). From the time of Socrates until nowadays, there is still a heated debate regarding the conflict between two popular learning orientations: teacher-centred learning and student-centred learning (Belal, 2011). In teacher-centred learning, the teacher/instructor is the one at the central point or the significance is given to teaching. The teacher transfers the knowledge they have gained towards the students. The students follow the given instructions and remain as passive actors (King, 2011). But in the SCL pedagogy, the *learning* is placed at the core of the learning process rather than the *teaching*. The learners decide the process of learning as illustrated in *Figure 1*. The learner chooses what they like to learn, what they would do to learn, how (assistance) they would learn, and how much they must learn. The learner decides on their own learning styles and strategies. They set the learning goals and search for the resources to achieve these goals. The instructor remains just as a facilitator in the learning process (Belal, 2011). Since the learners choose what they want to learn, they become more responsible and accountable and the knowledge and skills they gain remain more extensively and permanently within them (McCombs & Whistler, 1997). The individual skills, abilities and background of the learner are also adapted to student-centred learning (McCombs & Whistler, 1997). The teacher should give more insight into encouraging children to learn from each other instead of relying completely on textbooks and on other literary resources (Weimer, 2002). The roles and responsibilities of the teacher and the students are flipped in a student-centred classroom when

compared to a traditional teacher-centred classroom. The learners decide about the content and the methodology of learning whereas the instructor must help the trainee to overcome the difficulties in the process of arriving at decisions.
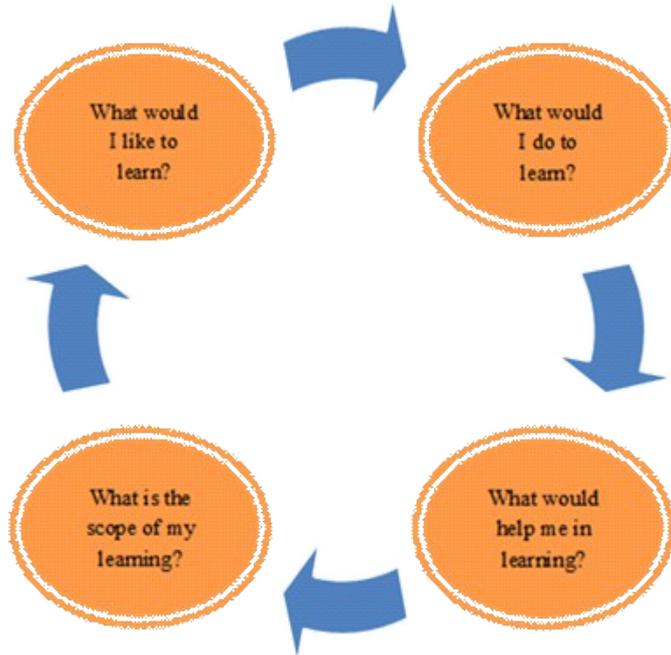
Figure 1 – Student Centred Learning Process

Methodologies used to implement SCL approaches are very important as they measure the motivation of the learners (Tseng et al., 2015). Through SCL, students acquire a broad range of skills on critical thinking, creativity, reasoning, visualization, decision making, interpersonal, etc. (Edutopia, 2007," Project Based Learning"). According to Carl Rogers, one of the most influential psychologists of the 20th century, a *person cannot teach another person directly; a person can only facilitate another's learning* (Rogers et al., 2013).

3. Student Centred Learning Strategies – Best Practices

The case study in this research focuses on the student-centred learning practices implemented in the Department of IT, Higher College of Technology, Muscat, Sultanate of Oman. The Higher College of Technology is one of the seven colleges operating under the Ministry of Manpower (MoM) in Sultanate of Oman (http://www.hct.edu.om). It is the second largest educational institution in the Sultanate. The Department of IT offers four-year bachelor programs of study in five different specializations, namely: Database, Software Engineering, Information Systems, Internet & E-Security, and Networking. SCL strategies are implemented in all the specializations through a variety of modes. Few of these are listed below:

3.1. Group Projects & Presentations

Doing projects is a real-life experience, as it requires comprehensive exploration of a real-world topic. Project-based learning is an SCL approach, which enables a student to acquire deeper knowledge to solve real-world problems (Philips, 2014). Starting from Year 2, students are required to do a project every year. Even though a supervisor is assigned as a mentor, students do by themselves the distinct phases of the project such as data collection, requirements specification, design, implementation and testing of the project. This helps the students acquire a host of skills in reading, writing, analysing, critical thinking, teamwork, problem solving, innovation, time management, etc. In addition, at the end of the project, the student must demonstrate the project in front of panellists. The presentation skills are also improved through this type of assessment. The experience of doing a project enables a student to become life-long learners.

3.2. Self-Study Topics

In every course topic, few sub-topics are identified as self-study topics. Lecturers provide the necessary guidelines to students on how to study

these topics. Students utilize the resources available in the library, or open resources available on the web and study the topics. These self-study topics are assessed through quizzes, assignments, or other activities. Sometimes, students are asked to incorporate the self-study topics in the projects.

3.3. Course Customization

A few courses in the department are designed in such a way that all the assessments are completely based on student activities as an alternative to the Final Examination system. For example, the course 'Research Methodology', which is taught in Year 3 follows a continuous assessment pattern where a student's progress is monitored throughout the semester. The lecturer encourages the students to choose a topic, prepare a research paper on the topic, and present the paper at an International Conference or publish it in an International Journal. This work is very challenging and requires rigorous hard work, since the students do a detailed literature review, prepare questionnaires, write the paper and defend the findings in a conference. But it is also one of the most academic experiences they ever get. Each student is assessed differently.

3.4. Integration of MOOC (Massive Open Online Courses)

Collaborative learning is an effective learner-centred approach particularly implemented in online courses (Tseng et al., 2015). In such environments, instructors just provide the necessary guidelines for the enrolled learners. Moreover, most of the online courses provide a feedback / comments section in which the learners clarify their doubts regarding the course from peer learners or the course instructor. Nowadays, the world's best universities offer MOOC's to all people around the world via the web. EdX, Coursera, UdaCity, Udemy, etc. are some of the MOOC providers (https://www.mooc-list.com/). In the department, the course coordinators identify short online courses whose course outcomes match with the courses offered in the

department. Then, students are asked to complete such short MOOC courses as part of the assessment. This enables students to have an exposure to courses offered by other Universities around the world.

3.5. iLearning

The Department of IT is a member of Oracle Academy. The academy offers a variety of resources to students and educators. Being a member of the academy, the IT department integrates the academy curriculum into different courses. These curricula are self-explanatory, i.e. the students read and practice by themselves with the support and guidance of the instructors. Moreover, the academy provides iLearning, an enterprise Learning Management System (LMS) to manage, deliver, and track training for online and classroom-based environments (https://ilearning.oracle.com/ilearn/en/learner/jsp/login.jsp). Courses on database concepts, SQL language, PL/SQL, Introductory Java, Advanced Java etc. are offered in iLearning. Students can perform lab sessions in cloud-based software such as APEX provided by iLearning. In this iLearning environment, online quizzes are part of every chapter. Students understand the concepts explained in each chapter and attempt the quiz. The assessment is done immediately, and students can view their results. This environment is very effective as an SCL approach.

3.6. E-learning portal

Every course resource is also hosted on the e-learning portal of the department. The portal includes course delivery plans, course materials, class activities, online quizzes, assignments, etc. Student logs, activity reports, activity access reports, course participation reports, activity completion reports are monitored by the lecturers. Every week the top 10 users are displayed in the portal. This encourages students to use the portal.

3.7. Open Educational Resources (OER)

Most of our courses are designed as OER on the e-learning portal. Relevant and valid resources are posted on the portal, which help students understand the topics. These are OER available on the Internet. Also, the department faculty prepares short customized video tutorials on selected courses/topics.

3.8. Other Classroom Activities

Group Discussions, online quizzes, individual/group activities, problem solving, case studies, etc. are organized as part of SCL.

4. Methodology

4.1. Participants

The target population of the study were the course coordinators of the Department of IT, Higher College of Technology, Muscat. The study used the stratified sampling method to select the participants since the study wishes to observe the differences between SCL implementation and challenges in various program levels. Thus, the course coordinators were divided into three different strata (Group 1, Group 2 & Group 3) based on their coordinator-ship level, namely, Diploma level, Advanced Diploma level and Bachelor level. Then the participants were randomly selected from each stratum. Group 1 was comprised of 10 Diploma level course coordinators, Group 2 was comprised of 7 Advanced Diploma coordinators and Group 3 consisted of 7 Bachelor level course coordinators.

4.2 Research Instrument

Two different instruments were used in this research for data collection. A questionnaire survey was first distributed among the participants to collect the feedback related to their perception and experiences of SCL in the department. A five-point scale from 1

'Strongly Disagree' to 5 'Strongly Agree' was used to measure the feedback. Later, a focus group discussion (FGD) was conducted to gather the data related to SCL challenges in the teaching and learning process in the department. FGD was chosen as the research instrument for collecting the challenges in order to foster more interaction among the participants in comparison to the questionnaire and individual or group interviews.

4.3 Data Analysis Techniques
The data analysis of the questionnaire was conducted through SPSS to describe the characteristics of the participants and to measure the effectiveness of SCL. In FGD, the data collected was subjective in nature. So, the researcher with the help of the moderator recorded the discussions, opinions, suggestions, etc. The whole discussion was converted into text using Google Cloud Speech-to-text API, from which the conclusions and summary were drawn (https://cloud.google.com/speech-to-text/).

5. Results

5.1 Demographic Characteristics of Participants
The study target population of FGD were twenty-four course coordinators placed in three groups. In Group 1, there were 7 male staff and 3 female staff. In Group 2, 4 were male staff, and the rest were female and in Group 3 were involved 5 male staff and 2 female staff. *Table 1* shows the percentage distribution of participants in terms of coordinator-ship level and gender.

Table 1. Percentage distribution of participants by coordinator-ship level and gender

		Number	Percentage
Coordinator-Ship Level	Diploma	10	41.6%
	Advanced Diploma	07	29.2%
	Bachelor	07	29.2%
	Total	24	100.0%
Gender	Male	16	66.67%
	Female	08	33.33%
	Total	24	100.0%

5.1.Perceptions & Experiences of Implementing SCL

The questionnaire was divided into three categories, questions on SCL Awareness, Effectiveness, and Mode of SCL activities implemented in the department.

SCL Awareness

The opinions of the participants on SCL Awareness is summarized in *Table 2*.

