

## **Analysis of the Accreditation Grade of Study Programs of Higher Education in Indonesia**

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### **Abstract**

This study aims to investigate the accreditation grade of college study program in Indonesia. The study was based on seven standards of accreditation instruments of higher education. It compares the grade of institutional groups, how the grades varies among study programs in Java and Outside Java, and compares the grades among regions of private colleges (Kopertis). The analytical method used in this study is evaluation research. The technique for data collection is documentation of accreditation results conducted by assessors of study programs in 2015. The results of the analysis show that: the overall lowest grade is Standard 7 with the average of 2.62 out of 4. The averages results of standard 6, 4, and 3 are 2.74, 2.78, and 2.83 respectively. The comparisons of the accreditation grades between Java and outside Java study programs are: 1678 and 268 study programs that received A grade, 4627 to 3422 received B grade, and 3901 to 8641 that received C grade, respectively. The top five provinces in which the colleges received A grades are Yogyakarta, Jakarta, West Java, East Java, and Central Java provinces with the percentages of 32, 18, 18, 13 and 12, respectively. In contrast, the provinces in which there are no college which received A grades are Gorontalo, Central Kalimantan, East Kalimantan, Bangka Belitung, North Maluku, Papua, and West Papua. The five Kopertis who got the most A grades are Kopertis Region V, Region III, Region IV, Region VII and Region VI with the percentages of 32, 18, 16, 13 and 12, respectively.

**Keywords:** accreditation grade, study program, Indonesia higher education.

### **Introduction**

Accreditation is an external quality assurance system (organizational entity) (Chalmers & Johnston, 2012; Rankin & Welsh, 2012). The accreditation system of higher education, both institutions, and programs, at the macro level at the sovereign state is always influenced by a system of values, norms, culture, social, economic, political and resilience and national defense (Al Alwan, 2012; Shaw, 2003). Therefore, it is generally unique/unique for the country concerned. Scarce states have precisely the same accreditation system, except if the country in question has ratified a joint agreement (either in the form of mutual arrangement, mutual understanding or mutual recognition), both in the context of public mobility and the implementation of an nation (internationalization), cross-border education (cross border education/borderless education), and cross-national education (trans-national education). At the micro, institutional and study program level, which is accredited is an internal quality assurance system developed by the entity/organization concerned (Gordon, 2004).

Accreditation in various definitions, centered on the review process (peer review system, expertise-based assessment, evaluation and assessment), using agreed standard instruments and references in order to maintain quality and to evaluate that the accredited entity has a commitment always to achieve high quality, and still consistently committed to implementing a system of continuous quality improvements (Management, 2009; Petty, 2010). In the context of the study program, it generally relies

heavily on an evaluation system using the peer review system, reviewers, assessors, or auditors. The essence of the quality assurance system in various contexts always contains five essential system elements, namely (1) quality, (2) standard, (3) management system (quality), (4) quality assurance system, and (5) assessment/audit/review, each of which is an "interrelated system" and in various ways interdependent.

Quality is the most crucial element in accreditation, both in the context of understanding, philosophical or school of thought and praxis (Senel, Yalcin, & Yildirim, 2008). Philosophically the notion of quality is always dynamic, conditional, not independent of the quality standards applied, all of which must be developed and rooted in a system of grades, norms, honesty, impartiality (objectivity) and integrity. Quality is essential if an entity, including universities, competes (Belohlav, 2012; Jansson & Waxell, 2011; Porter, 2005). Quality is becoming less important if an organization, entity or industry does not have to compete well in obtaining controlled input including managing uncontrolled input and managing the process and producing output. However, an object, such a monopolistic institution, in the context of serving the public/ community, especially the government, is still required to have quality outputs/products and services for the benefit of the community of stakeholders.

Quality is always built of a quality culture, which contains three main elements, namely artifacts, values and norms and underlying assumptions (Council on Higher Education, 2004). However, the quality behavior of people and organizations in developing their management systems depends on the practices adopted by a college/organizational entity. Since quality is always associated with competition, in the context of higher education, quality is often difficult to be uniform throughout the world. Theoretically and factually, what usually happens is that there is mutual recognition or equalization of the system. In the context of continuous quality improvement, the quality assurance system (internal and external) relies heavily on the knowledge management system, primarily as a basis for developing a quality control system, a system of evaluation and continuous quality improvement.

