

Does Quality Matters? Trends in Internationalization of Universities

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Abstract

Internationalization is imperative for the future development of the universities. By internationalization we share our insights and knowledge and seek to learn from the experience, cultures and research of others. The purpose of this study is to discuss common trends and patterns of internationalization and analyze empirically that how internationalization of university is important for university prestige and excellence in education and research. The common trends in higher education are the expansion of education, the assurance of education standards and a quality education, encouraging of competition to promote excellence and to promote research and development internationally. The empirical evidences show that internationalization of universities is significantly important for the promotion of education and research as a symbol of excellence.

Index terms— internationalization, trends, presence, openness, excellence, quality of education.

1 Introduction

According to one survey total population of whole world is about seven billion and the way the population is increasing,” in 2050 the total population of whole world will be about nine billion. There will be increase of only two billion. Most of the population working today will retire in 2050 and few will be working to support the elders the way medical facilities are being provided to rescue diseases” ??Dubrin, 2010). ”There is one child law in China and even in west people don’t prefer to have babies so according to this survey most of the older population will be in China and in west because of less fertility. Fertility rate is very high in countries like Pakistan, India, Middle East, and Arab World. According to one survey about seventy percent of population of these countries is below twenty five means that they are going to universities or are about to start their university life (Robbins, 1993).

”Better education these days is been provided in western countries and people prefer to take admission in universities in these countries because of that. Local universities either don’t have that level of education system or are struggling to achieve that standard” (Purvanova & Bono, 2009). If the criterion of international standard is fulfilled in these local universities and campuses then such a huge market of population in China, India, Pakistan, and Arab world that are below twenty five and about to take admission could be acquire.

Most of the books these days are also written by western authors and includes examples and cases from western cultures that local students are not able to understand while reading a book. There comes a major gap between theory and culture and understanding of western theory while studying local culture. The students are not able to absorb western theory. However after having all these concepts still there are few factors that can be accomplished for internationalization of universities.

Internationalization is an essential element for the future development of the Universities. Internationalization is a reciprocal process, where we share our insights and knowledge and where we seek to learn from the experience, cultures and research of others. Internationalization of the university is defined as the process of integrating international, cross-cultural and global perspectives into various dimensions of a university system. It is a

4 LITERATURE REVIEW

44 systemic institutional strategy to change the internal system of the organization to respond to changes in the
45 globalizing environment. (Knight, 2004; van der Wende, 1997).

46 In an OECD seminar, Higher Education and the Flow of Foreign Students, held in Japan in 1988, ??buchi
47 (1989) presented the process-oriented definition and defined internationalization components as "a kind of
48 inventory to measure to what extent a given university is internationalized". He defined internationalization
49 of higher education as:

50 A process by which the educational provision of a higher education system becomes more sophisticated,
51 enriched and broadly applicable of students from all backgrounds and countries, emphasizing especially the
52 possibility of development of programs which are internationally and cross-culturally compatible, with a view
53 toward providing all students with experiences and training necessary to develop skills for life in a world
54 characterized by increasing international exchange.

55 The constant flow of people and goods across borders is facilitating the internationalization of education and
56 research. Human interaction is increasing year by year, especially in higher education institutions. Faculty
57 members, researchers and students are moving all over the world to seek more attractive education and research
58 environments and intellectual alliances. This global flow of people provides a good opportunity to secure superior
59 human resources from around the world and provide diverse and attractive higher education of an international
60 standard. On the other hand, the progress of internationalization exposes universities to intense international
61 competition. A university that cannot develop its strengths while nurturing a distinct identity will clearly decline
62 in this competitive environment.

63 There could be many different causes of why universities go international that includes global learning,
64 research, teaching, student life, curriculum, and community service, outreach & engagement. "Firstly with global
65 integration in the area of trade, politics, investment, research, the environment, health, and culture facilitated
66 by advances in communication, information, and transportation technologies. Secondly, the universities needs
67 to stay updated with relevant and innovative research, teaching and mission. Thirdly, universities need to train
68 their students to find employment in global market place. Lastly, university needs to achieve variety of goals like
69 economic, academics and entrepreneurial, national security, social and foreign policy" (Ford & Seers, 2006).

70 2 a) Components of Internationalization

71 The set of internationalization components suggested by ??buchi (1989) Cheng and Townsend (2000) and Mok
72 (2006), some of the typical trends and patterns of higher education are as follows:

73 ? The reestablishing of new aims and a national vision for education; Teichler (2004) argues the following
74 questions before we take internationalization agenda seriously: ? Internationalizing higher education for whose
75 benefits? ? Internationalizing higher education for what??