Table 2. SCL Awareness

SCL Awareness		Group 1					Group 2					Group 3				
		SD	D	U	A	SA	SD	D	U	A	SA	SD	D	U	A	SA
I am aware of SCL activities	No	0	0	1	7	2	0	0	0	2	5	0	0	0	1	6
	%	0	0	10	70	20	0	0	0	28.6	71.4	0	0	0	14.3	85.7
I possess enough skills to implement SCL activities in my course	No	0	0	3	4	3	0	0	0	4	3	0	0	0	2	5
	%	0	0	30	40	30	0	0	0	57.1	42.9	0	0	0	28.6	71.4
I know how to assess SCL activities	No	0	0	5	3	2	0	0	1	4	2	0	0	0	4	3
	%	0	0	50	30	20	0	0	14.3	57.1	28.6	0	0	0	57.1	42.9
I know about the challenges of implementing SCL in my course	No	0	0	0	3	7	0	0	0	1	6	0	0	0	0	7
	%	0	0	0	30	70	0	0	0	14.3	85.7	0	0	0	0	100

SCL Effectiveness

The opinions of the participants on SCL Effectiveness are summarized in *Table 3*.

Table 3. SCL Effectiveness

SCL Effectiveness		Group 1					Group 2					Group 3				
		SD	D	U	A	SA	SD	D	U	A	SA	SD	D	U	A	SA
SCL increases the confidence of a student	No	0	1	3	3	3	0	0	0	4	3	0	0	0	0	7
	%	0	10	30	30	30	0	0	0	57.1	42.9	0	0	0	0	100
SCL increases the motivation of a student	No	0	2	3	2	3	0	0	1	4	2	0	0	0	1	6
	%	0	20	30	20	30	0	0	14.3	57.1	28.6	0	0	0	14.3	85.7
Students will focus more on learning if SCL is implemented in courses	No	0	2	4	3	1	0	0	0	6	1	0	1	2	4	0
	%	0	20	40	30	10	0	0	0	85.7	14.3	0	14.3	28.6	57.1	0
Students will become more responsible and committed	No	0	1	1	3	5	0	0	0	6	1	0	0	3	4	0
	%	0	10	10	30	50	0	0	0	85.7	14.3	0	0	42.9	57.1	0
The majority of my students are interested to participate in SCL activities	No	1	1	2	4	2	0	0	1	4	2	0	0	0	4	3
	%	10	10	20	40	20	0	0	14.3	57.1	28.6	0	0	0	57.1	42.9

Mode of Implementation of SCL Activities

Table 4 shows the mode of implementation of SCL activities.

Table 4. Mode of implementation of SCL activities

Mode of implementation of SCL activities		Group 1					Group 2					Group 3				
		SD	D	U	A	SA	SD	D	U	A	SA	SD	D	U	A	SA
I use Open Educational Resources (OER) to prepare assignments.	No	0	5	3	2	0	0	0	2	4	1	0	4	1	2	0
	%	0	50	30	20	0	0	0	28.6	57.1	14.3	0	57.1	14.3	28.6	0
My students are involved in online discussions/ online quizzes	No	2	5	0	2	1	1	2	2	1	1	0	0	1	5	1
	%	20	50	0	20	10	14.3	28.6	28.6	14.3	14.3	0	0	14.3	71.4	14.3
I include problem-based learning in my course	No	0	0	0	7	3	0	0	0	0	7	0	0	0	2	5
	%	0	0	0	70	30	0	0	0	0	100	0	0	0	28.6	71.4
Small group-activities are part of my course	No	3	2	0	2	3	0	0	0	1	6	0	1	0	2	4
	%	30	20	0	20	30	0	0	0	14.3	85.7	0	14.3	0	28.6	57.1
I encourage discussions in class	No	0	0	0	8	2	0	0	0	7	0	0	0	0	3	4
	%	0	0	0	80	20	0	0	0	100	0	0	0	0	42.9	57.1
I encourage students to solve problems on board	No	0	0	0	7	3	0	0	4	2	1	0	0	2	5	0
	%	0	0	0	70	30	0	0	57.1	28.6	14.3	0	0	28.6	71.4	0

5.3.Challenges of the SCL Approach

The FGD investigated the major challenges arising during the implementation of SCL in the Department of IT, HCT. The moderator encouraged lively discussions and honest opinions among the participants. The assumed challenges that were investigated by the research included the Communication / Language barrier, Cultural differences, Less Reading Habits & Lack of Well-Equipped libraries, Semester Duration, Class Strength/Numbers, Resistance from Students and Non-Availability of Smart Devices. The following summarizes the opinions of the participants.

Communication / Language barrier – The official language of Oman is Arabic. So, the medium of instruction in a majority of the primary and secondary schools in Oman is Arabic with a few exceptions in the case of private schools. The majority of the participants in all three groups pointed out that the students find it difficult to understand and communicate in English since the medium of instruction in higher education institutions is English. Before joining the Post-foundation courses, the students go through a Foundation year where they study English, IT, and Maths courses. But still, the students lack communication / writing skills in English, particularly when it comes to technical terms. So, the participants agreed that when a group activity / discussion is conducted, students find it difficult to convey their opinions and comments. This affects the discussion negatively and hence their performance. Arabic speaking participants in Group 1 commented that when they translated the key points in Arabic, the rate of participation of students in the discussion improved as they were able to understand the concepts better. Group 2 & 3 participants pointed out that the communication of students in the Advanced Diploma & Bachelor level is better compared to the Diploma level. But still, it must be improved.

Cultural differences – According to Arab culture, and especially in Oman, young women are usually reserved to talk in public. Male participants in Group 1 & 2 commented that female students often feel very shy to face the class when engaged in presentations, debates or any discussions, particularly in mixed classes. But female participants of the above groups had a blended experience that sometimes active participation is observed among female students and sometimes not. The majority of the Group 1 participants also commented that when the teacher gives opportunities to solve some questions on board, the participation is found very less from the female category. However, one female participant in Group 1 suggested that there are exceptions with female students more actively participating in such scenarios. Also, for any SCL oriented group activities, students of the opposite gender are

hardly grouped together (Emenyeonu, 2012) as part of the customs and beliefs in Oman. This affects the process of active learning. Group 1 and 2 participants agreed to the above point. But Group 3 participants commented that sometimes female students in some batches are active and work together with their male classmates in project / group discussions. Also, as per the past records and experiences, usually female students excel in assessments and the rate of female students successfully completing the bachelor's degree is high compared to their male counterparts. So, a majority of the participants suggested that if opposite genders were able to work together, with the support of female students, the male students would be able to understand the concepts better and be involved actively in the discussions.

Less Reading Habits & Lack of Well-Equipped Libraries – From the past decades, teachers share a perception that the reading habits of people in the Arab world are poor (Rajab, 2015). Many researchers argue that the main reason for poor reading habits is the oral nature of Arabic culture, which gives more importance to recitation. All the participants in Group 1 commented this to be a major challenge. One participant in Group 1 said that "I continuously advise my students to visit the library and to read relevant books". But they are not prepared to read and understand. Another participant in Group 1 commented that sometimes they are not properly reading the questions itself during exams and they call the attention of invigilators to explain the questions to them. Two Group 2 participants had the opinion that students just memorize the PowerPoint slides or notes and reproduce them during exams. So, they are not able to solve indirect questions as they are not that capable to write differently from what they memorized. When other participants were asked about their opinion on this, the majority agreed to it with few exceptions. One participant in Group 3 said that "I assign separate marks for decent writing and proper referencing, and this forces the majority of the students to refer to library books to complete the assignments / projects". Among the participants, about 85 percent responded that sometimes the contents of the textbooks or

reference books (examples, scenarios, illustrations, etc.) did not match with the local scene in Oman as most of the authors are from Western countries (Emenyeonu, 2012). As a result, the students felt difficulty in understanding the concepts through such examples.

To promote the reading culture of students in Oman, the country has taken several initiatives including a mobile library which was launched in December 2013 (Times of Oman, 2015). There is a shortage of public libraries in Oman (Al-Musalli, 2014). Even if more libraries were established, the students would hardly have time to read books. The social media has influenced them so much that after the class hours, they wish to spend time playing with the mobile phones.

Semester Duration – According to almost all participants, the duration of the semester is also a key barrier in implementing SCL activities. Most of the semesters have 12-13 weeks of teaching. But due to holidays (Eid & Ramadan), the effective teaching hours are further decreased. So, all the participants pointed out that they find it difficult to cover the course outcomes if they allocate time for presentations, group work, and assignments. Thus, in this scenario, teachers are not able to dedicate much time to student-centred learning approaches such as focused group discussions, debates, field trips etc. One participant in Group 3 commented: "When I have less students in a class, I am able to give more SCL activities, and I found that students actively participate in such activities, particularly if the class consists of only female students."

Class Strength (Numbers) – This is yet another challenge for initiating presentations, seminars, or other SCL-related activities. About 95 percent of the participants in Group 1 said that the majority of the classes involve an average of 25-30 students. With this class strength/number, it is challenging to schedule individual / group presentations as it takes more lecture days to complete such activities. The opinion of Group 3 participants was that if the course is more practical-oriented, activities such as short assignments or projects are given to students to solve by themselves at home. But Group 1 & 2

participants reported that they conducted short activities in the class itself and the teacher assisted the students in the completion of such activities. So, a class with a larger number of students negatively affects these activities as sometimes the teacher will not be able to clear the doubts of all students within the stipulated time.

Resistance from Students – The majority of the students still believe in traditional teaching methods, where the teacher has the key role in the process of teaching and learning. Even though the teacher is motivated to involve students in different SCL activities, still a majority of them wish to sit and listen to their teacher, as a kind of spoon-feeding. The participants had a mixed opinion about this challenge. As per a Group 1 participant, she reported: "I call my students to solve the activity questions on board, and they happily participate. Sometimes, the same students wish to attempt again". The other Group 1 participants agreed to this point that sometimes there is a rough starting, but after a few volunteers, then the rest of the students also participate. Participants in Group 2 & 3 had a different opinion, namely that the majority of the students believe that the teacher is still the sole authority in the classroom. One participant in Group 3 reported: "When I asked one of my students to solve a problem, he solved it, but still the other students want me to explain it again. So, the students believe that only teachers have the knowledge and everything should come from them."

Network Strength, Availability of Smart Devices, Free Access Labs, etc. – Sometimes, technology itself serves as a barrier to implement and progress on SCL methods. The availability and the high-bandwidth of the Internet are very essential to have technology integrated SCL approaches. Almost 99 percent of the participants agreed that they face a lot of difficulties in labs when conducting SCL activities. A Group 3 participant commented that, "When I remind the students about the deadline of assignments in class, they say that there aren't enough free access labs to complete the assignments". The majority of the Group 1 participants reported that we cannot expect all

diploma level students to own a laptop. Teachers do not have time to spend dealing with low-bandwidth or equipment failure issues. Students must be provided with enough labs, for practice, which are equipped with the latest technologies.

6. Discussion

The study findings indicate that almost 90% of Group 1, and 100% of Group 2 & 3 respondents are aware of SCL activities. Group 2 & 3 coordinators were more experienced than Group 1, which consists of Diploma level coordinators. Almost 100% of Group 2 & 3 reported that they are confident that they have enough skills to implement SCL, whereas only 70% of Group 1 were confident. Regarding the assessment of SCL activities, there were mixed opinions among Group 1 & 2. Around 50% of Group 1 and 85.7% of Group 2 only knew how to carry out the assessment. But all Group 3 participants were sure about assessment methods. All the participants were aware of the challenges of SCL implementation.