The structure of the accreditation system can consist of: (1) supra system; (2) development and guidance sub-systems; (3) sub-systems that carry out accreditation; and (4) accreditation performance monitoring sub-system (Christianingsih, 2011; Kohiri, 2010). Supra system has functions including (1) establishing the initial design of the higher education accreditation system; (2) determine the work area of the higher education accreditation system; (3) informing the expectations set for the higher education accreditation system; (4) provide the necessary resources; (5) guidance (stewardship) consisting of: (a) knowledge management; (b) formulation of a strategic policy framework; (c) providing tools for the implementation of guidance; (d) building partnerships; (e) creating harmony between policy objectives with organizational structure and culture; and (f) guarantee accountability to the broader community. Sub-system development and coaching is a subsystem that allows the overall accreditation system to make choices so that the system has a purpose. This sub-system is responsible for (1) the development and development of accreditation systems; (2) planning resources needed to realize the above items; and (3) performance evaluation of various types of accreditation institutions. Also, this sub-system must notify expectations of the accreditation implementing sub-system and the accreditation performance monitoring sub-system.

The accreditation implementing sub-system carries out accreditation of study programs or higher education institutions. The accreditation performance monitoring sub-system works too (1) monitor the performance of the Internal Quality Assurance System expected from the Study Program after receiving accreditation feedback and (2) provide input on deviations from the accreditation system's expectations to the development and guidance sub-systems and supra systems so that repairs can be made (Krysell, 1997; Palaniswamy, 2014). Accreditation System Requirements can include [8]: (1) based on standards; (2) has a legal basis so that it has national legitimacy; (3) independent of interventions of interest other than the quality of higher education; (4) transparent; (5) non-profit; (6) accountable; (7) representing, but not dependent on stakeholders; (8) managed so that it is effective and efficient; (9) consider assessments by their own study program (self-assessment), assessment by external parties

based on documents and visits by the assessor (site visit); (10) the results of accreditation must be reversed by giving the study program the opportunity to respond; (11) the accreditation system must have adequate resources if possible including budgeting from public funds; and (12) the accreditation system must be periodically evaluated so that standards, procedures, and organizational performance remain optimal.

The Basic Principles for establishing a Higher Education Accreditation System include: (1) commitment to improve the performance of educational institutions / study programs (continuous quality improvement - CQI); (2) the relationship between the quality of higher education and the quality of service in the community (quality cascade - QC); (3) mapping the career path of the workforce from the start of the education stage, its placement to its continuing professional development (conceptualization - production - usability - CPU); (4) able to be trusted by all stakeholders including the Four Main Pillars: institutions / study programs; professional organization; government; user community; and students and the international community (Trustworthy) (Christianingsih, 2011; Kohiri, 2010; SENEL et al., 2008).

Accreditation is an essential element for universities to show the quality of all standards they have (Council & Accreditation, 2005; Cret, 2011; Mishra, 2006; Schomaker, 2015). The presence of accreditation has a positive impact on the quality of graduates (Patil, Sid Nair, & Codner, 2008; Schomaker, 2015; Tshai, Ho, Yap, & Ng, 2014). Accreditation is the recognition process that a study program or higher education institution has a quality assurance system that is by agreed standards and compliance with public accountability, as well as external quality assurance. Also, accreditation of study programs is a comprehensive process of evaluation and evaluation of the commitment of study programs to the quality and capacity of the implementation of the tertiary tri dharma program, to determine the feasibility of study programs to organize their academic programs. Therefore, this study is directed at surveying and analyzing the grade of accreditation on seven standard accreditation instruments, comparing the grade of higher education study programs in Java and Outer Islands, and comparing the grades of higher education institutions based on the Kopertis region.

## Method

The analytical method used in this research is evaluation research. Evaluation research is part of the evaluation and is also part of the study. The number of study programs that have been accredited until 2014 is 18,848 with details of 10,206 located on Java Island, and the rest outside Java. Data collection techniques use documentation studies. Documentation techniques can be interpreted as a way of collecting data obtained from existing documents or stored records, both in the form of files of transcripts, books, newspapers, and so forth. A document is a record of past events. Reports can be in the way of writing, numbers, pictures, or monumental works from someone. Accreditation document data that has been produced by each assessor is then processed and analyzed. The analysis uses descriptive statistics, in the form of average calculations, and percentage calculations. The source of the data in this report is the study program accreditation documents that have been carried out by study program assessors up to 2015.

