Assessing the quality of the business and management education in higher education

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ABSTRACT

As the third-party planner and implementer of higher education institutional and program evaluations, the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT) completed program evaluations for all 145 undergraduate business and management (B&M) programs in 43 universities/colleges from 2006 to 2010. In the 145 programs evaluated, 105 programs (or 72 percent) received a five-year certificate of accreditation. However, the failure rate (28 percent) of the programs in this field is much higher than the average failure rate of overall university programs (13 percent). This indicates that not only all programs in this field should keep enhancing quality assurance but also around one third of programs among them have to make many efforts to meet the accreditation criteria. The purpose of this paper was to identify the critical factors of passing/failing the program evaluation and the measures in line with the critical factors should be urgently improved. To attain the purpose, a content analysis of 145 B&M program evaluation reports was conducted. As result of the analysis, the following results are achieved: (1) The 10 critical factors of passing/failing the program evaluation are coherence between goal feature and curriculum, self-improvement capability and mechanism, composition and operation of program committee, curriculum design and mapping, interaction between faculty and student, use and benefit of instructional equipment, environment and rewarding system for research, research outcome and faculty load, graduate's education-employment match, and employment counseling and alumni follow-up; (2) The three measures that should be urgently taken include "aligning program goals, faculty quantity and quality, and curriculum planning", "encouraging all faculty to engage in research and increase research quantity, quality and internationalization", as well as "strengthening faculty quantity and quality, and lightening their workload".

Keywords: *program evaluation, business and management education, higher education, quality assessment, content analysis*

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Introduction

Program evaluation has become an essential element of the means of continuous improvement and accountability measures of universities. In Taiwan, there are the following two tracks for post-compulsory education: academic education and technological and vocational education. The official program evaluation for the 78 universities/colleges in the track of academic education is conducted by the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT). It is accreditation-oriented, adopting the PDCA (Plan-Do-Check-Act) model with an emphasis on program self-positioning, student learning outcome, and mechanism for continuous improvement.

The spirit of the program evaluation was "to ensure that the program provides students with a quality learning environment." Therefore, the design of program evaluation standards mainly focused on the following four aspects: (1) What to do—What are the aims and goals of the program? (2) How to do—How does the program enhance its curriculum design, faculty quality and teaching, student learning and assessment, as well as administration and management? (3) What are achieved—To what extent do faculty professional performance and graduates' performance meet program aims and goals and what are the program features? (4) How to improve—How does the program make improvement when any operation of the program deviates from program aims and goals and what is the effectiveness of improvement? That is to say, the program evaluation standards were centered on students' "right to education" (HEEACT, 2009). HEEACT's review procedure of program evaluation is shown as Figure 1. Obviously, there are the following three tiers of decision making teams in charge of the result of any program evaluation: program site-visit team, discipline-specific accreditation taskforce, and accreditation commission.
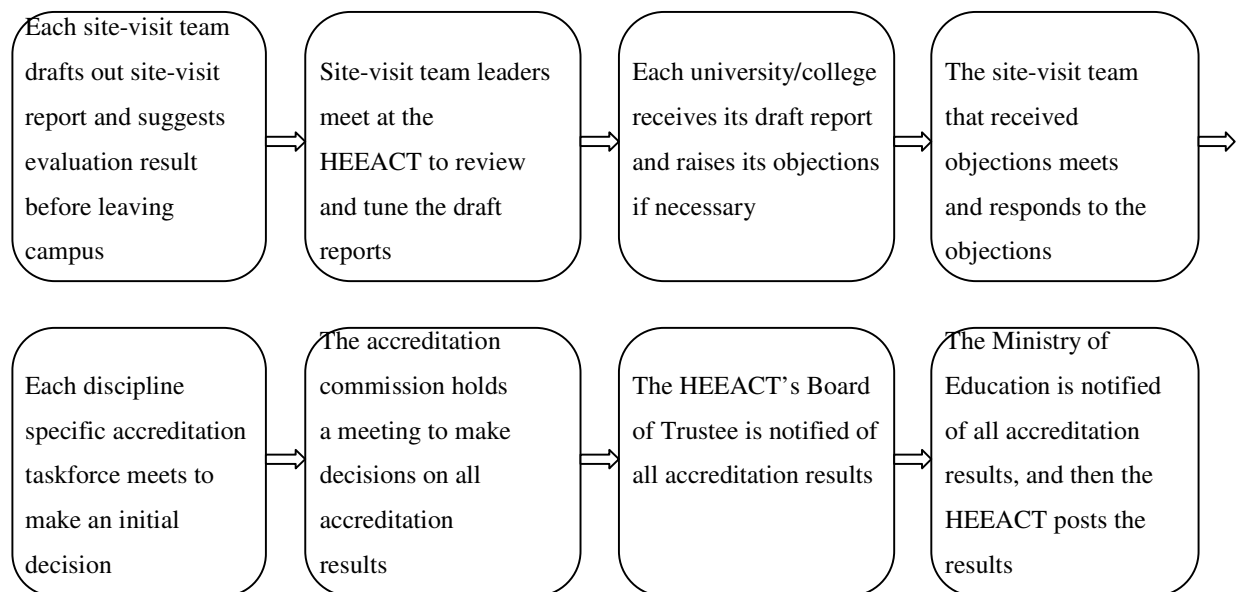
Each site-visit team drafts out site-visit report and suggests evaluation result before leaving campus	Site-visit team leaders meet at the HEEACT to review and tune the draft reports	Each university/college receives its draft report and raises its objections if necessary	The site-visit team that received objections meets and responds to the objections
Each discipline specific accreditation taskforce meets to make an initial decision	The accreditation commission holds a meeting to make decisions on all accreditation results	The HEEACT's Board of Trustee is notified of all accreditation results	The Ministry of Education is notified of all accreditation results, and then the HEEACT posts the results