The opinions of the groups on the effectiveness of implementing SCL were diverse. All Group 2 & 3 respondents were sure that SCL increases the confidence of students, whereas, in Group 1, only 60% agreed to this. Regarding student motivation, 20% of Group 1 participants disagree, 30% were unsure, and the rest agreed. In Group 2, around 85.7% of participants agreed and the rest were unsure. In Group 3, all the participants agreed.

In Group 1, only 40% agreed that students would focus more on learning if SCL were implemented, whereas in Group 2, all the participants agreed and in Group 3, 85.7% agreed. Around 80% of Group 1 favoured student responsibility & commitment to SCL, whereas 100% of Group 2 preferred it. However, in Group 3, only 57.1% agreed that students would become more committed, while 42.9% were unsure about it. 60% of Group 1 participants reported that students were

interested in SCL activities. In Group 2, 85.7% positively responded to this, whereas in Group 3, everyone agreed.

Regarding the mode of implementation of SCL activities, problem-based learning, class discussions, and problem solving on the board were the most preferred methods of SCL activity among Group 1. Only 50% of Group 1 participants included small group-activities in their courses. Regarding online activities (discussions & quizzes), only 30% agreed. 20% agreed that they use OER in their courses. Similarly, in Group 2, problem-based learning and class discussions were the most preferred ones, followed by group activities, use of OER, class discussions, solving problems on the board and online activities. In Group 3, problem-based learning received the highest score followed by group activities, class discussions, solving problems on board, and use of OER.

Regarding the SCL effectiveness, the results are similar with other studies such as which is reported by the research in Tseng et al. (2015), where students are found to be more focused and responsible during SCL activities. As per the opinion of the respondents, Advanced Diploma students were found to be more focused on learning than Diploma & Bachelor students. Regarding SCL challenges, similar findings are reported by the study conducted in Oman (Emenyeonu, 2012) where language, cultural differences, less reading habits, student resistance etc. are the major barriers in implementing SCL. However, another study conducted in 2014 (Al-Musalli, 2014) among university students in Oman reported that Omani students read more in their mother tongue than in English. Consequently, it might be untrue to comment in general that the students have less reading habits.

This study strongly recognizes the non-availability of resources as one key challenge as reported by the research conducted among higher education institutions in Eriteria (Tekle, 2017), which states that the availability of resources affects the practice of SCL. Time constraints pose a significant issue in the implementation of student-centred learning activities as reported in the literature (Seng, 2014). According

to Seng, the respondents stated that it takes a lot of time to complete the activities as part of SCL, thereby serving as a difficulty to complete the topics within the time allotted. Overall, our research is consistent with the previous studies carried out in the similar domain.

7. Conclusion & Recommendation

To implement a student-centred classroom, the instructors must be willing to prioritize the learning, moving away from traditional teaching methodologies. The instructor, being a facilitator, can help the learners to set a goal and to achieve it through self-confidence and improved skills. Instructors can also help the learner to identify the best method of study, suitable to each learner. In a student-centred classroom, the learner is responsible for their own learning. They set their goals, identify the strategies to achieve these goals, and do self-assessment. The instructor just remains as a facilitator who reviews the learning strategies, assessment methods, resources, etc. chosen by the learner.

To sum up, this study investigated the perceptions of staff regarding the implementation and challenges of Student-Centred Learning in the Sultanate of Oman. The study participants were the course coordinators from three levels – Diploma, Advanced Diploma and Bachelor of the Department of IT, Higher College of Technology. The best SCL practices implemented in the department were explored in the research. The study used the stratified sampling method to choose a sample size of 24 subjects. Two different approaches (survey questionnaire and a focus group discussion) were used in collecting the data. The objective data related to the experiences of SCL implementation was processed using SPSS and summarized in tables. Google Cloud Speech-to-text API was employed to analyse the recordings of focus group discussion.

The results show that SCL is more effective at the Advanced Diploma and Bachelor level than at the Diploma level students. Such

students tend to be more serious about their studies, and they actively participate in the learning process. When in a reduced class size, they are found to work comfortably in groups, sometimes irrespective of their gender, under the close monitoring of the course lecturer. The awareness related to SCL among the course lecturers was comparatively better at the Bachelor level than at the Diploma & Advanced Diploma level.

The majority of the course lecturers at the Diploma & Advanced Diploma level found to need more details when dealing with the assessment of SCL. Therefore, it is required to empower them with suitable training to shift towards a learner-centred approach of teaching rather than the traditional ones. Problem-based learning was found to be the favourite SCL activity among all the groups.

Regarding the challenges, the English language level of the students needs to improve in order to empower them to read and understand the study materials. Also, improvements in student support services such as availability of free-access labs for practice, adequate network connectivity, digital resources etc. should be given due consideration. Overall, the culture of life-long learning must be encouraged among the students and, in order to ensure this all the stakeholders (students, teachers, parents, administrators, staff, etc.) must work together.

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A Governance Approach to the Management of Quality Assurance in the University for Development Studies, Ghana

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Abstract: The study examines the structure of governance of quality assurance in the University for Development Studies, Ghana. The study adopts a qualitative descriptive research design. The data was obtained through in-depth interviews and document study. Three staff of the Directorate of Academic Planning and Quality Assurance and 13 Faculty/School Quality Assurance Officers were interviewed. The study revealed that quality assurance governance in the University has evolved over the years and there is devolution of quality assurance activities to the Quality Assurance Officers and Committees in the Campuses of the University. However, what remains unresolved is the full implementation of the governance structure as stipulated in the Quality Assurance Policy of the University. The paper recommends that there should be key appointments of qualified personnel to fill the staff gap to make the quality assurance governance structure functional. It is further recommended that the independence and integrity of the Quality Assurance Committees at the Faculty/School and Departmental level need to be ensured by excluding Deans and Heads of Departments from the Committees.

Keywords: Quality assurance, governance, higher education institutions, Ghana

Introduction

The human capital of a nation, which is the most important factor of production, ensures the economic success of the nation. The quality of human capital is, in turn, influenced and fuelled by the quality of the educational system. Human capital, which is expressed in the form of knowledge, skills, creativity and cherished social values is obtained from the quality of education given to the population (Pavel, 2012). The quality of knowledge provided by higher education institutions (HEIs) is a crucial component of national competitiveness and the comparative advantage in higher education. Quality education does not only sharpen the minds and skills of individuals but also fosters the transformation agenda of countries. Therefore, countries can attain their sustainable development through the development of their human capital (World Bank, 2004).

The plethora of changes in the field of higher education is fuelled by political, economic and socio-cultural forces that have occurred in the second part of the 20th century. These waves of changes among others include funding regimes, educational technologies, greater diversity of students as well as diversity of academic programmes to match with industrial needs (Požarnik, 2009; Coughlan, 2015). At the same time, these changes have triggered a concern about the quality of education offered by universities (Massy, 2003; Amaral, 2007; Martin and Stella, 2007; Becket and Brookes, 2008). This has necessitated a formal approach to dealing with quality through schemes of quality assurance in comparison to what it was required in the conventional elite universities (Brennan and Shah, 2000). Accordingly, many countries across the world have embraced formal quality assurance structures with the resolve to standardise and improve quality of their higher education systems. Notwithstanding, the non-existence of consensus over what constitute quality, formal quality assurance at the moment is a topical component of reform and policy in HEIs so as to

meet the expectations of both internal and external stakeholders of educational services (Kennedy, 2003).

The establishment of Quality Assurance units and structures has been common across the tertiary education landscape worldwide. In Ghana, all tertiary institutions irrespective of whether they are publicly or privately owned must establish quality assurance structures. This requirement is in tandem with the mandate of the National Accreditation Board (NAB) that the establishment of Internal Quality Assurance Unit (IQAU) is a statutory requirement in tertiary institutions in Ghana (NAB, 2011). In the case of the University for Development Studies, the Quality Assurance Unit came into being in the year 2008 following consultations with the relevant stakeholders of the University.

There are several studies on quality assurance in universities but there is no empirical study on the governance approach to the management of quality assurance in a multi-campus University setting such as the University for Development Studies. Some recent empirical studies by Seniwoliba and Yakubu (2015) as well as Seniwoliba (2014) focused on quality assurance in public universities in general. Other studies such as Okae-Adjei (2012); Tsevi (2014) and Boateng (2014); as well as Badu-Nyarko (2013) highlighted quality assurance in polytechnics, private tertiary institutions and distance learning respectively. The studies carried out by Seniwoliba (2014) and Okae-Adjei (2012) in particular were general and mainly focused on the student lifecycle framework; Tsevi (2014) analysed the institutional and accreditation of academic programmes; Boateng (2014) assessed barriers within private tertiary institutions in Ghana on quality assurance; and Badu-Nyarko (2013) ascertained quality assurance in undergraduate distance education in the University of Ghana. Seniwoliba and Yakubu (2015) also looked at quality assurance policies in a Ghanaian university with particular reference to the University for Development Studies.

In the light of the areas examined by the studies above, this study aims at examining the governance aspect of the implementation of

internal quality assurance of the University for Development Studies. The study will be beneficial to the research community as it contributes to the management of quality assurance in a multi-campus university setting. This paper is structured in the following order: the section after the introduction is the literature review on quality and quality assurance in the higher education setting. This is followed by the nexus of governance and quality assurance. The subsequent section sheds light on the method and results, while the final section presents the conclusions and offers some recommendations regarding the management of quality assurance in the University for Development Studies.

Literature Review

Quality and Quality Assurance

Quality has increasingly become a very important aspect of HEIs across the world. This is based on the strong justification that attaining competitive advantage in the midst of massification and internationalisation of higher education requires quality in the training of students. In the case of Ghana, quality of higher education is not a new idea and has been an implicit concern since the establishment of Ghana's first university (University of Ghana) in 1948. Chacha (2002) therefore, thinks that universities worldwide are expected to ensure quality and excellence, responsiveness, equity, effectiveness and efficiency in educational services provisioning, good institutional governance and management of resources in a manner that fosters excellence.

The word 'quality' has its foundation in the industrial and commercial setting in the 1980s and has found its way into the field of higher education (Okae-Adjei, 2012). As a result, quality has no absolute definition in the context of higher education. Therefore, the relative

definition of quality requires judgement against a set of benchmarks or standards (Crozier et al., 2006). Quality is a value judgement with diverse interpretation by educational stakeholders such as governments, non-teaching staff, teaching staff and students, among others. Quality can be likened to beauty, which is based on personal judgement (Doherty, 2008).

