A Critical Review of the Global Institutional Ranking System with Special Reference to the Tertiary Education Sector of the USA and Europe and It’s Prospects in Bangladesh

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ABSTRACT
Institutional ranking has become a competitive trend in promoting quality education across the globe. This ranking system facilitates fair competition in terms of teaching-learning and investment among its various stakeholders namely students, teachers, parents and investors with special focus on academic excellence leading towards lucrative placement in the corporate world. The college and university ranking practice mostly conducted by leading magazines, newspaper, websites, government and academics has been primarily observed since long in the western world especially in the USA and Europe. However it has not remained confined within that territory only; rather it has expanded its boundaries and reached all corners of the world including South-East Asia as well. This article is a critical review of the existing ranking systems available worldwide with special focus on the USA and European college and university ranking practices. Thus this paper has critically reviewed various ranking systems along with their general and specific criteria such as admission acceptance rate, average alumni donation rate, average graduation rate and performance, class size, expenditure per student, faculty compensation rate, faculty with PhD or terminal degree, lucrative placements of alumni, peer assessment, SAT/ACT score and Student-teacher ratio and many more. Finally this study has highlighted many important issues relevant in our context some of which are not feasible to adopt in this very socio-economic as well as cultural context of our country. However the study has been found very significant in the context of our education system to promote fair competition among the relevant stakeholders and ensure quality education both in public and private universities leading towards pertinent placement in the Government and industrial sector.

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Introduction
Growing rate of participation in the higher education is increasing the demand of national university and college ranking system. Over more than two decades the use and popularity of these type of ranking system is increasing. Mostly these ranking systems are produced by newspaper, magazines, research centers and government. Several websites are also stepping ahead to produce ranking of educational institutes at present. Prospective students get a lot of information from these rankings which help them to decide about their future education institute. These ranking systems not only give information about the rank of the institute among others but also provide broad idea about the institute, cost of education, its performance, teaching style and prospective job sector after completing education.

Ranking system also helps the ranked institutes. Top ranked university can attract more students and reputation base so some institutes try to improve for going upward in the ranking. Overtime these institutional ranking will grow in use and importance. Keeping this in mind this paper focused to provide an introduction to different ranking systems worldwide and a critical analysis of ten of those referring the benefits, limitations and impact and after that some recommendations have been shown to improve the ranking systems and ensure greater utility and reliability.

What is national university or college ranking?
National university or college ranking rank educational institutes based on some criteria defined by the ranking institutes. These ranking can be on international or national universities and colleges. Some ranking evaluates institutes within a single country and other evaluates institutes worldwide. International or world ranking system focus on the universities which approve foreign students and mostly focus on post graduate programs; whereas national university and college ranking rank institutes focused on undergraduate programs. Mostly ranking is conducted by magazines, newspaper, websites, government and academics. Sometimes rankings are also performed on specific programs, departments or schools. Ranking system considers many variables like; research excellence and influence, wealth, selectivity, student’s option, eventual success, peer review, reputation base, demographics, payment per faculty, spending per students etc.

These ranking systems indicate the top educational institute and help the prospective students to choose the right institute where they can get quality education with possibility of facilities and opportunities.

Ranking systems around the world have created much argument about it’s usefulness and accuracy. The growing rate of ranking system and diversity of ranking method have
increased criticism which indicate the lack of unanimity of this field.

Why national university or college ranking is done?
National university and college ranking mainly is done for the prospective students who can choose the right institutes for their higher education based on information of some important variables.

Sometime ranking is also done for some academic purpose or for providing information for any research purpose. For universities, ranking also matter because these ranking indicate the perception of excellence. Ranking influence the quality and quantity of prospective students which affect the institute’s overall activities as well as perceived value of the degrees. All these perceptions influence the enrollment measures and retention rated which affect the revenue, operating budgets, faculty student ratio, per student expenditures etc.al these factor affects the institute’s reputation base. Webster found in his study that these important feedbacks are imbedded in the ranking process which supports existing ideas about the academic quality of ranked institute (Webster, 2001).

In another study, Across found that parents also follow the ranking as they are the financial source for their child’s education most of the time and they are the driving force behind gathering information and assessing variables (Across, 2011).

Literature Review
Ranking system is not new phenomenon. Since ‘800s ranking systems are getting concentration in the United States. Popularity and use of ranking system increased with the development of the U.S. News and World Report in the early 1980s (Across, 2011). As the need of transparency and accountability increases, ranking systems grew more worldwide (Gnolek, Falciano, & Kuncl, 2014).

In a study of impact of institutional and program area rankings on student access and choice in U.S. Higher education, Webster found that the college ranking conducted by U.S. News and World Report affect students and university leaders in a great deal.

In his study it has also been found that between and among the ranking criteria of U.S. there is presence of multicollinearity and there is possibility that assigned weighting scheme may not accurately reflect actual contributions to USNWR tier rankings. USNWR gives highest weight on academic reputation. In this paper a cursory examination concluded about a systematic relationship which exists between USNWR tier rankings and the tier criteria (Webster, 2001).

