

Professorial criteria in Vietnam

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ABSTRACT:

Professorial promotion within the university is decisive for the success of both scientific research and higher education. Vietnam has 235 universities, but their quality has been questioned; and very few of them are recognized in prestigious world university rankings. This paper studies professorial promotion at universities in Vietnam using the professorial criteria issued by the national government in 2012. For comparison, the professorial criteria of Malaysian universities, also issued in 2012, are measured against those of Vietnam. Differences in the criteria of these two countries provide proofs that convincingly explain variance in higher education achievements. The paper proposes that important aspects of professorial criteria from Malaysia should be taken into account by policy makers when upgrading similar criteria for Vietnam. The quality of university graduates in Vietnam has been criticized and the portion of unemployed graduates has steadily been increased; therefore, reconsidering professorial criteria is unavoidable if Vietnam is to improve its higher education standard.

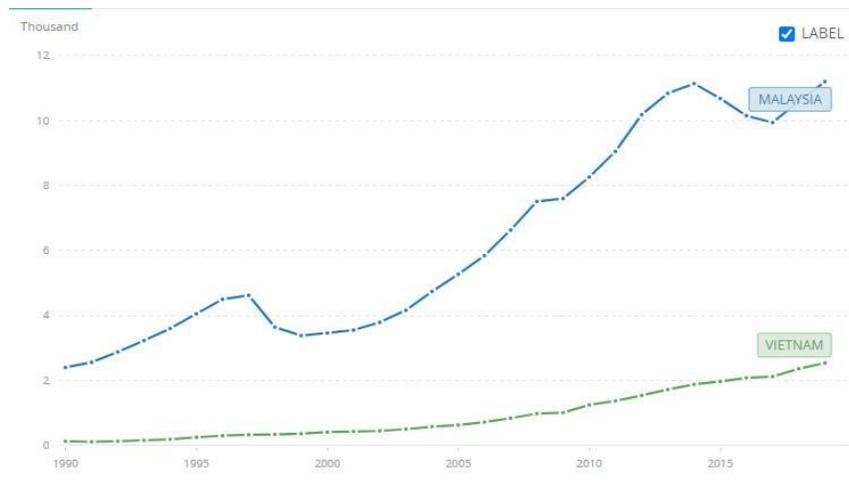
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1. Introduction

There have been considerable developments in higher education in Southeast Asia in recent years. Some countries have made remarkable achievements, while others still face many difficulties. In Vo et al. (2019), Malaysia and

Vietnam were considered as the most comparable (and competing) countries in the region. However, according to Gross National Income (GNI) per capita data given by the World Bank, the GNI per capita of Vietnam was considerably lower than Malaysia's over three decades: 1990 - 2019.



Source: The World Bank

By 2019, the GNI per capita of Malaysia was 11,200 USD, but Vietnam's was 2,540 USD. This difference is huge, so it is difficult for Vietnam to bridge this gap. It is undoubtable that economic development directly affects education. Regarding higher education, Vietnam has 235 universities, as noted in MOET (2018), and Malaysia has 61

universities, as reported in EMGS (2019). The number and percentage of Vietnamese and Malaysian universities ranked by the leading world university ranking lists, the Academic Ranking of World Universities (ARWU) and Times Higher Education World University Rankings (THE), were as follows:

Country	Ranking		Portion within country
	ARWU	THE	
Vietnam	1	3	1.7%
Malaysia	5	13	29.5%

Table 1: Numbers of universities ranked of Malaysia and Vietnam; Retrieved in 2019

As Table 1 shows, Vietnam has only 1 university ranked by ARWU and 3 universities ranked by THE. However, Malaysia has 5 universities in the table of ARWU and 13 universities listed in THE. Regarding the portions of universities ranked by either ARWU or THE over the total number of universities in each country, we see it was 1.7% for Vietnam and 29.5% for Malaysia. It was notable that Malaysia is considerably stronger than Vietnam regarding these rankings. This is a significant difference and reflects the strength of the higher education in Malaysia compared to Vietnam.

To evaluate the strength of a university, the faculty at the rank of professor is considered, since they represent the senior forces in their fields and of the university (Altbach, 2008; Finnegan and Hyle, 2009; Stewart et al., 2009; Taylor, 2007; Armijos-Bravo, 2019; Aydin, 2019; Akkaya, 2019). Therefore, the above records of ranked universities in Malaysia and Vietnam may reveal considerable differences in the professorial criteria of the two countries.