In spite of the difficulty in defining quality in higher education, Mishra (2007) contended that the whole concept of quality revolves around some focal ideas such as quality as *absolute* (quality considered as a standard that can be measured across a scale), quality as *relative* (described relative to specific situations), quality as *a process* which embraces procedures and outcomes of the system, and quality as *a culture* which is imbibed by organisations as a transformative drive towards the attainment of the organisational goals. Mishra noted that HEIs are more inclined to quality as a culture although other thematic areas of quality have a special place in the educational institutions. Harvey (1997), on the other hand, identified five distinguishable aspects of quality with respect to higher education. These five aspects of quality are: quality as exceptional, quality as perfection, quality as fitness for purpose, quality as value for money as well as quality as transformation. Some of these definitions of quality have produced ambivalence among a host of scholars in their application in the educational setting. For instance, the aspect of quality as perfection cannot be applied to higher education because institutions do not aim to produce graduates that are free of defects or meet all the dynamics of the labour market (Watty, 2003).

The definition of quality by different stakeholders leans on the multi-dimensional, multilevel and dynamic nature of the concept. This in turn relates to the circumstantial milieu of the model of education, vision and mission of institutions and specific standard set forth in a given system as well as the academic discipline (Pavel, 2012). Therefore, countries are likely to define quality differently based on their specific higher education policy and goals. This paper adopts the

definition of quality as *fitness for purpose* which embraces the concept of meeting prior agreed guidelines or standards which may be defined by legal, institutional, academic/professional bodies and/or quality assurance agencies (Materu, 2007). In the different arena of higher education, fitness for purpose differs greatly by field and academic programme. However, fitness for purpose demands the delineation of the purpose as well as development of criteria referenced judgement (Doherty, 2008).

A multiplicity of factors affect quality in tertiary institutions which include but are not limited to the following: the vision and goals of the tertiary institution, teaching staff talent and specialisation, admission procedures and standards of assessment, the environment for teaching and learning, the employability of the graduates produced (i.e. the relevance of the graduates on the labour market), the quality of the library facilities including stock and e-learning materials, quality of laboratories for practical sessions, the effectiveness of management, governance structures and leadership (Seniwoliba, 2014). It is therefore imperative that HEIs put mechanisms in place in order to assure stakeholders of the quality of the education offered to students. Pavel (2012) noted that concerns about the quality of higher education are not a recent phenomenon because the various components of higher education such as governance, contents, pedagogical forms and the services provided have taken place in relation to assessments, monitoring, and improvement of quality. He added that what was new covers those developments which border on quality assurance and its management.

Quality assurance in universities as service organisations is relevant to stakeholders including students, parents/guardians and the government and it is an important aspect of the audit process. This is because quality assurance offers confidence in the value of higher education system and as a means to reverse decline in quality as result of dwindling resources, proliferation of the private sector into tertiary education provision, poor governance and inadequate qualified

academic staff to mention but a few (Materu, 2007). While quality assurance is noted to be important in higher education, the conceptualisation of quality assurance and quality management is still a contending question among stakeholders. Quality assurance is a deliberate and systematic process of the review of an institution or programme to ascertain whether or not agreed upon standards of education, scholarship, and infrastructure are met, maintained and enhanced (Hayward, 2001).

Quality assurance in the university system can be considered from two dimensions. The first aspect is the internal quality assurance while the second part is the external quality assurance. The internal quality assurance aims at ensuring that an academic programme or institution has laid down policies that guide its standards and objectives in its operations. The external quality assurance, on the other hand, is usually carried out or conducted by external agencies to keep the integrity of the tertiary institution system in check. The external quality assurance mechanisms usually involve accreditation, quality audit and quality assessment (Tsevi, 2014).

Accreditation usually involves the process of self-study and outside quality assurance review of higher education in order to ascertain that an institution and/or its programmes meet a set of rudimentary standards of quality and the need for improved quality (Seniwoliba, 2014). The process is intended to ascertain as to whether or not an institution has attained or exceeded basic publicly verifiable standards which are set by external bodies (such as NAB, NCTE, or other professional bodies in the case of Ghana) on the one hand and whether institutions are realising their documented mission and purpose on the other. The procedure commonly comprises a self-evaluation, a peer review process and a visit to the premises of the institution. The successful completion of the processes with satisfactory outcomes leads to programme or institutional accreditation by the external body (Seniwoliba, 2014). In short, accreditation output normally leads to a yes/no decision, although graduation can be possible. It is a widely used

method of quality assurance in both the global North and South (Viktoria, 2005).

Quality audit is also a process of appraisal or scrutinizing an institution or academic programme to ascertain whether the programme curriculum, academic staff, and infrastructure meet its outlined goals and objectives (Seniwoliba, 2014). The evaluation of an institution or its programmes is usually carried out by taking into consideration the mission, goals, and stated standards of the institution in question. The team of assessors are more concerned about the success of the institution in achieving its stated goals. The main areas of the audit are the accountability of the institution and programmes. Again, the process normally consists of a self-evaluation, a peer review and a visit to the premises of the institution. The audit can equally be self-managed or conducted by an external body (Seniwoliba, 2014). On the whole, a quality audit is carried out to ascertain the extent of accomplishing specified explicit or implicit goals and stated objectives of the institution (Viktoria, 2005).

A quality assessment is a periodic review of an institution or academic programme by a panel of experts upon which a final report is issued. It is a rigorous endeavour that requires institutions to prepare well in advance before the commencement of the assessment process. Quality assessment is a model of quality assurance involving managing agent(s), self-evaluation, external peer review and publication of reports. In a more germane manner, quality assessment seeks to improve the accountability of institutions to its stakeholders (Baryeh, 2009). Quality assessment is a quantitative evaluation about the quality based on graded judgement and seeks to answer the question "how good are your outputs?" (Viktoria, 2005, p.5).

In Ghana, the external quality assurance body is the NAB responsible for ensuring quality and improvement in higher education institutions. By and large, the NAB undertakes its external quality assurance responsibility by both institutional and programme accreditation. By this, HEIs are required to meet threshold

requirements that can be verified through self-study from documents prepared by institutions, accompanied by a visit of a panel of experts from the Board (Tsevi, 2014).

The American Society for Quality (2017) posits that quality assurance is a basic aspect of the audit function. This is due to the fact that quality assurance is used to match attained quality in contrast to the established standard for quality with the aim of determining deviations and to set in motion measures to deal with such deviations. As a result, the audit function cannot be carried out without recourse to quality assurance as a prelude to the audit decision. In the same way, audit of a higher degree which is a final product in the case of universities as service organisations should be carried out in the light of quality assurance. It is also important to point out that quality control and quality assurance have been used interchangeably in many domains but are not exactly the same. In the field of corporate audit, quality control and quality assurance are two intrinsic functions. Whereas quality control is characteristic of a product company, quality assurance on the other hand relates to a service company such as the university in the field of corporate audit (Ngwakwe and Ngoepe, 2017).

It is also important to stress that there are rudimentary principles that should be taken into account in quality assurance assessment such as reliability, validity, transparency, fairness, credibility, and academic integrity.

Governance and Quality Assurance Nexus

Governance is a cross-cutting issue that permeates all sectors of development and a major policy concern of the 21st century higher education (Kennedy, 2003). It is a key issue not only in higher education but the society at large. The way and manner in which organisations are managed and directed as well as organisational values are clear manifestations of what they stand for and function in society. It is a fact that the structure of governance of HEIs such as universities was not

questioned for the larger part of the 20th century (Kennedy, 2003). However, at the later part of the same century, major changes in higher education were undertaken including governments position on how universities were administered as well as the role of universities in national development. The demand for more accountability and intensified scrutiny of outside stakeholders challenged the conventional values of universities (Kennedy, 2003). Therefore, universities were required to meet the expectations of external stakeholders as part of shaping their focus in nation building.

According to Hénard and Mitterle (2010), the issue of governance in higher education has been required because of the following reasons: expansion in the tertiary education sector; diversity in the provisioning including programmes diversification and private sector participation; new pathways of delivery including distance and e-learning; heterogeneity of student composition including more females and mature students; ongoing internationalisation of higher education; and research and innovation which have leveraged new knowledge production. These factors continue to shape the focus of universities worldwide so as to meet the needs of the dynamic knowledge driven society.

Good governance in institutions of higher learning is an integral part of their success. Good governance as an extension of the concept of governance is simply a system which attempts to maintain the integrity of the value of an educational system while concurrently placing universities in relation to their bigger environment. This is to ensure that the educational system is responsive and accountable to external communication, demands and expectations of stakeholders (Hénard and Mitterle, 2010). There is no doubt that good governance can make institutions of higher learning more effective and efficient while maintaining the quality in the training of students.

It is impossible to decouple governance issues from quality in HEIs today. Universities have increasingly been expected to demonstrate greater accountability to stakeholders. This is because universities are

funded by tax payers' money and there is the need to ensure value for money or responsible use of public resources in the operations of universities. The trajectory of greater public accountability and transparency has developed parallels towards the autonomy of universities. These ideas reflect the recognition that the public has a keen interest in institutions of higher learning which should be in tandem with the benefits that are associated with the autonomy of universities. Therefore, the public interest as a matter of fact should necessarily be sustained in terms of guaranteed academic standards and quality, equity in student admission procedures and increased accessibility of students from less endowed families as well as ensuring internal efficiency in the use of public funds (Hénard and Mitterle, 2010).

There are many ways of ensuring universities are accountable to their constituents. One of the surest ways is through the adoption of quality assurance frameworks. These frameworks set out benchmarks and commitments against which the quality of universities can be measured. Apart from these quality assurance frameworks, performance-related funding, the interplay of the market forces and the involvement of outside stakeholders in the governing councils and/or bodies (i.e. having external representatives that would offer advice and support to the institution with regards to its mandate to society and provide constructive criticism on institutional results) are other aspects of maintaining the accountability of universities to their clientele (Hénard and Mitterle, 2010).

The issues of governance in universities, on the one hand, and of quality assurance, on the other, can be integrated and considered as two sides of the same coin in order to advance the course of complementarity among stakeholders. Quality instruments and tools in universities can serve as a catalyst of good governance and improve quality. The design and recommendation of appropriate governance arrangements in universities is likely to provide an opportunity for the state and intermediary bodies (such as quality assurance agencies,

university councils and donor/funding bodies) and HEIs to discuss pertinent issues for mutual benefit. The engagement of these stakeholders to discuss autonomy, accountability and delineation of responsibility expected by each stakeholder could widen the implementation of national regulations, explore new areas of autonomy and identify vital elements that could facilitate efficient governance of HEIs (Hénard and Mitterle, 2010).

Methodology

Research Design
For the study on the governance approach to the management of quality assurance, we used a qualitative descriptive research design. As posited by Bhattacherjee (2012), a descriptive research normally aims at conscientious observation and detailed notes taking on the phenomenon under study. Among the qualitative research approach, a case study method was employed to obtain the needed data for the study. The case study method is an approach of inquiry whereby the researcher conducts an in-depth study on a phenomenon of interest which could be a programme, an activity, an event, a process, or person(s) by the use of various procedures of data collection (Stake, 1995, cited in Creswell, 2003).