Another study of Bastedo and Bowman concluded that ranking has a causal impact on future peer assessment of reputation. In terms of national universities, future peer assessments of reputation are influenced by overall ranking, tier level and changes in tier level. The study supports that USNWR have institutional effects in higher education. They observed that inclusion of less prestigious institutions in the USNWE increased reputation of that institution (Bastedo & Bowman, 2010).

Eccles (2002) observed that potential students are not influenced by changes in ranking position. Students are mostly influenced by competition for places and quality of the learning environment of the university. Other important factors affecting choice in whether the university provide right course programme, have good reputation for teaching and quality of the facilities (Eccles, 2002).

McDonough stated in an article that national ranking influence the middle income students most and student who choose regional colleges mostly affected by ranking than others. His regression analysis point out that with the increase of socio economic status and family income, influence of the USNWR also increases. High achieving students also follow the ranking. He added most of the time these ranking provide information to college bound students who need more basic information (McDonough et.al, 1998).

Clarke came across that low income students bear a negative impact because colleges have introduced early admission to improve their ranking position. For looking better in USNWR these colleges are giving financial aid to top scorer account rather than needy students. To attract high achieving students these colleges are making huge investments which is reducing available resource for other activities (Clarke, 2007).

Through running a simulation Gnolek et al. (2014) showed that a school ranked in mid 30 can move to top 20 with some changes in undergraduate academic reputation score. For this, spending per student and compensation per faculty should be increased side by side other changes and peer assessment score should be increased to 0.08 points (Gnolek, Falciano, & Kuncl, 2014).

While study about NSSE Pike found statistically significant differences among the institutional means for all five NSSE benchmarks and the difference was extremely modest. In another study he concluded that NSSE score is affected by background characteristics of students, gender of the students, major subject, majoring in pre-professional program, number of majors and type of studentship (full time or part time). He did not find any similarity between NSSE benchmark and U.S. News Rankings (Pike, 2004).

Many observers said that these ranking have actually increased the access of students in best university as these universities focus more on attracting high achieving students so that their ranking position goes upward. Evidence also supports that ranking is not an important factor in student’s decision. Only high achieving students, high income families and families with college educated parents give importance on ranking. But the ranking position of undergraduate college affects student’s career at the beginning but it does not seem to affect later (Clarke, 2007).

Eccles (2002) also supported these observations and added that though there is a newspaper hype that annual rankings affects the colleges and universities but these does not have that much influence in the choices of prospective students in deciding about which university they want to be enrolled.

Critical analysis of popular national university or college ranking systems
U.S. News & World Report College and University ranking

Definition:
The U.S. News & World Report’s magazine conduct a ranking of national universities and colleges which is based upon the information collected from different educational institutes and also some annual surveys as well as school websites. It ranges from ties 1 to tier 4. This ranking was first published in 1983 and except 1984, all these years the magazine is publishing the ranking.

Definition of the criteria:
There are seven broad areas in which the indicators to measure academic quality fall. Those are: peer assessment,
retention and graduation of students, faculty resources, student selectivity, financial resources, alumni giving and graduation rate performance. All these indicators measures both the input and output quality. The criteria are:

**Acceptance rate:** It is the ratio of the number of student admitted to the number of applicants of first year students. Lower acceptance rate gives higher ranking.

**Average alumni giving rate:** It is the average percentage of undergraduate alumni who donate money to the university which shows how pleased the past students are with their institute. Higher alumni giving rate gives higher ranking.

**Average graduation rate:** It is the percentage of the students who finished their graduation within six years or less which excludes the students who transferred from other institutes.

**Class size, 1-19 students:** It is the percentage of undergraduate class with student of lower then 20. Higher percentage of small classes scores higher ranking.

**Class size, 50 plus students:** It is the percentage of undergraduate class with 50 students. The lower the percentage of large classes the higher the ranking is.

**Expenditure per student:** It measures the average spending on per full time student. Higher average expenditure per student scores higher ranking.

**Faculty compensation:** It measures the average faculty salary after adjusting with regional cost of living.

**Faculty with a Ph. D. or terminal degree:** It measures the percentage of full time faculty members with highest degree of the related field. Institutes with higher percentage of full time faculty with higher degree score higher rank.

**Graduation rate performance:** It is the difference between the actual graduation rate and the predicted graduation rate. If tactual graduation rate is better than the predicted graduation rate then the institute is over performing which better for the ranking.

**High school class standing:** The percentage of students in the beginning of the academic year who graduated in the top 10 percent from National Universities and National Liberal Arts Colleges or 20 percent from Regional Universities and Regional Colleges. Higher proportion of these type of students score better ranking.

**High school counsellor rating score:** Scores are collected from public and private independent counsellors which is averaged. Higher score from counsellor is sign of academic reputation which scores higher ranking.

**Peer assessment:** It measures how the administrators at peer institutions consider the institute. Higher average peer assessment is better.

**Proportion of full time faculty:** Full time faculty member includes all full time faculty as well as one third of the part time faculty member. Higher full time faculty member scores higher in the ranking.