Until now, there have been many investigations of the professorial criteria in Malaysia (Azman et al., 2016; Omar et al., 2014; Sidek et al., 2012; Yunus and Pang, 2015; Wang

and Teter, 2017) and references therein. These studies focused in detail on professorial criteria in Malaysia and analyzed what should be changed in such criteria. While we have not found any research papers investigating professorial criteria in Vietnam, there have been frequent debates on this topic among scholars and also among journalists in Vietnamese newspapers (Dai, 2018; Hanh, 2019; Nguyen, 2019; Le, 2012). Concern about this issue seems unstoppable, and therefore we conclude that the professorial criteria of Vietnam should be studied scientifically.

This paper is focused on introducing the professorial criteria of Vietnam in such a way that they can be understandable for the whole world. We were then devoted to comparing professorial criteria of Vietnam and Malaysia and to figuring out what changes Vietnam should consider when upgrading its professorial criteria. At the end, Section 3.2 of this paper, in its several parts, is focused particularly on recommendations for Vietnam in progressively revising its professorial promotion criteria.

2. Materials and methods

The study was based on the professorial criteria of Vietnam and Malaysia both issued in 2012 (actually both were the 2nd editions of the previous regulations). These came from the official materials of the two countries. This paper only focused upon the ranks of associate and full professors and on the criteria for full-time posts.

2.1. The professorial criteria of Malaysia

In Azman et al. (2016), MME (2012), Wang (2017), Teter (2017), the professorial criteria in Malaysia were presented. These include the following indicators:

- Seniority (M1)
- Teaching and learning (M2)
- Research and innovation (M3)
- Publication and writing (M4)
- Postgraduate supervision (M5)
- Academic recognition/leadership (M6)
- Community services and nation building (M7)
- Consultancy and industrial links (M8)
- Administrative roles/contributions to university (M9)

Further details of these criteria can be found in the aforementioned texts (MME, 2012; Wang, 2017; and Teter, 2017).

2.2. The professorial criteria of Vietnam

The criteria for professorial promotion in Vietnam can be found in the State Council for Professorial Promotion documentation (2016). However, this material is not available in English;

therefore, it is necessary to briefly present it here in summary and translation. Vietnam’s criteria include 6 indicators as below.

- Seniority (V1)
- Academic presentation (V2)
- Language proficiency (V3)
- Teaching experience (V4)
- Graduate supervision (V5)
- Research record (V6)

2.2.1. Seniority (V1)

Each candidate must have a doctoral degree at least 3 years before submitting a promotion application. In case a candidate submits an application earlier than 3 years after getting a doctoral degree, they must have a research record doubly stronger than the standard one.

2.2.2. Academic presentation (V2)

Each candidate must be able to present a report about their record in research, innovation and education at institutional and national committees.

2.2.3. Language proficiency (V3)

All candidates must be fluent in at least one foreign language for their academic activities and must be able to communicate in English.

2.2.4. Teaching experience (V4)

This criterion is based on total hours that a candidate must teach. These teaching hours depend on the number of courses, courses’ credits, and can be exchanged with undergraduate and graduate supervision. This requirement is measured as below.

Associate professor			Full professor
Option 1	Option 2	Option 3	
At least 1215 hours, and the last 607.5 hours are consecutive	Less than 1215 hours, but having a research record two times more than	At least 10 years of consecutively teaching	Three years after appointed to be an associate professor, and the last 607.5 hours of teaching are

	required, and the last 607.5 hours are consecutive		consecutive
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Table 2: Vietnam’s criterion for teaching experience

Note that

- The consecutiveness of the last teaching hours of a candidate with a habilitation or doctor of science degree, as in France or Russia, can be less, more precisely, just 202.5 hours.
- Academic supervision can be exchanged for teaching hours as follows:

Supervision task	Equivalent teaching hour
A doctoral thesis	150
A master thesis	52.5
An undergraduate thesis	18.75

Table 3: Vietnam’s criterion for supervision exchanged

If a thesis is jointly supervised by more than one supervisor, then the main advisor gets $\frac{2}{3}$ of total

equivalent teaching hours and the final $\frac{1}{3}$ is equally divided among other supervisors.

2.2.5. Graduate supervision (V5)

Associate professor		Full professor
Option 1	Option 2	Main supervisor of at least two doctoral students successfully defending their theses
Main supervisor of at least two master’s students successfully defending their theses	A doctoral student successfully defending his thesis.	

Table 4: Supervision requirements for Vietnam’s professorial promotion

2.2.6. Research record (V6)

The research record should begin with a definition of research marks. Scientific papers, books/lecture notes, research grants and doctoral

supervision are marked with research marks; more precisely, as presented in the following comprehensive table.