76 ? Why internationalization should be adopted as a major agenda for contemporary universities? ? Does
77 internationalization matter to students and other stakeholders in the society? ? What purposes should
78 contemporary universities exist for? ? What university education that we believe and should commit ourselves
79 to? Thus the purpose of this study is through light on the trends and patterns of internationalization and
80 discusses how internationalization of university is imperative for the prestige and the excellence in education
81 globally.

82 3 II.

83 4 Literature Review

84 After completing a series of comparative studies, Mok and Welch (2003), Mok, Tan and Lee (2000), Tse (2002)
85 and Weng (2000) find that educational developments in the region, including Hong Kong, Taiwan, Singapore,
86 South Korea, Mainland China, Japan, the Philippine, Cambodia, New Zealand, Australia, have been affected
87 by the trends of marketization and corporatization. Governments in these societies are increasingly concerned
88 about the role of education in improving the competitiveness of their countries, and their place in regional and
89 global markets. Therefore, they are very keen to promote the idea of 'life-long learning' and 'quality education'
90 in preparing their citizens for the knowledge-based economy. Thus, universities in Hong Kong and Singapore
91 have started changing the university admission criteria by reducing the weight to academic scores but giving
92 more emphasis to non-academic performance, including leadership, community services and other talents (Mok
93 and Tan 2004).

94 Despite the difficulties in getting a consensus on how 'internationalization of higher education' should be
95 defined, no one can deny that East Asian universities have taken 'internationalization' far more seriously.
96 Academic exchanges, international collaborations, transnational education and other forms of international
97 activities across different national borders are becoming increasingly prominent in East Asia (Mok and Tan
98 2004;Lo and Weng 2005).

99 Traditionally, internationalization has referred to international activities that have been a part of the life of the
100 universities based on individual aspirations to seek knowledge and experience internationally; however, during the
101 last decade or so, discourse on internationalization has started to focus on the institutionalization of international
102 activities that have emerged due to changes in the context of higher education. International activities became
103 more diverse, structured and integrated into the regular organizational life of higher education (Watabe, 2010).

104 According to Lenz and Steinhaus (2010), Bildung of individuals is a unique value by itself which can't be
105 converted into cash terms and does not fit into the world of accountancies, ratios, balance sheets, benchmarking,
106 rankings and accreditation. Embedded in an institutional concept of learning internationalization could contribute
107 significantly towards the individual's process of edification. But internationalization should be never seen as an
108 end in itself or as a means to fulfilling the interests of the institution "university". The focus should be always
109 the individual and its process of Bildung.

110 Asian scholars should be more critical about what they have learned from the West. Following the global
111 practices and ideologies without developing our own unique systems and honoring the rich traditions, cultures
112 and scholarships of East Asia may easily lead us to entering the processes of re-colonization. Perhaps, Asian
113 scholars are not confident enough as what the previous Prime Minister of Malaysia suggested.

114 "Dr Mahathir Mohamad said, most Asians have not been able to get over the feelings of inferiority that decades
115 and centuries of colonialism have brought in them.

116 They are politically independent but psychologically they are still colonized. The desire to please the non-
117 Asians is strong among them. Their value system and their way of thinking are still very much dominated by
118 Western thinkers". Learning from other systems is desirable but we should guard against copying without proper
119 adaptation and contextualization. Most important of all, Asia has rich traditions and cultures and we should
120 never look down upon our rich scholarly traditions. I strongly believe scholars in Asia should internationalize our
121 academic systems, cultivating and developing our own paradigms.

122 Internationalizing with East Asian characteristics would be a far more challenging and we must commit
123 ourselves to develop alternative academic paradigms for promoting cross-cultural understanding and cross-
124 national policy learning (Mok, 2006).

125 **5 III.**

126 **6 Methodology and Data Source**

127 According to the Webometrics website rank criteria, the world ranking of the universities depends upon the
128 internationalization of the universities that is visibility and quality of education that is activities. By visibility
129 they mean the university international linkages, cultural exchange programs and scholarships offered for foreign
130 students. By activities they mean (1) university presence that is the total number of web pages hosted in the
131 main web domain of the university as indexed by the largest commercial search engine Google (2) university
132 openness that is the global effort to set up institutional research repositories published in dedicated websites
133 according to the academic search engine Google Scholar and (3) university excellence that is the academic papers
134 published in high impact international journals. The required data is gathered from the website Webometrics.
135 The data includes 140 universities of the World. Universities from fourteen countries of the world are taken for
136 analysis (the top ten universities of each country).