Sampling Technique and Data Collection

The researchers employed a non-probability technique of purposive sampling in order to obtain the primary data for the study. Purposive sampling technique involves the selection of participants for a study through the use of the researcher's special knowledge or expertise. The selection of the participants was based on the assumption that such participants possess certain attributes that make them suitable in eliciting appropriate response for the study. Purposive sampling is often

used in cases when the goal of the research is to give a detailed account of a situation instead of generalisation (Glassner et al., 1983, cited in Berg, 2001).

Documents published by quality assurance agencies such as NAB and NCTE were reviewed, coupled with the guidelines and reports produced by these agencies. The researchers also searched the official websites of the quality assurance agencies that provided further useful and detailed information which were related to the subject matter of the study. The Acts of Parliament of the Republic of Ghana which established these agencies were equally taken into account in the study. Apart from the aforementioned sources of information, the researchers also consulted books, journal articles and reports relevant to the study.

Interviewing was employed as the major method of primary data collection. In specific terms, unstructured interviews were carried out with three staff of DAPQA and 13 Faculty/School Quality Assurance Officers in the various Campuses of the University using semi-structured questionnaires. The flexibility that presents itself during interviews aided the researchers in being able to probe respondents for further explanation and probable clarifications when it was necessary.

Data Analysis

The study used a qualitative data analysis. It involves analysing non-numeric (qualitative) data from interviews and transcripts. In qualitative data analysis, much emphasis is placed on understanding the phenomena of interest in the social setting of the study (Bhattacherjee, 2012). Bearing this in mind, the researchers therefore, employed thematic analysis. It was carried out by data cleaning in the first instance. At this stage, the data collected was edited to deal with all errors and uncompleted statements in the course of filling the interview schedule. The researchers then read through the descriptive statements of the respondents in order to identify patterns of responses. This formed the basis for coding and categorisation of responses. The

analysis was then carried out based on the themes that emerged from the data.

Results and Discussion

Quality Assurance in the University for Development Studies

The research revealed that quality assurance in the University for Development Studies has evolved over time. The study showed that the formal approach to quality assurance in the University came into existence following a workshop that was organized on 29th April, 2008 for key stakeholders. The workshop paved the way for the establishment of the Quality Assurance Unit which was to fulfil one of the requirements of the PNDC Law 317 and its subsequent amendment into NAB Act 744, 2007. Act 744 stipulates that tertiary institutions should establish Internal Quality Assurance Unit (IQAU) within a maximum of five (5) years from the date of first accreditation. The Unit was therefore established as reported, based on the need to ensure quality teaching and learning in the University by improving academic standards, ensuring value for money and improved service delivery. Furthermore, it was envisaged that the image of the University could be boosted within and outside the country as well as make the graduates of the University more competitive in the global labour market through rigorous training and intellectual development acquired in the University.

The study showed that the internal quality assurance structures of the University have metamorphosed over the eleven years of their existence. The Directorate of Academic Planning and Quality Assurance (DAPQA) as it is known today was originally called Quality Assurance Unit (QAU) in 2008 at its inception under the Office of the Vice-Chancellor. From QAU in 2008, the word "Academic" was added as a prefix to the original name, which gave it a new name Academic Quality Assurance Unit (AQAU). Since there was the need for the Unit to assume

more functions, the Unit was subsequently changed to the Directorate of Academic and Quality Assurance (DAQA). It is important to state that quality cannot be assured in the University without proper planning. A respondent stated that according to the view of the Management of the University, a new name of the internal quality assurance structure that embodies quality and planning was needed. Therefore, the current designation as "Directorate of Academic Planning and Quality Assurance (DAPQA)" was adopted to reflect the new role of the Directorate in the University for Development Studies.

The functions of DAPQA as stated by the respondents and captured in the University Statutes and the Quality Assurance Policy of the University include:

➢ Vetting of examination results on behalf of the Academic Board;

➢ Orientation of newly appointed or upgraded (from Senior Research Assistants to either Assistant Lecturers or Lecturers) teaching staff;

➢ Students' assessment of courses and teaching staff;

➢ Monitoring of beginning of lectures at the various Campuses of the University;

➢ Vetting of proposals for new programmes to NCTE and NAB for approval and (re)accreditation respectively;

➢ Investigating appeals made by students for alleged involvement in examination malpractices; and

➢ Other duties assigned to the Directorate by the Vice-Chancellor.

Besides the above functions, the respondents also stated that the Directorate has been assigned a further responsibility of coordinating and handling affiliation request from non-charted tertiary institutions to the University.

Governance of Quality Assurance in the University for Development Studies

The study found that the management and governance of quality assurance in the University has undergone tremendous changes. The study showed that the governance of quality assurance in the University can conveniently be categorised into two phases as explained in the following subsections.

Governance of Quality Assurance from the Period 2008 to 2014

The research found that the governance of quality assurance between 2008 and 2014 had a top-down approach. During this period, the DAPQA at the Central Administration was directly responsible for overseeing all quality related issues across the Campuses of the University. None of the staff or officers at the Campuses had specific role to play in the quality assurance activities of the University. Some functions of the Directorate which were to be carried out in the Campuses were done by staff of the Directorate or other staff selected by the Directorate to do so. For instance, the monitoring of beginning of lectures at the various Campuses of the University in the Tamale and Nyankpala Campuses were carried out by staff of DAPQA while in the Navrongo and Wa Campuses, Research Fellows from the then Institute of Continuing Education and Interdisciplinary Research (ICCEIR) had to carry out the exercise on behalf of DAPQA. The interaction with staff of the Directorate revealed that in order to sustain the zeal of staff engaged to perform assignments on behalf of the Directorate, they had to be motivated upon completion of the assigned task such as the monitoring of beginning of lectures exercise. In the case of student assessment of courses and lecturers, the researchers were informed that DAPQA had to rely on the benevolence and cooperation of Faculty

and/or School Officers to administer the appraisal forms to the students.

The respondents stated that other functions of the DAPQA were carried out solely by staff of the Directorate who had to sometimes travel to the Campuses to perform these functions such as investigations of appeals made by students for alleged involvement in examinations malpractices or other constituted investigations at the instance of the Vice-Chancellor or Management.

The respondents indicated that during this period, the issue of quality assurance was nascent and this has reflected in the initial organigram or governance structure of quality assurance in the University. At the time (from 2008 to 2014), the governance structure was quite simple with forward and backward linkages of communication among University Officers. The Director as the Head of Quality Assurance Structure of the University reported directly to the Vice-Chancellor or in their absence, to the Pro-Vice Chancellor. The University Council as the highest decision making body could demand from the Vice-Chancellor to draft a report on any quality assurance issue it was interested in or required. The Director in carrying out their assigned duties was assisted by an Assistant Registrar and by Administrative Officer(s).
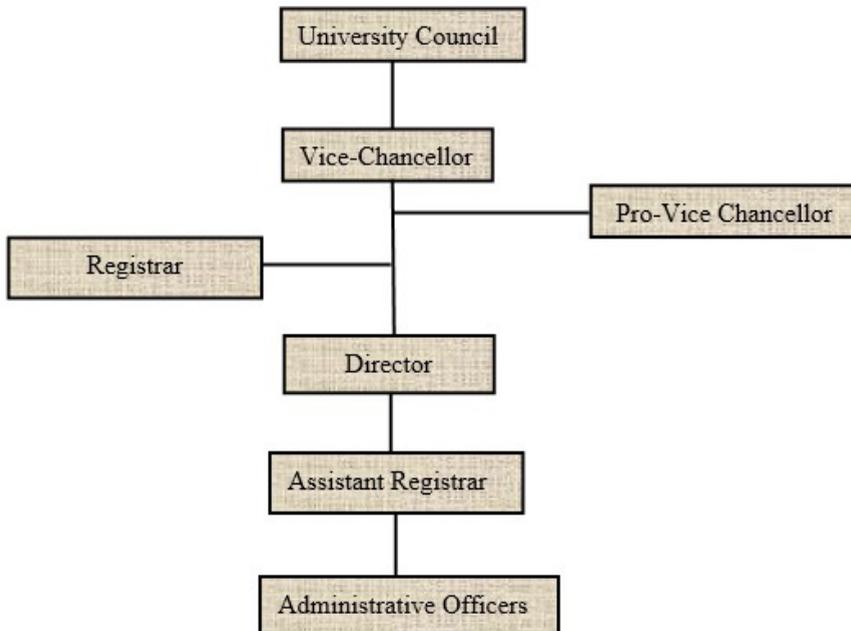
Figure 1: Governance structure of quality assurance from 20018 to 2014 in UDS (Source: Authors Construct, 2019)

The respondents further stated that, although the issue of quality assurance was nascent during the period under review, more and more was being demanded from tertiary institutions by NAB and NCTE. As a result, the then AQAU had widen its scope to cover all aspects of quality assurance in the University.

Governance of Quality Assurance after 2014

The respondents stated that after 2014, the third successive Director of Academic Planning and Quality Assurance initiated measures for the radical transformation of the governance of quality assurance in the University. According to the respondents, the initiatives culminated in the restructuring of quality assurance governance and its evolution from Directorate of Academic and Quality Assurance (DAQA) to the current designation as DAPQA. The respondents said the first ever Quality Assurance Policy handbook of the University was published in

October 2015 to give meaning and entrench a quality assurance culture in the University. This policy document, according to the respondents, was approved by the Executive Committee of the Academic Board, which ushered in a bottom-up approach to the governance of quality assurance in the University. The functions of DAPQA were therefore devolved to the Faculties and/or Schools and even to the academic departments. This placed DAPQA at the Central Administration as a coordinating body of quality assurance issues from the various Campuses of the University.
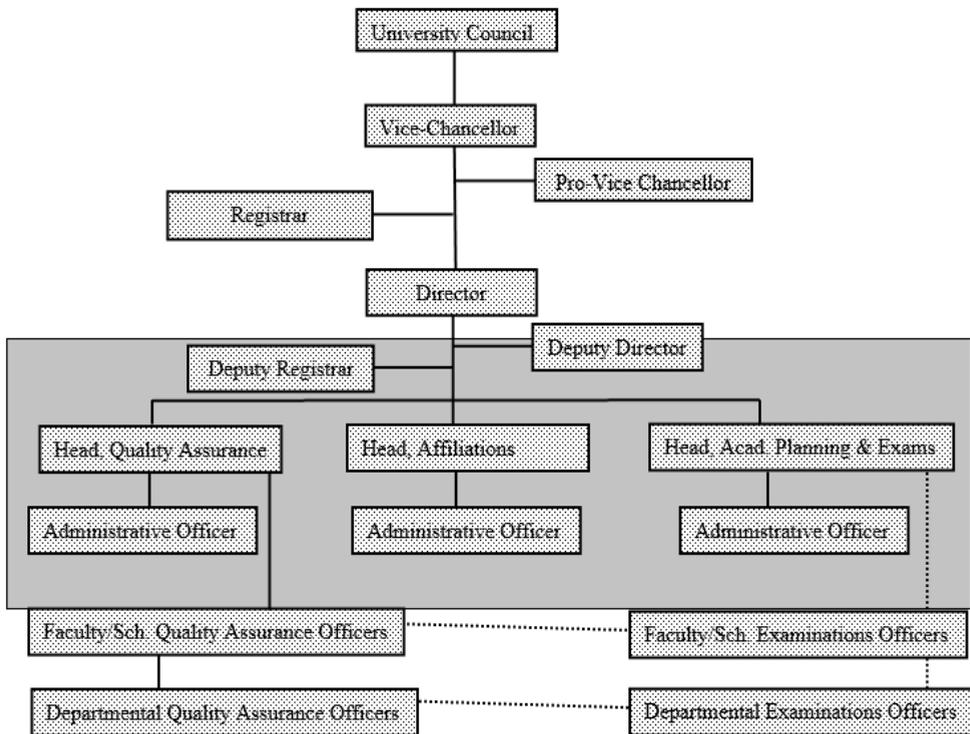
Figure 2: Governance structure of quality assurance after 2014 in UDS (Source: Modified from Quality Assurance Policy, 2015).
NB: Key partners in quality assurance in the various Campuses of the university.