Figure 1. The review procedure of program evaluation/accreditation

Source: Lee, Wei, & Wang (2013), p. 8.

The first round of university program evaluation was conducted from 2006 to 2010. In total, more than 4,000 programs (including 2,822 undergraduate programs) in 78 universities/colleges evaluated in the first round were categorized into 44 disciplines. In the 78 universities/colleges during the first-round evaluation, 43 had a (or several) business and management (B&M) program(s)--bachelor, master, doctoral or cross-departmental program(s). Totally, there were 286 B&M programs in which accounted for 145 undergraduate programs. There were three possible results of program evaluation: Pass, Referred or Fail. In Taiwanese culture, "Referred" is often considered as "Fail" because it also fails to pass.

There were 2,822 undergraduate programs evaluated in the first round of program evaluation. Among them, 2,445 (87 percent) passed the evaluation and received a five-year certificate of accreditation, while 377 (13 percent) failed to pass (see Figure 2).
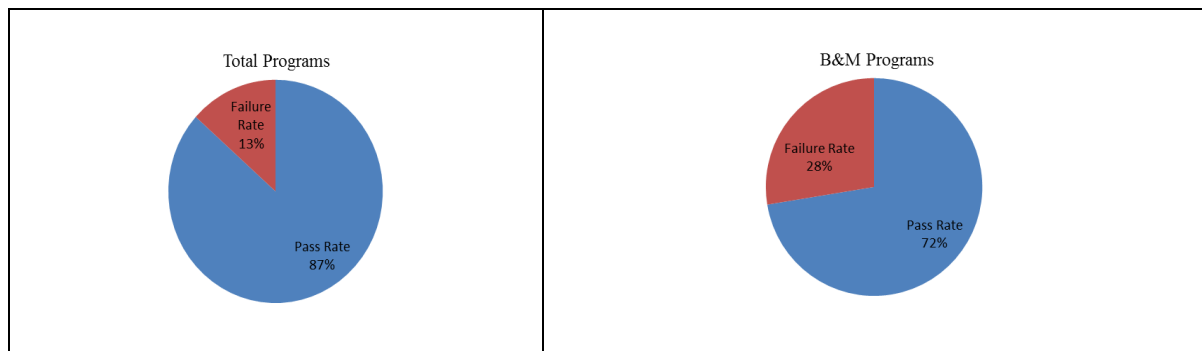
Figure 1. Failure rates of total programs (left) and B&M programs (right)

B&M is one of the 44 disciplines categorized in the first-round program evaluation and had the following four sub-areas: finance, accounting, general management (including organizational and human resource management, strategic and international business management, and technology management) and medical management. In the 145 undergraduate B&M programs evaluated, 105 programs (72 percent) received a five-year certificate of accreditation. However, the failure rate (28 percent) of the programs in this discipline/field is much higher than the average failure rate of overall university programs (13 percent; see Figure 2). It implies that about one-third of undergraduate B&M programs did not provide their students with a quality learning environment. The purpose of this paper was to identify the critical factors of passing/failing the program evaluation and the measures in line with the critical factors that should be urgently taken.

Methodology

Content analysis was employed to attain the purpose of this study. Originally used in the field of communication research, content analysis is an objective, systematic and qualitative method based on a quantitative description of explicit contents in written texts. A content analysis of 145 B&M program evaluation reports, posted on HEEACT's website, was conducted in this study in 2014.