**SAT/ACT scores:** It measures combined test score on SAT and composite ACT of all the first year students. Higher average SAT and ACT score is better for the ranking.

**Student-faculty ratio:** It is the ratio of full time students to full time faculty members which increases the ranking score with higher ratio.

**Method of data collection**

U.S. News collects most of the information from the colleges and universities by sending a questionnaire to those institutes. In 2016 the data collection process took place at the time of spring and summer of 2015. After the information is received the team evaluate the data for any errors.

Institutes which don’t fill up the questionnaires and don’t answer all the questions, U.S. News use other equivalent information for these institutes collected from Council for Aid to Education, the National Collegiate Athletic Association and the U.S. Department of Education’s National Centre for Education Statistic. Data is also gathered from previous year’s U.S. News and institute’s websites.

**Reference**

Gnolek et al., 2014; Webster, 2001.

<table>
<thead>
<tr>
<th>Criteria</th>
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<tbody>
<tr>
<td>Undergraduate academic reputation</td>
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<tr>
<td>Retention rate</td>
<td>22.5%</td>
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<tr>
<td>Faculty resources</td>
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<tr>
<td>Student selectivity</td>
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<tr>
<td>Graduation rate performance</td>
<td>7.5%</td>
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<tr>
<td>Alumni giving rate</td>
<td>5%</td>
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Weight on each criteria: Each of seven broad criteria is given weight which is shown in the following table.

Recent changes in the U.S. News & World Report College and University rankings

In the year 1016, the ranking has been changed a little bit while calculating the ranking of the Best Colleges of 2016. In that year, two recent surveys of 2014 and 2015 were the base of academic peer assessment scores. Another change was in terms of high school counsellor ratings which were based on average of three recent year’s result. It was based on two year’s result in the previous year’s edition of ranking. But the weights of ranking methodology were unchanged in this year.

**Impact**

U.S. News ranking is one of the most influential and popular rankings in the world. Many educational institutes want to get a place in this ranking. It plays a major role in potential student’s choices about their future college or university as well as the subject they will be study in. Parents and students both use this ranking to get an idea or option in the college or university searching process. There are some evidence that this ranking help the students and parents to make decision where to study.

Limitations

There are some allegations regarding the ranking system that it is volatile and compose wrong result. Some research concluded that the method is noisy and the sub factors are reversible (Gnolek, Falciano, & Kuncl, 2014). The weighting method of the ranking process is also questioned (Clarke, 2007). The ranks are calculated though there is a lack of research on the sub factors and the weights don’t have any empirical and theoretical basis (Gnolek et al., 2014). Some study concluded that the ranking system only focuses on input measures but not on the output measures. Again it has been criticized that the U.S. News ranking guess the values of the factors (DER, 2012). An examination of the ranking criteria suggested that there is huge multicollinearity in three criteria (ALUM, SATAVG, TOP 10). This high multicollinearity and estimated correlation coefficients suggest that the weightage of the criteria may not exactly reveal the real result of the ranking criteria to the overall ranking (Webster, 2001).
The main objective behind this local ranking is to promote competition and quality of education among the affiliated colleges. In addition, the ranking was aimed at increasing the awareness of quality education and the required cognizance among its stakeholders regarding admission of their wards to suitable institution. Since National University of Bangladesh is the largest educational institution accommodating more than 1500000 (lacs) of tertiary level learners of Bangladesh, 2016 ranking would really work as the eye opening standard to all the guardians and learners as well. In parallel to this, private universities in Bangladesh has also started ranking universities of its sort maintaining various national and international criteria in use. Even though the ranking attempted so far might have its pros and cons, a humble beginning is what we needed in the given context.

Conclusion
This article on the review of international ranking system has stressed on various criteria and issues related to educational enterprise and the interests of the concerned stakeholders. Ranking across the globe exists in many different formats. Out of the various university and college ranking systems in practice in different continents reveal its heterogeneous nature. Since socio-economic standard of the learners and sponsors in different countries is one of the key determining factors that helps the stakeholders to decide on admission into institutions, all the stakeholders do not demonstrate the same level of effort to invest on their wards. Hence the heterogeneity of ranking criteria cannot be merged with homogenous characteristics ranking system. In addition, various ranking agencies and organizations were reviewed in this study and the findings seem to suggest that US News and World Report adopt the highest range of criteria to assess the ranking of different universities in the USA. However even the best ranking system is not without its flaws. The article thus suggests that selecting the suitable criteria befitting in the Bangladeshi context may help improving the competitive education and increase the quality of education sector in Bangladesh through administering national ranking among the government universities.

References:

Authors’ Summary
First author: Dr. AKM Zakaria is a Professor in English language in the Department of Humanities and Social Sciences (HSS) of Dhaka University of Engineering & Technology (DUET), Gazipur-1700, Bangladesh. His areas of research interest are English Language Education/Teaching (ELE/ELT), English for Specific Purposes (ESP), Bilingual Education, Applied Linguistics and Sociolinguistics. He has been in teaching and research for the last 16 years.