As shown in *Figure 2*, the governance structure of quality assurance has been decentralised from the University Council level as

the highest decision making body to the academic units. The University Council has an important role to play in defining the policy direction of quality assurance in the University through strategic decisions. Decisions such as having a *world-class* University are founded on a quality teaching and learning environment.

The respondents noted that it was important for the Management of the University such as the Vice-Chancellor, Pro-Vice Chancellor as well as Registrar to prioritize the use of the resources of the University, which should reflect in providing quality teaching and learning. The respondents were of the opinion that the Admission Committee which has the responsibility of admitting Students into the University and which has members of Management and Director of Academic Planning and Quality Assurance as members should ensure that admission is based on quality of the applicants. This is because the quality of the students (input) ultimately determines the quality of graduates (output). The academic units (process) will then refine the students to produce graduates (the end product). This is a manifestation of the assumption that quality assurance is everybody's business in the University.

The Operationalization of the Governance Structure of Quality Assurance in the University for Development Studies

The study revealed that the governance structure for safeguarding quality assurance in the University has not been fully realised although modest gains have been made in implementing the structure. The study showed that there is no Deputy Director at post to assist the Director of Academic Planning and Quality Assurance in ensuring quality as enshrined in the Quality Assurance Policy document of the University. In terms of the day-to-day running of the Directorate, a Deputy Registrar was required but, at the moment, the place is occupied by an

Assistant Registrar. In fact, the entire highlighted area in *Figure 2* has not been implemented.

The Campus respondents who were purposively selected confirmed that indeed, there are Faculty/School Quality Assurance Officers who are responsible for overseeing and coordinating quality assurance activities in their respective Faculties/Schools. The Campus respondents further stated that there was equally Departmental Quality Assurance Officers who are in charge of quality assurance activities in their various Departments. In terms of their role, Departmental Quality Assurance Officers were to assist and report to Faculty/School Quality Assurance Officers on matters that are likely to compromise quality teaching and learning in their respective Departments.

The study found that there were two types of Committees in place in the campuses meant to ensure that quality assurance issues are dealt with dispassionately. These were Faculty/School Quality Assurance Committees and Departmental Quality Assurance Committees. The Faculty/School Quality Assurance Committees consisted of the Dean of the Faculty/School as Chairman, the Faculty/School Officer, Faculty/School Quality Assurance Officer, Faculty/School Examination Officer and Departmental Quality Assurance Officers in the Faculty/School. The Departmental Quality Assurance Committees on the other hand consisted of the Head of Department (HoD) as the Chairman, Departmental Quality Assurance Officer, Departmental Examinations Officer and two Senior Members from the Department who are appointed by the HoD.

Implication of the Governance Structure on Quality Assurance in the University for Development Studies

It is clear from the previous section that there is lack of full implementation of the quality assurance structure of the University. These gaps in the implementation of the structure might not lead to the

full realization of the goals and objectives of the institutionalization of quality assurance in the University.

The composition of the Quality Assurance Committees at the Faculty/School as well as the Departmental levels also raises concern and could be detrimental to ensuring quality. The fact that School/Faculty Quality Assurance Committees are chaired by Deans whereas Departmental Quality Assurance Committees are chaired by HoDs can compromise quality. The reason is that Deans are chief examiners in the Faculty/School and chair of the Faculty Board of Examiners. At the same time, they are those who chair the Quality Assurance Committees of the Faculties/Schools. These double roles of Deans could result in conflict of interest situations and jeopardise quality in the Faculty/School. The same applies to the HoDs who are chief examiners in the Departments. In the similar vein, HoDs chair the Departmental Quality Assurance Committees. Furthermore, the HoDs are given the power to appoint two Senior Members of the Department to be part of the Departmental Quality Assurance Committees and this has the tendency to lead to bias in the selection of members of the Committee. This might lead to the exclusion of potential Senior Members in the Committee who HoDs consider to challenge the status quo in terms of quality assurance in the Department.

Conclusion and Recommendations

The study has revealed that there has been considerable effort in shaping the governance of quality assurance in the University for Development Studies. However, what remains unresolved is the full implementation of the governance structure. As stated earlier, key appointments have not been made to ensure the full operationalization of the governance structure of quality assurance. Deans and HoDs who double as Chief Examiners and Chairman of the Quality Assurance

Committees in their Faculties/Schools and Departments respectively might not promote the independence and integrity of the Committees.

In order for the University to achieve its objective of becoming one of the reputable public tertiary institutions in Ghana, the paper recommends that there should be key appointments of qualified personnel to fill the staff gap to make the quality assurance governance structure functional.

It is further recommended that the independence and integrity of the Quality Assurance Committees at the Faculty/School and Departmental level need to be ensured by excluding Deans and HoDs from the Committees. These Committees should be chaired by Faculty/School and Departmental Quality Assurance Officers in the case of Faculty/School and Departments respectively. This would offer Faculty/School Quality Assurance Officers the autonomy to report anything untoward that could compromise quality in the Faculty/School to the Director of Academic Planning and Quality Assurance for action to be taken.

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Romanian University Historians in the 1930s and 1940s – the Case of Dimitrie Todoranu, Professor at the University of Cluj

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Abstract: This study focuses on the complex topics of university history and academic strategy as they were seen in the late 1930s and early 1940s by a Romanian scholar, Dimitrie Todoranu. At the time a young psychologist and university member of staff, Todoranu held influential administrative positions, being appointed head of the *University Office* at the Romanian University of Cluj in 1934. Starting from that year, and throughout the Second World War, he reflected and published rather extensively on the characteristics, the "role and the essence" of a university in Europe and in particular in Central and Eastern Europe. Using the evolution of the Romanian University of Cluj as a case study, Todoranu tried to define what a modern university should look like, what were the best relationships between students and professors, what the public significance of a university should be in the life of a (nation)state. Todoranu's works and ideas testify not only to a significant phase in the field of European higher education, but also represent an important and a less known episode / contribution to the history of universities in the 20th century Romania.

Keywords: history of universities, Romanian University of Cluj, Dimitrie Todoranu, academic institutional development, 1930s and the Second World War.

In a well-known work of comparative history, the French historian Christophe Charle analysed how European academics acquired an increasingly prominent role on the public scene starting with the late 19th century (Charle, 2002), a tendency that has been continuing with varied intensity until today. As the importance of the university professors within society gradually increased, the research and debates regarding the functions, responsibilities and the future progress of the universities equally multiplied. Today, university history has the full status of a separate historical discipline, dealing with a wide range of subjects (Dhondt, 2015).

Although institutions of academic training can be traced in the Romanian historical provinces as early as the 16th century, universities proper were founded only after the creation of the Romanian national state – the University of Iași was set up in 1860 and the University of Bucharest in 1864 (Iacob and Platon, 2010), (Iacob, 2007), (Bozgan and Murgescu, 2014). Several decades later, at the end of the Great War, Romania not only doubled its territory and population by incorporating provinces formerly belonging to the Austro-Hungarian Empire, but also doubled the number of its universities, as in the autumn of 1919, two new Romanian universities opened their gates in the cities of Cluj/Kolozsvár (in Transylvania) and Cernăuți/Czernowitz (in Bukovina, the present-day western part of Ukraine).[1]

After 1945 and the instauration of communism the number of Romanian universities, academies and superior schools registered a significant exponential growth, as the new political regime aimed to train contingents of specialists eager to implement its economic and socio-cultural ideas (Pașca, 2013), (Cazan and Pașca, 2013), (Vasile, 2014). It is obvious that this rather short national academic tradition directly influenced the amount of theoretical and practical texts that

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[1] In this respect see: *Serbările pentru inaugurarea Universității din Cluj*, *31 ianuarie-2 februarie 1920 [The Festivities for the Inauguration of the University of Cluj, 31 January – 2 February 1920]* (Bucharest: Cartea Românească, 1920), 16-17; *Serbarea inaugurării Universității din Cernăuți [The Inauguration Festivity of the University of Cernăuți]* (Bucharest: Imprimeria Statului, 1920), 1-48.

discussed the destiny of Romanian universities. Only a minority of authors dared to reflect on how these institutions should define their position within the Romanian society. The present study investigates an episode of Romanian historiography dedicated to the national and international academic life in the 1930s. It is part of a larger research project focusing on the identification and examination of all the Romanian authors who wrote on the evolution of universities in the interwar period, a time of vibrant as well as contrasting developments.

The Romanian Universities in the Interwar Years – a Long Transition Towards a Unitary and Modern Academic System

As the 20th century unfolded after the troubled years of the First World War, the Romanian academic landscape was dominated by inequalities. The universities of the "Old Kingdom" (namely those of Bucharest and Iași) functioned on the basis of a French model, while the new institutions from Cluj/Kolozsvár and Cernăuți/Czernowitz continued to follow mostly the German traditions that had dominated the educational, cultural and scientific system of Austria-Hungary.[2] The differences consisted mostly in the way the teaching staff was selected and organized, as well as in the administrative principles that ruled the academic life.[3]

Creating a common set of rules for all the Romanian universities, while taking into account every one of their local specificities, would

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[2] In fact, until 1919 Cluj and Cernăuți had been two important academic centers of the former Austro-Hungarian Empire. The University of Cluj/Kolozsvár was founded in 1872 and its teaching language was Hungarian. The University of Cernăuți/Czernowitz was established in 1875 and its teaching language was German. For details about their evolution up to the end of the First World War see (Ghitta, 2012); http://www.chnu.edu.ua/index.php?page=en/history (consulted on February 15, 2017).