The six main steps of content analysis utilized in this study are as follows: stating research question(s), selecting the text material, reading and reviewing the material selected, defining the unit of analysis and categories, coding the textual material, marking the keywords or phrases with a computer software and placing them in the categories which have been

identified, and interpreting and reporting the findings (Hall, u.d.; Mayring, 2000). HEEACT's program evaluation reports are presented in qualitative description, which mainly include evaluation result and a list of the programs' merits and suggestions for improve. In terms of categories, the following five aspects of program evaluation were set by HEEACT: (1) Goal, features and self-improvement, (2) Curriculum design and faculty teaching, (3) Student learning and student affairs, (4) Research and professional performance, and (5) Graduates' performance. Thus, they were selected as the main topics of categories in this study. Furthermore, the following seven evaluation criteria were set by HEEACT: (1) Program aims and goals are specific and meet the professional trends of the discipline which the program belongs to; (2) Curriculum planning of the program reflects educational goals of the program; (3) Faculty quality and quantity meet the needs to attain educational goals and implement the curriculum planned; (4) Learning resources meet the needs for faculty teaching and student learning; (5) Both quality and quantity of faculty research and professional performance are good; (6) The mechanism of program self-improvement is sound and workable; and (7) The mechanism to follow-up graduates' careers is good. Hence, the seven criteria were selected as the sub-topics of categories in this study. In addition, the intercoder reliability from a pilot test of this study was 0.874. It is acceptable according to Kassarjian (1977).

Results

Based on the open coding (n = 5,568) and selective coding (n = 231) on the 145 undergraduate B&M program evaluation reports, the results of this study were inducted as follows:

The critical factors of passing/failing the program evaluation

Based on the frequency-of-mention in the 145 program evaluation reports, the 10 critical factors of passing/failing the program evaluation are identified as follows: coherence between goal feature and curriculum, self-improvement capability and mechanism, composition and operation of program committee, curriculum design and mapping, interaction between faculty and student, use and benefit of instructional equipment, environment and rewarding system for research, research outcome and faculty load, graduate's education-employment match, and employment counseling and alumni follow-up (see Table 1). With regard to the factors mentioned in the programs that passed the evaluation, the top three factors in descending order of frequency-of-mention are "Coherence between goal feature and curriculum", "Curriculum

design and mapping" and "Interaction between faculty and student". In regard to the factors mentioned in the programs that failed the evaluation, the top three factors in descending order of frequency-of-mention are "Research outcome and faculty load", "Curriculum design and mapping" and "Coherence between goal feature and curriculum". Apparently, the two factors, "Coherence between goal feature and curriculum" and "Curriculum design and mapping", are highly concerned for either the programs passing the evaluation or the programs failing the evaluation. Obviously, curriculum is the common keyword of the two factors.

Table 1. The frequency-of-mention of 10 critical factors mentioned as merits or should-be-improved suggestions

	Critical Factors	Is this factor mentioned in the evaluation reports? Yes/No	Is this factor mentioned in the programs passing the evaluation? (N=105) Yes/No (%)	Is this factor mentioned in the programs failing the evaluation? (N=40) Yes/No (%)
1.	Coherence between goal feature and curriculum	124/21	89/16(84.8/15.2)	35/5(87.2/12.5)
2.	Self-improvement capability and mechanism	64/81	46/59(43.8/56.2)	18/22(45/55)
3.	Composition and operation of program committee	85/60	59/44(56.2/41.9)	26/14(65/40)
4.	Curriculum design and mapping	117/28	82/23(78.1/21.9)	35/5(87.5/12.5)
5.	Interaction between faculty and student	107/38	76/32(72.4/30.5)	31/6(77.5/15)
6.	Use and benefit of instructional equipment	96/49	70/35(66.7/33.3)	26/14(65/35)
7.	Environment and rewarding system for research	94/51	70/35(66.7/33.3)	24/16(60/40)
8.	Research outcome and faculty load	101/44	66/39(62.9/37.1)	35/5(87.5/12.5)
9.	Graduate's education-employment match	74/71	60/45(57.1/42.9)	14/26(35/65)
10	Employment counseling and alumni follow-up	96/49	75/33(71.4/31.4)	21/16(19/40)
	Total		105	40

Note: Evaluation outcome "Referred" was classified into "Fail".

The measures that should be urgently taken

The frequency-of-mention of 10 critical factors mentioned in the should-be-improved suggestions is shown as Table 2. In terms of continuous improvement, all the suggestions should be valued. However, the six critical factors with frequency-of-mention percentages higher than 50 percent in the passing or failing program reports can be identified as follows: "Coherence between goal feature and curriculum", "Composition and operation of program committee", "Curriculum design and mapping", "Environment and rewarding system for research", "Research outcome and faculty load" and "Employment counseling and alumni follow-up". Therefore, the three measures, in line with the six critical factors, that should be urgently taken include "aligning program goals, faculty quantity and quality, and curriculum planning", "encouraging all faculty to engage in research and increase research quantity, quality and internationalization", as well as "strengthening faculty quantity and quality and lightening their workload".