137 **7 Methodology**

138 To check the impact of internationalization of universities on the international ranking the study used the following
139 model: International Ranking = f (Internationalization, Quality of Education)(1)

140 As discussed above the ranking criteria the equation (1) can be extended as International Ranking = f
141 (Visibility, Presence, Openness, Excellence)

142 (2)

143 The mathematical form of this model is presented as(, , ,) Rank f vis pre open exc =(3)

144 The log-linear form of the equation (3) is described as 0 1 23

145 To analyze the data the study used the correlation analysis, stationarity of the data, cointegration analysis,
146 causality test, regression and graphical analysis.

147 V.

148 **8 Analysis of Data**

149 The current analysis includes correlation analysis, co-integration analysis, causality analysis and regression
150 analysis.

151 **9 a) Correlation Analysis**

152 The correlation analysis shows the degree of association or dependence between the variables. The results of the
153 correlation analysis are presented in table 1. The results indicate that there is a positive dependence between the
154 variables. The degree of association varies from 42% to 93%. The internationalization (visibility) of universities
155 is directly associated with all other indicators namely university world ranking, presence, openness and university
156 excellence. Thus one cannot deny the significance of the university internationalization as it is the key element
157 for the grooming of the any academic institution. Ordinary Least Squares (OLS) is one of the more simple
158 methods of linear regression. The objective of OLS is to closely "fit" a function with the data. The method
159 of least squares is used to approximately solve over determined systems, i.e. systems of equations in which
160 there are more equations than unknowns. Least squares are often applied in statistical contexts, particularly

10 CONCLUSION

161 regression analysis. The results of regression analysis are presented in table 6. The results indicate that the
162 coefficients of each variable (visibility, presence, openness and excellence) have a direct relationship with world
163 ranking. The increase in external university linkages, increasing cultural exchange program for talented students
164 will increase the international ranking of the university towards the top. Based on results any improvement
165 in internationalization will increase about 60% of the world ranking towards top. The diagnostic statistics of
166 the model shows that model is free from specification biasness. The results are highly significant as F-statistic
167 (1082.92) is high. About 98% of the variation in the world ranking is explained by the internationalization,
168 presence, openness and excellence.

169 10 Conclusion

170 Internationalization is imperative for the future development of the universities. By internationalization we
171 share our insights and knowledge and seek to learn from the experience, cultures and research of others. It is
172 a systemic institutional strategy to change the internal system of the university to respond to changes in the
173 globalizing environment. University internationalization could be assessed whether it is involved in internationally
174 focused programs of study, international institutional links, student exchange programs, international research
175 collaboration, support for international students and staff exchange programs. The clear trends in higher
176 education will lead the university towards the process of internationalization. The common trends in higher
177 education are the expansion of education, the assurance of education standards and a quality education,
178 encouraging of competition to promote excellence and to promote research and development internationally.
179 Thus the purpose of this study is through light on the trends and patterns of internationalization and discusses
180 empirically that how internationalization of university is imperative for the prestige and the excellence in
181 education globally.

182 The results of empirical analysis are significant and positively correlated with internationalization of
183 universities. The log-linear model is used for the analysis of self based conceptual framework for this study.
184 The data regarding university world ranking, internationalization, presence, openness and excellence from 140
185 universities of the world is taken from website 'Webometrics'. It is clear from the results that internationalization
186 causes world ranking, presence, openness and excellence. The results of regression analysis indicate that the
187 internationalization (visibility), presence, openness and excellence have a direct relationship with world ranking.
188 The increase in external university linkages will increase the international ranking of the university towards the
top.



Figure 1:

1

Internationalization Indicator Visibility (External Linkages)	Weightes 50%	Quality of Education Indicator Activities 1.Prescence 2.Openness 15% 3.Excellence 15%	Weightes 20%
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Figure 2: Table 1 :

2

Does Quality Matters? Trends in Internationalization of Universities of the World		a) Theoretical framework	
Region	Europe	Asia	Hong Kong
Europe	North America	Country	China
		Germany	
		United	
		Kingdom	
		France	
		Greece	
		Canada	
		USA	
		South	
		Africa	
38	Year 2014	Presence	The theoretical framework of the study based on the existed information and literature is as follows:
		Openness	
Volume	XIV	Education (Activity) Qual- ity of	
Issue	II	Internationalization (Visi- bility)	
Version	I	World	
G)		Rank- ing	
(
Global Journal			
of Human Social			
Science			

[Note: © 2014 Global Journals Inc. (US) -IV.]