[3] For details regarding the functioning of the Romanian University of Cluj after 1919 in comparison with the universities of Bucharest and Iași see (Ana-Maria Stan, 2011: 83-93).

prove a long and intricate process. Only in April 1932 was a new Law of Higher Education issued by the government of Bucharest, imposing for the first time a unitary functioning frame for all the Romanian universities (Antologia legilor învăţământului din România, 2004). This law and its subsequent implementing regulation, adopted in 1933, also established new principles for the relationship between the students' community and the university professors. One of the amendments introduced by the 1932 law required that each university set up a *University Office* (Stan, 2011). This original structure, directly subordinated to the Rector, was aimed at:

> "informing and guiding male and female students within the university; organizing the medical, psychological and social assistance for the university students and providing professional academic guidance" (*Regulamentul de organizare, 1936)*.

More specifically, through its function of information and counselling, this *Office* took over the role previously, and almost exclusively, played by the guidebooks for students that had been printed by the Romanian universities in different formats and at various time intervals (Stan, 2013). Furthermore, through its medical and social tasks, the *Office* assumed additional and formerly underdeveloped responsibilities towards the young people coming to study at the university. If we take into account its national character, namely its generalized presence in the Romanian universities, it is easily to understand that the foundation of the *University Office* represented an important chapter in the process of professionalization and standardization of the Romanian academic life.

At the University of Cluj, the *University Office* was established in October 1934, and two years later, in June 1936, the University Senate finally approved its operating rules.[4] The *Office* was organized in a complex and interdisciplinary way in order to respond efficiently both to the requirements of the law and to a growing number of students. Four distinct sections were created in the *Office*, each with a well-

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[4]*Regulamentul*, (chapter I, articles 1-3), 3; *Regulamentul*, (chapter VII, article 25), 8.

defined mission. Two of these departments played a key role in reflecting upon the landscape of the national and international academic environment and, subsequently, in shaping the future organization of the Romanian university system. *The Information and Documentation Department* focused on:

> "providing information and giving advice about university life in Romania and abroad, as well as economic and social information to the male and female university students. […] To ensure the proper functioning of the Information and Documentation Department, the *University Office* will have its own specialized library, which will include relevant studies and research on the organization of university and student life at home and abroad".[5]

Even more relevant and interesting was the *Department for studying the academic and student life,* whose mission was to:

> "collect data on the organization of academic and student life. [This Department] will study in particular the organization and the evolution of higher education in Romania and abroad, the cultural relations between universities, the unemployment in the highly qualified professions, etc. Student life will also be studied in its various aspects and from a historical perspective. For an objective knowledge of student life, the *University Office* will establish direct relationships with all the student associations of the University (namely the ones recognized by the University Senate). These associations are required to give any information that will be asked of them by the *University Office*".[6]

The other two sections of the *University Office* were the *Department of Medical, Social and Psychological Assistance* and the *Department of Academic Career Guidance.*

Thus, we notice the diversification and multiplication of the resources and of the ways in which students familiarized themselves with the rules they had to respect while being members of the academic community. Moreover, the introduction of a regular (and real) dialogue between the student organizations and the university administration aimed to offer efficient solutions for every prospective problem of the

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[5]   *Regulamentul*, (chapter II, articles 5 and 6), 3-4.
[6]   *Regulamentul,* (chapter V, articles 17 and 18), 7.

students and, in the long run, to encourage a more responsible attitude of the young generations towards their student status.

Ensuring a successful activity of the *University Office* would not be an easy task and it required a talented person to supervise the smooth working of its various departments. In fact, the *Office* regulations stipulated in detail what qualities were needed for the entire staff, including its manager. The suitable candidate had to possess a doctoral title either in Medicine or Psychology and be well-trained in Psychology and psychological procedures. Furthermore, his appointment, which was to be done directly by the Ministry of Education, equally required the approval of the Cluj University Senate, as well as favourable recommendations from his professors.[7] After careful consideration, the person chosen to be the manager of the *University Office* was a young scholar, Dimitrie Todoranu, who was put in charge of a small but efficient four-person team.

Dimitrie Todoranu's Activity as a University Historian – an Atypical Example

Born in 1908 in the very heart of Transylvania (the village of Ibănești/Libánfalva, the present-day Mureș county), Dimitrie Todoranu enrolled at the Faculty of Letters and Philosophy of the Cluj University in 1926. He chose to specialize in psychology and pedagogy, obtaining his license in 1929 and his Ph.D. in 1932, with a thesis entitled *The Psychology of Temperament*. Immediately afterwards, he made his debut in the academic life as a researcher and teaching assistant and by 1934 he was already lecturer.[8]

[7]*Regulamentul,* (chapter VI, articles 19 and 20), 7-8.
[8]The exact Romanian academic title of Dimitrie Todoranu in 1934 was that of *șef de lucrări* (following the French model of university degrees of that time – where a *chef de travaux* enjoyed a higher status than a university teaching assistant and a junior or assistant lecturer, but had a lower position than an associate professor). Biographical information regarding Dimitrie Todoranu taken from: Dumitru Salade, *Portrete de universitari clujeni* [*Portraits of Cluj University Professors*] (Cluj-Napoca: Presa universitară clujeană, 1997), 101-111; Dan Fornade, *Personalități clujene 1800-2007.*

Todoranu was a disciple and close collaborator of the famous Romanian psychologist Florian Ştefănescu-Goangă, who had established and was successfully directing a top level Psychological Institute in Cluj, using many modern theoretical and practical methods, in line with the European trends of the times (Ştefănescu-Goangă, 2002). Since 1930 Goangă had also been Rector of the University of Cluj, a fact which, combined with the norms of the new Higher Education Law of 1932, served only to accentuate the role of psychological principles in the local academic management.

Before he was selected to lead the *University Office*, namely in October 1934[9], Dimitrie Todoranu had worked predominantly on psychology subjects – it was at that time that he authored the first serious Romanian analysis on the psychology of advertisements, a book which remains much cited even today (Todoranu, 1935). The new appointment added variety and a fresh direction to Todoranu's scientific path, as he became interested in national and international university history and, to a certain extent, even in the theory of academic management. As director of the *University Office* he had to supervise the publication of several guides and counselling handbooks for students, aimed to help them in their activity while attending the university.

The first relevant volume, eloquently titled *Îndrumări universitare* [*Academic Guidelines*], was printed in 1936 and focused on the best methods for studying. Todoranu authored three out of five chapters and chose to stay on familiar territory. Thus, his studies discussed the efficient principles of mental hygiene or the importance of the academic professional orientation, heavily drawing upon his previous

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Dicţionar Ilustrat [Cluj personalities. 1800-2007. An Illustrated Dictionary] (Cluj-Napoca: Casa Cărţii de Ştiinţă, 2007), 598-599; Eugen Mera, "Personalităţi din Ibăneşti. Isidor Todoran" [Personalities from Ibăneşti. Isidor Todoran], *Cuvântul Liber*, no. 242 (Târgu-Mureş: 22.01.2009), accessed January 31, 2017 at http://www.cuvantul-liber.ro/news/41464/61/center-b-PERSONALITATI-DIN-IBANESTI-br-ISIDOR-TODORAN-b-center

[9] *Anuarul Universităţii "Regele Ferdinand I", 1933-1934 [The Annual Book of the "King Ferdinand I" University, 1933-1934]* (Cluj: Institutul de Arte Grafice Ardealul, 1934), 62.

psychological research work at the Institute of Professor Goangă.[10] However, the most important chapter that Todoranu authored in this educational guide dealt with the techniques of intellectual work, detailing all the steps a student had to go through in order to achieve a successful, solid and efficient theoretical and practical training during his university years. While explaining how a young person progressed from assimilating knowledge and information to creating original scientific content, later certified by its publication, Todoranu did not miss the opportunity to start reflecting on the fundamental social role of the academic institutions:

> "a comprehensive, integrative schooling represents one of the main objectives of a **modern university**, which needs to encourage the preparation for a superior life through a life effectively lived within the academia's citadel."[11]

It was a timid beginning for Todoranu, which anticipated his later, more consistent analyses of the role of the universities in the 20th century. Soon after this first attempt, the young director of the Cluj *University Office* joined the public debate with a two-part article focused entirely on academic problems. His thorough study appeared in 1938 in a Transylvanian cultural magazine, entitled *Gând românesc*,[12] under the relevant title *Universitatea contemporană. Reflecții pe marginea ființei și rolului ei [The Contemporary University. Reflections regarding its Being and its Role]* and represents one of the very few theoretical studies done in interwar Romania on the subject of higher education. Here, Todoranu

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[10] *Îndrumări universitare [Academic Guidelines]* (Cluj: Editura Oficiului Universitar al Universității din Cluj, 1936). In this volume Dimitrie Todoranu wrote the chapters: "Orientarea profesională academică", "Tehnica Muncii intelectuale" and "Principii de igienă mintală". In fact, Todoranu elaborated more than two-thirds of the guidebook, namely 132 pages out of 167.

[11] Dimitrie Todoranu, "Tehnica Muncii intelectuale" [The Technique of Intellectual Work], in *Îndrumări universitare,* 1936: 80.

[12] *Gând românesc [Romanian Thought]* was a monthly magazine issued between 1933 and 1940 by ASTRA (the Transylvanian Association for Romanian literature and the culture of the Romanian people). Judging by its title and its publisher, one can note that this publication focused on literary works (original poetry, prose or theatre) and cultural subjects, but also published essays, chronicles, reviews and sometimes even academic lectures.

proves himself not only as an excellent university historian, but also as a perceptive observer of the challenges that the universities had to face in the late 1930s (Todoranu, 1938A), (Todoranu, 1938B). The structure of his research followed a classical, chronological path, aiming to respond to a fundamental question, namely:

> "what is the role and the essence of the university in this world which is caught up in an accelerated change and transformation? Can it remain indifferent to the boiling atmosphere of the contemporary life that is searching for new spiritual fundaments?" (Todoranu, 1938A: 182)

Dimitrie Todoranu equally based his investigation on an assumption that worried the elite in those years, but is valid even today. He judiciously stated that:

> "the absence of an intellectuality with an organizing role in the reconstruction of tomorrow's spiritual world […] will most likely signify the decline and twilight of Europe's cultural superiority." (Todoranu, 1938A: 182)

Given the troubled general context in which the article was elaborated (the spring and summer of 1938 are the time of the *Anschluss* in Central Europe and of the instauration of the authoritarian regime of King Carol II in Romania) one can better understand the sombre tone adopted by Todoranu.

He started by sketching a very detailed and lucid picture of how universities and the academic world had evolved over the centuries in various countries (Greece, then France, Italy, Spain, England, Germany, the Czech lands, the Northern countries, United States of America, etc.) (Todoranu, 1938A: 193-201), (Todoranu, 1938B: 254-262). After a thorough survey, he pointed out the general, long-standing principles of the European university life. According to Todoranu, there were three enduring, core values within the academia: the first and main concept was the impartial research for the truth; the second was the transmission and interpretation of knowledge for a competent professional training and the third one was the organization of a sound student life, in order to provide the young people with a humane,

compassionate education.[13] Unfortunately, these standards started to be besieged and questioned in the 20th century, leading to a gradual erosion of the universities' position in society.