Table 2. The frequency-of-mention of 10 critical factors mentioned in the should-be-improved suggestions

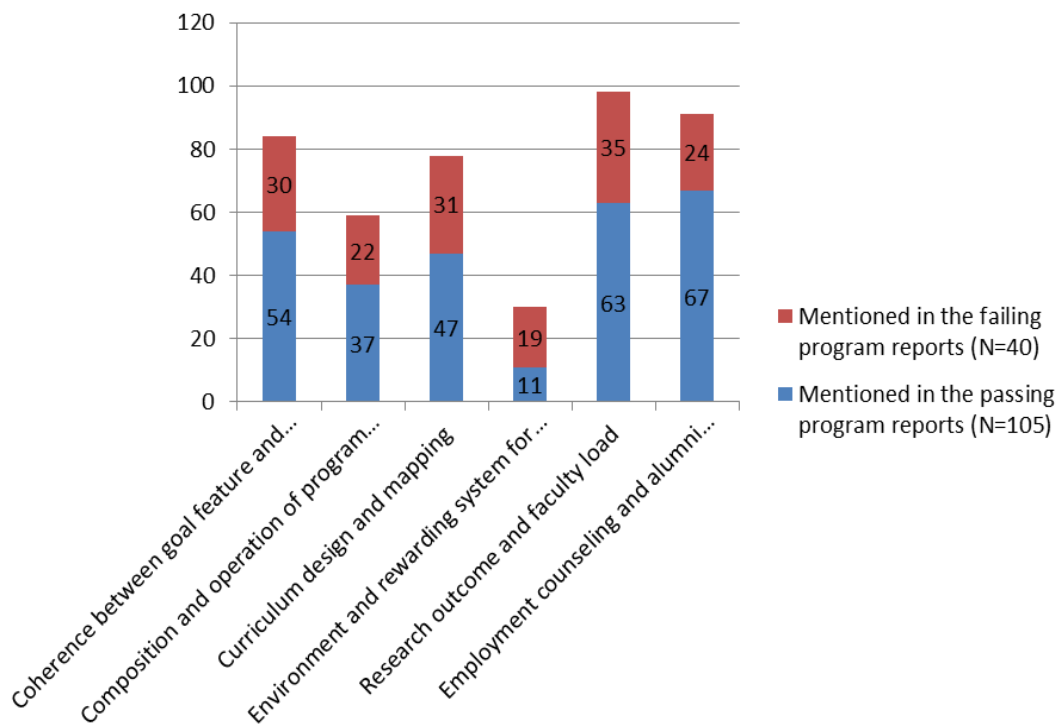|	Critical Factors	Mentioned in the passing program reports (N=105)	Mentioned in the failing program reports (N=40)
1.	Coherence between goal feature and curriculum	54 (51.4%)	30 (75.0%)
2.	Self-improvement capability and mechanism	17 (16.2%)	13 (32.5%)
3.	Composition and operation of program committee	37 (35.2%)	22 (55.0%)
4.	Curriculum design and mapping	47 (44.8%)	31 (77.5%)
5.	Interaction between faculty and student	11 (10.5%)	14 (35.0%)
6.	Use and benefit of instructional equipment	46 (43.8%)	18 (28.1)
7.	Environment and rewarding system for research	11 (10.5%)	19 (63.3)
8.	Research outcome and faculty load	63 (60.0%)	35 (87.5%)
9.	Graduate's education-employment match	21 (20.0%)	8 (20.0%)
10.	Employment counseling and alumni follow-up	67 (63.8%)	24 (60.0%)
	Total	105	40

Figure 2. The six critical factors mentioned in the should-be-improved suggestions

Implications

Based on the above results, the implications of this study may be drawn as follows:

Implications for managerial practices

1. The 10 critical factors of passing/failing the program evaluation can serve as the key success factors of program evaluation.
   Key success factors (KSFs) are the combination of important facts that is required to accomplish desirable goals such as passing the program evaluation (BusinessDictionary, 2014). To effectively ensure the quality and accountability of undergraduate B&M programs, the 10 critical factors of passing/failing the program evaluation, such as coherence between goal feature and curriculum, have to be valued.

2. The three measures should be urgently taken to avoid negative comments.
   The should-be-improved suggestions somehow mean disadvantages. Thus, the three measures, such as "aligning program goals, faculty quantity and quality, and curriculum planning", should be urgently taken by any program to avoid negative comments from evaluators.

Implications for further studies

A content analysis of the 145 undergraduate B&M programs completed in this study results in more information than those are presented in this paper. The authors of this paper will present more results and implications in the near future. Additionally, the second round of nation-wide university program evaluation has been implementing. A comparison of the analysis results between the two rounds of evaluation is suggested to be made.

Acknowledgement

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