Table 1. Number of Accredited Study Programs in Each Province

Province	Number of Accredited
Aceh	526
Bali	397
Banten	483
Bengkulu	184
Special Region of Yogyakarta	974
Jakarta Capital Special Region	1907
Gorontalo	123

Cont. Table 1.

<b>Province</b>	<b>Number of Accredited</b>
Jambi	207
West Java	2490
Central Java	1729
East Java	2610
West Kalimantan	227
South Kalimantan	252
Central Kalimantan	134
East Kalimantan	293
Bangka Belitung Islands	47
Riau islands	121
Lampung	376
Maluku	175
North Maluku	126
West Nusa Tenggara	317
East Nusa Tenggara	257
Papua	231
West Papua	136
Riau	411
West Sulawesi	77
South Sulawesi	998
Central Sulawesi	212
Southeast Sulawesi	230
North Sulawesi	284
West Sumatra	631
South Sumatra	491
North Sumatra	1192
<b>Total</b>	<b>18848</b>

## Results and Discussion

### A grade of Accreditation of Higher Education Study Programs in Indonesia

The national data that has obtained A, B and C accreditation grade are 18,848 study programs. The total number of accredited study programs there are 1,946 study programs (10%) have received A grade, 8,049 study programs (43%) have B grade and C grade there are 8,853 study programs (47%). This shows that very few still get "A" accreditation, which is only 10%.

Data on accreditation of study programs at universities in Java have mixed results. Based on the study program accreditation analysis, there were 1678 study programs (16.4%), accreditation B grade, 4627 study programs (45.3%), and accreditation C grade there were 3901 study programs (38.2%). This data shows that there are still many study programs that require continuous coaching so that the performance of study programs can increase. The government needs to make a policy to foster study programs that still receive C grade. The data also shows that accreditation is always found to be not superior. This is due to many factors such as the quality of graduates, facilities and infrastructure, ratios, demographics, access and information, and other factors. Data of accreditation grade of study program accreditation outside of Java Island are still very few, because the study programs that have accredited

A grade only 3.1%, B grade 39.6% and C grade 57.3%. This illustrates that the average quality of education quality outside Java is still not as expected because there are still 57% or 4952 study programs that are accredited in C grade. From the two regions, it shows a comparison that Java Island is superior to educational quality compared to outside Java.

Comparison of the Grade of Accreditation of Study Programs that Gets A, B and C Grades for Each Province

The overall grade of accreditation of study programs in the five major provinces which graded more than 10% for A accreditation grade were DIY 32%, DKI 18%, West Java 18%, East Java 13%, and Central Java 12%. These results explain that DIY is the province with the highest number of institutions and contributes to the number of excellent study programs. The percentage of accreditation grades for other regions is still below 10% or below the national average. Whereas for the list of provinces that do not yet have the grade of study program A there are still eight provinces, namely Gorontalo, Central Kalimantan, East Kalimantan, Bangka Belitung Islands, North Maluku, Papua, West Papua, and West Sulawesi. This needs special handling because there are only 5 provinces (15%) that have received more than 10% of study program accreditation grades, and there are still 8 provinces (24%) whose study programs have not received A grade. A description of the comparison of accreditation grades study programs in Indonesia appear in the following graph.