A significant problem that deeply affected the credibility of the academia was the appearance of intellectual unemployment, namely of a marked discrepancy between the number of graduates and the state's capacity to offer them suitable jobs, stated Todoranu. Another relevant aspect of the crisis was the deterioration of the relationships between students and professors. Todoranu noted that a gradual interference of various ideologies modified and transformed the academic community. Looking at the situation of the totalitarian countries of those years (Germany, Italy, Russia) and also at the situation in Austria, Todoranu exemplified how the state authorities intervened in the student organizations, regulating their functioning. One efficient way of being in command of the students' activities was a direct appointment of their leaders by the Ministry of Education, as was the case in Germany after 1935 (Todoranu, 1938B: 266). Unsurprisingly, Todoranu commented that:

> "the social role of the student develops [in those countries] under the explicit control of the state; his entire activity will be oriented towards the fulfilment of the great collective needs. Scientific research and professional training are, to a certain extent, subordinated to the accomplishment of citizens' values and to the work for the benefit of the nation." (Todoranu, 1938B: 266-267)

In contrast, he also made an accurate, discriminating analysis of the students' situation in Great Britain and France, highlighting the freedom they still enjoyed there and the important role this played in forming their characters.

Predictably, Todoranu's conclusions on the fate of the contemporary universities were nuanced and interesting. Despite the

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[13]Regarding the third principle of the academic spirit Todoranu talks about "educația umană a studenților în sensul românescului *omenie*", namely about a Romanian ethic and moral concept, encompassing various social values such as respect and kindness, which is rather hard to translate. See (Todoranu, 1938B: 258).

warning signs of a sombre future, he considered that these academic institutions still had a crucial role to play in society and could help in preserving freedom, imposing new ethical norms and establishing sound connections between different nations.

> "The mission and the social function of a university demand that it should be concomitantly a public institution and an autonomous body. [...] **Differentiation and cooperation** are the notions that express the sense of the present-day equilibrium at university level as well. [...] **A university that represents the intellectual and the moral conscience of a nation: this is the imperative demand of our times**" (Todoranu, 1938B: 268).

Todoranu believed that intellectual cooperation was a possible solution for integrating national differences on a higher level and consequently for guaranteeing social progress. He condemned the use of culture exclusively for utilitarian purposes as it had started to happen in many European countries. Instead, Todoranu strongly supported the return to a more classical conception of the academic life, where students would be educated in the spirit of impartial, unbiased intellectual values. He stated that

> "the university autonomy must mean that the academic family is organized according to the demands of the truth, [a truth] which is discovered and propagated through its own effort" (Todoranu, 1938B: 269).

Consequently, he opted for accuracy and genuine research instead of teaching and learning activities influenced by various political ideologies or practical reasons. Todoranu did not hesitate to criticize the interference of the state in the academic environment, underlining that governments had the exclusive duty to maintain a rightful balance between the need for intellectual values and the social demands and that universities could not "*compensate for the rulers' incapacity [of doing their job]*" (Todoranu, 1938B: 269).

But what solution did Todoranu propose in the difficult atmosphere of the late 1930s for preserving the integrity of the academic environment? Unsurprisingly, his ideas represented a *pro*

domo appeal, as he argued in favour of using experts (namely psychologists and pedagogues) for an efficient university management. He introduced the concept of "guided/directed culture [in Romanian - *cultură dirijată*]", defined as a method of bringing a "new order into the students' life". More precisely, this meant a careful, professional selection of the future students, as well as a protection of their biological and ethical capacities (Todoranu, 1938B: 269-270). Although Dimitrie Todoranu never mentions in his text the newly created *University Office*, which he was leading at the time at the University of Cluj, it is obvious that these ambitious objectives could only be accomplished with the help of such specific structures. Let us recall the fact that the purposes of the *Office* were to inform, guide and assist the young people eager to enrol and study at the university. In other words, the activity of the *University Office* was understood and subsequently seen by Todoranu as an efficient way of training and preparing new, capable generations for the society. At the same time, the *Office* could limit various forms of abuse and manipulation of the students, including political ones, if it was made to function in a judicious form (namely using good faith, care and discernment). Last but not least, Todoranu also highly encouraged the idea of international academic exchanges, in fact an opportunity for both professors and students to understand the complexity of the world and of life itself.

Todoranu ended his analysis of the contemporary universities with an appeal to reason, invoking Descartes and Bergson as models for avoiding the upcoming crisis:

> "the slogan that I would propose […] even for the ordinary people, is the simplest as well as the most Cartesian one - a person must act as a man of reason and think as a man of action." (Todoranu, 1938B: 272).

Unfortunately, the subsequent European socio-political and military events severely challenged the wish for balance and the dialogue solutions that Todoranu promoted in his 1938 text.

Instead, the Second World War affected deeply and in a most direct way the fate of the European universities. The Romanian University of

Cluj represents a typical example, as it was forced to leave its residence city and take refuge in two small Romanian towns – namely in Sibiu (where the Faculties of Letters, Law and Medicine were relocated starting with the autumn of 1940) and Timişoara (where the Faculty of Science found shelter). In these new locations, with numerous administrative, structural or economic difficulties caused by the war, the University of Cluj continued to function until 1945, striving and often succeeding to carry out relevant teaching and research activities.

In his capacity as director of the *University Office*, Dimitrie Todoranu remained closely involved in the life of this institution. He maintained his role of attentive observer and even intensified the work he did as a university advisor. During the academic year 1941-1942 the *University Office* managed to publish a detailed and useful new guidebook for students (Todoranu, 1941-1942). In fact, this volume not only addressed the needs and problems of the students, but also tried to cultivate a more intense patriotic feeling among them. It was also a volume that underlined the rich academic history and the traditions of the University of Cluj and the hope for a better and brighter institutional evolution at the end of the war. Consequently, we discover Todoranu as the author of a short and dense university history and he proves to be a rather skilful specialist in this field.

In fact, in the guidebook's introductory text, Dimitrie Todoranu interestingly combined his qualities of university historian and psychologist (Todoranu, 1941-1942: 7-22). He went as far back as the times of King Matthias Corvinus, Prince John Sigismund and King Stephen Báthory and described in detail the organization of the academic institutions of Cluj throughout the centuries. He then focused on the episodes that led to the establishment of the Romanian University of Cluj. Although he claimed that "*the day of May 12th, 1919 is the real date of the irrevocable foundation of the Romanian University of Superior Dacia*" (Todoranu, 1941-1942: 13-14) (a debatable statement from the perspective of historians specialized in the history of the

University of Cluj[14]) he did not forget to mention all the other legal steps that were taken during the years 1919 and 1920 for the new university.

From this point onwards, Dimitrie Todoranu continued his study in a comparative manner. On the one hand, he synthetically presented the achievements of the first generation of Romanian university professors and their contribution to national and international research, going as far as to state that Cluj was a sort of "*university citadel in the style of Heidelberg*", where the intellectuals of Transylvania were able to integrate the superior strata of culture (Todoranu, 1941-1942: 17). On the other hand, Todoranu considered that the Romanian University of Cluj represented a perfect example of the three general principles of academic spirit that he had discussed in his 1938 articles. More precisely, he acknowledged that the University of Cluj successfully embodied the impartial search for the truth; the transmission and interpretation of knowledge to ensure a competent professional training and, finally, a healthy student life, together with the cultivation of a compassionate, humane spirit.

Todoranu went even further with his theories on the "being" of a university, as he analysed other characteristics of the Romanian University of Cluj. He argued that the common academic spirit also included psychological and geographical dimensions and that these elements played a key role in individualizing each university. Sometimes, various factors would fracture the intrinsic links between geography and the other core values of the academic spirit, creating tensions and problems. In fact, the situation in which the University of Cluj found itself in 1940-1945 perfectly illustrated such a conflict. Yet, despite the hardships of the refuge years, Todoranu was confident that the university had within itself the power to overcome such moments. If

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[14] The Royal Decree that officially founded the Romanian University of Cluj was issued in September 12, 1919 and stated that the Hungarian University of Cluj became a Romanian University starting with October 1, 1919. On the 12th May 1919, the Romanian government of Transylvania (*Consiliul Dirigent*) took over the buildings of the Hungarian University of Cluj/ Kolozsvár from the Hungarian authorities of Transylvania, in the aftermath of the disintegration of the Austro-Hungarian Empire and the decision made on December 1st, 1918 by the province of Transylvania to unite with the Romanian state.

shared with the same intensity by the students and the professors, the general communion of academic ideas and principles could work its magic in almost every situation, the theoretical and psychological elements prevailing over geography, politics or military factors. Thus, Todoranu's conclusions were rather optimistic, despite the terrible background of the Second World War.

However, the events of the following decades would contradict on many levels the author's enthusiasm and his ideas regarding the academic environment. It should be noted that the student guidebook of 1942 remained a singular initiative. No comparable volume was printed in the following war years. Furthermore, to our knowledge, the *University Office* did not issue any other publication until the end of 1945 and the return of the University of Cluj from its refuge. A couple of years later, the reform of the Romanian educational system, imposed by the instauration of communism would in fact indicate the end of the *University Office*. It was equally an end to the procedures put in place by this specific structure, which at the University of Cluj, had tried, based on serious psychological and pedagogical methodologies and studies, to create national elites. Under Todoranu's leadership, the *Office* aimed to provide the students of Cluj with information and with standards of intellectual work similar to those used in the leading European universities. The experience was short lived but proved to have a great potential.

Dimitrie Todoranu continued his academic career after 1945 with considerable success. In 1947 he became full university professor. However, he would gradually turn from psychology to pedagogy – in our opinion, an implicit choice of professional and personal survival, given the Romanian political context, as communism regarded psychology, sociology and other related disciplines as subversive and dangerous ones. His reconversion started as early as 1942 when he published a work entitled *The Psychology of Education,* shortly followed in 1943 by another volume, entitled *Education and Pedagogy*. Todoranu would even lead the chair of pedagogy at the University of Cluj University between

1947 and 1959. In 1970 he was called to Bucharest, the capital of Romania, and was appointed president of the Scientific Council of the Institute of Pedagogical Sciences. Later on, he would become rector of the Central Institute for the Teaching Staff's Development. Parallel to his teaching activity, he was also a distinguished translator and commentator of world-famous educators such as Rousseau, Binet, Meumann, etc. According to the testimonies of his peers, he was renowned for his serious, sober attitude and especially for his scientific rigor and his extensive documentation on every subject (Salade, 1997: 104-105).

And although the theoretical and practical contributions he made to the history of Romanian universities are limited to his texts of the late 1930s and early 1940s, they maintain their relevance. Todoranu's studies should be investigated and discussed in comparison with other similar national and international writings that debated "*the idea of a university*".[15] We consider that Dimitrie Todoranu has a rightful, significant place in the gallery of Romanian intellectuals who focused on the social role of the academia or other type of superior schools, as his voice attempted to bring some new, original ideas in this field.

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[15]We refer here to the famous discourses of John Henry, cardinal Newman, *The Idea of a University*, published in 1852, which serve as a starting point for many debates on the role of modern and contemporary universities.

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