Figure 3: Table 2 :

3

Variable	Rank	Visibility	Presence	Openness	Excellence
Rank	1	0.929	0.772	0.799	0.821
Visibility	0.929	1	0.868	0.823	0.565
Presence	0.772	0.868	1	0.882	0.415
Openness	0.799	0.823	0.882	1	0.559
Excellence	0.821	0.565	0.415	0.559	1

b) Stationarity Analysis

Most of the time the data shows the high fluctuations or non-stationarity which cause spurious regression estimates. To check the stationarity of data

Augmented Dickey Fuller (ADF)

Figure 4: Table 3 :

4

Variables	Level and Intercept		
	ADF	Critical Values at 1% Decision	Decision
Rank	-	-3.477	I(0)
	4.123		
Visibility	-	-3.477	I(0)
	3.886		
Presence	-	-3.477	I(0)
	4.636		
Openness	-	-3.477	I(0)
	4.383		
Excellence	-	-3.477	I(0)
	5.889		

c) Causality Analysis

The Granger Causality test shows the existence of causation between two variables. The results are shown in table 5 below. The results indicate that

1. The Visibility (internationalization) cause World Ranking of the Universities
2. The Presence (size of university) cause World Ranking of the Universities
3. The Openness (research output) cause World Ranking of the Universities

4. The world ranking of Universities cause Openness
5. The Visibility (internationalization) cause Openness
6. The Visibility (internationalization) cause Presence
7. The Visibility (internationalization) cause Excellence
8. The Presence cause Openness
9. The Excellence cause Presence
10. The Excellence cause Openness and
11. The Openness cause Excellence

Figure 5: Table 4 :

5

Null Hypothesis	F-Statistics	Probability	Decision
Visibility does not Granger Cause RANK	2.67665	0.0247	Causality
RANK does not Granger Cause Visibility	1.47256	0.2035	No Causality
Presence does not Granger Cause RANK	1.93021	0.0940	Causality
RANK does not Granger Cause Presence	0.89529	0.4866	No Causality
Openness does not Granger Cause RANK	3.26129	0.0084	Causality
RANK does not Granger Cause Openness	4.11665	0.0017	Causality
Excellence does not Granger Cause RANK	1.12829	0.3489	No Causality
RANK does not Granger Cause Excellence	1.87982	0.1025	No Causality
Presence does not Granger Cause Visibility	1.32483	0.2580	No Causality
Visibility does not Granger Cause Presence	4.49681	0.0008	Causality
Openness does not Granger Cause Visibility	1.74829	0.1285	No Causality
Visibility does not Granger Cause Openness	4.93536	0.0004	Causality
Excellence does not Granger Cause Visibility	1.32524	0.2578	No Causality
Visibility does not Granger Cause Excellence	2.38909	0.0417	Causality
Openness does not Granger Cause Presence	0.53053	0.7528	No Causality
Presence does not Granger Cause Openness	6.02503	5.E-05	Causality
Excellence does not Granger Cause Presence	2.52573	0.0325	Causality
Presence does not Granger Cause Excellence	1.37123	0.2396	No Causality

Figure 6: Table 5 :

6

Variables	Coefficient	Standard Error	t- Statistics	Probability
C	-	0.036570	-	0.0000
	0.192649		5.267984	
LOG(VIS)	0.600187	0.009224	65.065720.0000	
LOG(PRE)	0.019318	0.006951	2.7790230.0062	
LOG(OPEN)	0.048228	0.010628	4.5378990.0000	
LOG(EX)	0.334086	0.009335	35.788190.0000	
R-squared	0.976892	Schwarz criterion	-	1.774743
Adjusted R-squared 0.966799		Durbin-Watson stat	1.666089	
F-statistic	1082.92	Prob(F-statistic)	0.000000	

The results of graphical analysis of data are presented in appendix. The analysis includes normality test, model validity test, residual test, gradient of objective function, derivate of equation specification. The results indicate that model is best fit and free of specification biasness.

VI.

Figure 7: Table 6 :

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