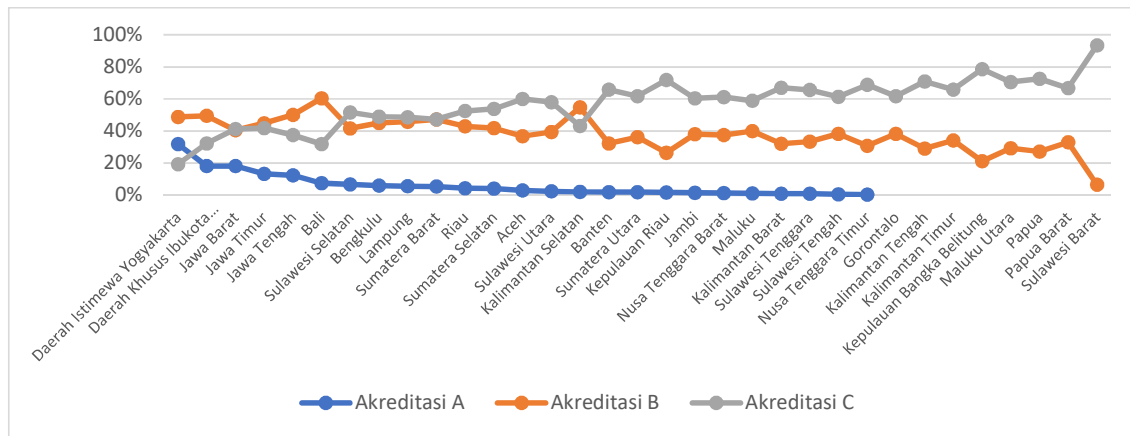


Figure 1. Comparison of Accreditation Grades for each Province

Comparison of data on the accreditation grades of each study program are presented in Figure 2. It could be concluded that the A accreditation grade achieved is only 8%, B grade is 41%, and C grade is 51%. Kopertis Region V has the highest universities with A grade out of 14 Kopertis in Indonesia, which has the percentage of 32%. This is due to the DIY region, popular as the city of student, has the highest number of study programs coupled with superior accreditation that gives the right to dominate as a region with a good quality of education. In the contrary, there is a region that has no universities with A grades, which is Kopertis Region XIV. The low quality of education in the region with all its limitations, especially in explaining the instrument indicators in accreditation standards has made the region became inferior.

Based on the data, Kopertis V is in the DIY province, while Kopertis XIV is located in Papua and West Papua provinces. This shows that the performance of study programs in Papua and West Papua requires intensive assistance from the government, especially the Ministry of Research, Technology and Higher Education.

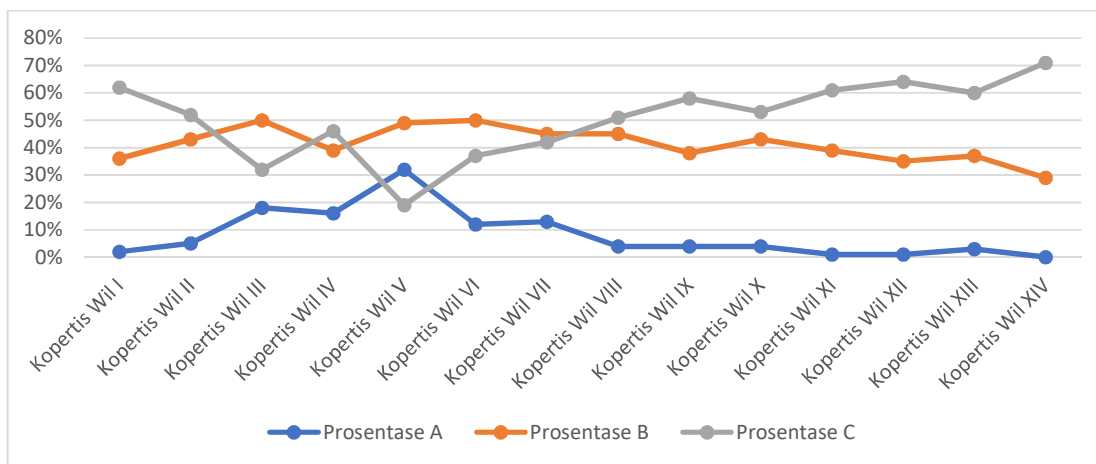


Figure 2. Comparison of Accreditation Grades for each Kopertis

### Comparison of the Standard Grades of Java and Outside Java Study Programs

The average grade of the standard study program, in Java and outside Java based on the analysis shows that the assessment in Java is relatively better than the standard grade outside Java. The average grade of the standard in Java Island is already above three while for the Outer Islands of Java the average grade of the standard is still around 2.78. The lowest standard grade data in Java and outside Java is still in Standard 7, namely in research, service/community service and collaboration. The highest average standard grade on Java Island in Standard 1 with a grade of 3.21, that is, on the standard of students and graduates, this is the same as the highest grade outside Java, also in standard 1 with a grade of 3.04.

Table 2. Average Standard Grades for Java and Outside Java Study Program

Scope of Accreditation	Standard of Accreditation						
	1	2	3	4	5	6	7
Java	3.21	3.21	2.93	2.93	3.19	2.91	2.81
Outside Java	3.04	3.03	2.72	2.64	3.02	2.56	2.43
Average	3.12	3.12	2.83	2.78	3.11	2.74	2.62

Comparison of standard grades for study program forms per province generally shows that the average standard grade is seven which is the lowest and the highest standard grade 1. The average standard grade for the Study Program in the Special Province of Yogyakarta still ranks highest for national data and the lowest in North Maluku Province. From the data also seen, apart from North Maluku, the study programs that received the lowest grades came from the Provinces: Banten, NTT, Riau Islands, and West Papua. It turns out that the standard grade of study programs in Banten, NTT, Riau Islands, and West Papua is still relatively low compared to other provinces, thus requiring more assistance from the Government.

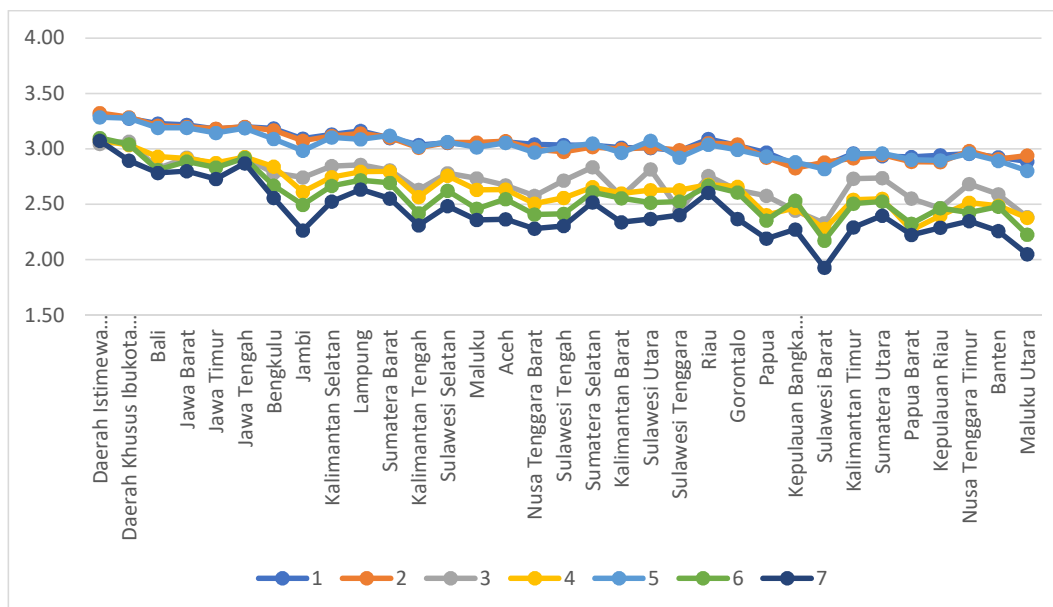


Figure 3. Average comparison of standard grades for study programs per region

Various kinds of analysis results both from accreditation assessments and accreditation standards show a significant imbalance between Java island and the outside Java province. There are many best universities on Java Island, so Java is a reference in the quality of education in Indonesia. As with the outside of Java, with a limited number of excellent universities, the percentage of both the quantity and quality of education is lower than the area of Java. Therefore, the research findings of this analysis are how to provide equal distribution of educational excellence through quality improvement programs in outside Java provinces.

## Conclusions

Based on data about the grade of accreditation of study programs from various groups, types and levels of institutions that have been collected and after analysis can be given conclusions as follows.

1. Nationally, the number of study programs that received A accreditation grade are 1946 study programs (10%), B grade 8,049 (43%) and C grade of 8,853 study programs (47%). So the highest grade of accreditation is the C grade.
2. Study programs in public universities that get A grade are 1459 study programs (23%), B grade 3517 (56%) and C grade 1312 (21%). While the study programs at private universities that received A grade were 487 study programs (4%), B grade of 4532 (36%) and C grade 7541 (60%).
3. Based on seven accreditation standards, the national average grade can be sorted from the lowest to the highest as follows. Standard 7 concerning: research, service/community service, and collaboration average grade 2.62 for grades 4. Standard 6 about financing, facilities and infrastructure, and information system average 2.74 out of 4. Standard 4 on human resources average grade 2.78 out of 4. Standard 3 on students and graduates, average grade 2.83 out of 4. Standard 5 about curriculum, learning, and academic atmosphere, average grade 3.02 out of 4. Standard 2 about governance, leadership, management system, and quality assurance, average grade 3.12 out of 4. Finally standard 1 about vision, mission, goals and targets, and achievement strategies, average grade 3.12 out of 4.

4. Comparison of the grade of accreditation of study programs on Java and outside Java as follows. On Java Island, there were 1678 study programs which received A grade, outside Java as many as 268. In Java, 4627 study programs received B grades, outside Java 3422. In Java, there were 3901 study program received C grade, and outside Java 8641.
5. Comparison of the grade of accreditation of study programs based on Kopertis, the five Kopertis who got the most A grades are Kopertis Region V, Region III, Region IV, Region VII and Region VI with the percentages of 32, 18, 16, 13 and 12, respectively.

## References

- Al Alwan, I. (2012). Is accreditation a true reflection of quality? *Medical Education*.  
<https://doi.org/10.1111/j.1365-2923.2012.04259.x>
- Belohlav, J. A. (2012). Quality, Strategy, and Competitiveness. *California Management Review*.  
<https://doi.org/10.2307/41166743>
- Chalmers, D., & Johnston, S. (2012). Quality assurance and accreditation in higher education. In *Quality Assurance and Accreditation in Distance Education and E-learning: Models, Policies and Research*.  
<https://doi.org/10.4324/9780203834497>
- Christianingsih, E. (2011). Manajemen Mutu Perguruan Tinggi (Sebuah Konsep tentang Mutu Perguruan Tinggi Swasta). *PUBLICA*.
- Council, A., & Accreditation, H. E. (2005). Sharing Quality Higher Education Across Borders: A Checklist for Good Practice. *Higher Education*.
- Council on Higher Education. (2004). *Criteria for programme accreditation*. Council on Higher Education.  
<https://doi.org/10.1109/CLEOE-IQEC.2007.4386596>
- Cret, B. (2011). Accreditations as local management tools. *Higher Education*.  
<https://doi.org/10.1007/s10734-010-9338-2>
- Gordon, G. (2004). Quality Assurance in Higher Education. *Quality Assurance in Education*.  
<https://doi.org/10.1108/09684889310046158>
- Jansson, J., & Waxell, A. (2011). Quality and regional competitiveness. *Environment and Planning A*.  
<https://doi.org/10.1068/a4469>
- Kohiri, M. (2010). Sistem Penjaminan Mutu Perguruan Tinggi Diteknologi. *Seminar Nasional VI SDM Teknologi Nuklir*.
- Krysell, M. (1997). How accreditation changed us. In *Marine Pollution Bulletin*.  
[https://doi.org/10.1016/S0025-326X\(97\)80881-8](https://doi.org/10.1016/S0025-326X(97)80881-8)
- Management, H. (2009). Accreditation & Standards. *Quality*.
- Mishra, S. (2006). *Quality Assurance in Higher Education: An Introduction*. National Assessment and Accreditation Council (NAAC). <https://doi.org/10.1080/0260293990240402>
- Palaniswamy, C. (2014). Milestones and the Next Accreditation System. *Journal of the American College of Cardiology*. <https://doi.org/10.1016/j.jacc.2014.07.951>
- Patil, A., Sid Nair, C., & Codner, G. (2008). Global Accreditation for the Global Engineering Attributes : A Way Forward. In *Proceedings of the 2008 AaeE Conference, Yeppoon*.
- Petty, M. D. (2010). Verification, Validation, and Accreditation. In *Modeling and Simulation Fundamentals: Theoretical Underpinnings and Practical Domains*.  
<https://doi.org/10.1002/9780470590621.ch10>
- Porter, M.E. (2005) 'Building the Microeconomic Foundations of Prosperity: Findings from the



- Business Competitiveness Index, in M.E. Porter, K. Schwab and A. Lopez-Claros (eds.) *The Global Competitiveness Report 2005–2006*, Palgrave Macmillan, World Economic Forum: New York, pp: 43–77.
- Rankin, B. W. J., & Welsh, C. (2012). Accreditation. In *Encyclopedia of Forensic Sciences: Second Edition*. <https://doi.org/10.1016/B978-0-12-382165-2.00235-X>
- Schomaker, R. (2015). Accreditation and quality assurance in the Egyptian higher education system. *Quality Assurance in Education*. <https://doi.org/10.1108/QAE-08-2013-0034>
- Senel, S., Yalcin, D., & Yildirim, O. (2008). Accreditation For Academic Quality. In *8th International Scientific Conference - SGEM2008*.
- Shaw, C. D. (2003). Evaluating accreditation. *International Journal for Quality in Health Care*. <https://doi.org/10.1093/intqhc/mzg092>
- Tshai, K. Y., Ho, J. H., Yap, E. H., & Ng, H. K. (2014). Outcome-based education - The assessment of programme educational objectives for an engineering undergraduate degree. *Engineering Education*. <https://doi.org/10.11120/ened.2014.00020>