Document type	Index/Classification	Research mark
A paper in a scientific journal	ISI (SCI, SCIE, SSCI, AHCI)	0 – 2
	ISI (ESCI), Scopus	0 – 1.5
	International but not ISI/Scopus	0 – 1

	National (in Vietnamese)		0 – 1
	Institutional (in Vietnamese)		0 – 0.5
	Institutional (in Vietnamese), young		0 – 0.25
A conference paper	Proceeding with ISBN		0 – 1
A book	Advanced		0 – 3
	Lecture note		0 – 2
	Reference		0 – 1.5
	Guidance, dictionary		0 – 1
A research program	National	Chair	0 – 1.5
		Deputy chair, Secretary	0 – 0.5
A research project	National	Chief investigator	0 – 1.25
	Ministry, provincial, central city	Chief investigator	0 – 0.5
	Institutional	Chief investigator	0 – 0.25
Doctoral supervision	Unique supervisor		1
	More-than-one supervisors	Main supervisor	$\frac{2}{3}$
		Co-supervisors	$\frac{1}{3}$

Table 5: Research marks of research outputs for Vietnam’s professorial promotion

The following notes explain some items in Table 5:

- ISI is the abbreviation of Institute for Science Information. ISI Web of Knowledge or Web of Science maintains citation databases covering thousands of academic journals classified into several citation categories follows:
 - SCI: Science Citation Index,
 - SCIE: Science Citation Index – Expanded,
 - SSCI: Social Sciences Citation Index,
 - AHCI: Arts and Humanities Citation Index,

- ESCI: Emerging Sources Citation Index; ISI used to be owned by Thomson Reuters in USA but was sold. Now it belongs to Clarivate Analytics also in USA (Clarivate Analytics, 2016).
- Scopus: the citation database of the Dutch scientific publisher Elsevier. For a journal/conference paper of n co-authors, a co-author gets research marks.

$$\left(\frac{n}{\text{Total research marks of the paper}} \right)$$

- For a book of n co-authors, the lead author gets $\frac{1}{5}$ of the total research marks given to the book.

The rest of the marks $\frac{4}{5}$ are divided to all authors.

From the above definitions of research marks, the criterion for research record is given as

below.

Requirement		Position	Associate Professor	Full professor
Total research mark			6	12
Last three years			1.5	3
Scientific paper			3	6
Book	Total			3
	Advanced/Lecture note			1.5

Table 6: Criterion for research record of Vietnam’s professorial promotion

It is worth warning that all indicators of V6 are core and must be satisfied by every candidate. No flexibility can be considered.

3. Findings

3.1. Critical differences between the professorial criteria of Vietnam and of Malaysia

From examination of the professorial criteria of Vietnam and of Malaysia as in Section 2., both criteria appear quite different regarding both the names of indicators and their scientific content. This first finding means we can focus upon analyzing critical differences between the two promotion systems that may help Vietnam improve its professorial criteria.

3.1.1. Differences in shared indicators

Although indicators such as seniority, teaching experience, graduate supervision and research record were shared by both criteria systems, the requirement of such indicators were different in each system.

- **Seniority:** In Malaysia, this is not a core criterion. It is simply counted for special candidates who, early in their careers, were able to make significant contributions to establishing centers, faculties or even a university. However, Vietnam considers seniority a core indicator and all candidates must fulfil it. A candidate for

associate professor can only pass this requirement if they obtain their doctoral degrees at least three years before consideration; in case they do not satisfy the three-years requirements as mentioned, but have research marks double those requested, they can meet this criterion.

- **Teaching experience:** According to this indicator in Vietnam, the measurement is based upon a fixed minimum amount of teaching hours that a candidate must lecture. Any academic supervision can be exchanged for teaching hours. However, no evaluation of teaching from students is required. In Malaysia, this criterion counts the number of courses, the number of credits of delivered courses, the number of students per course and academic supervision. However, there are two considerable differences under this criterion in Malaysia. The first is that evaluation of teaching from students is considered; and the second is that there is no minimum number of teaching hours that a candidate must teach.
- **Graduate supervision:** The Malaysian indicator generally denotes that each candidate must supervise graduate students; of course, the number of successful theses and the supervision

roles are considered. Although the Vietnamese indicator requires similar levels of supervision, it fixes a minimum record for supervision that a candidate must fulfil. Remarkably, the parameter of graduation on time of supervised students is counted for the Malaysian indicator, but is not measured in the Vietnamese case.

– **Scientific research:** In Vietnam, this indicator is measured by a point score or marks, each considerable item is marked with research marks. And each candidate must get a fixed minimum of research marks. In Malaysia, this indicator is divided into two dual items: research and innovation, publication and writing. The key difference from Vietnam in the Malaysian criteria is that the measurement is not based on marking but on the peer-reviewed procedure of applications. While doctoral

- supervision is counted according to the Vietnamese indicator, this is not considered in Malaysia. Then the Malaysian indicator covers important aspects regarding quality that the Vietnamese does not:
 - Magnitude and scale of research projects,
 - Technology transfer and commercialization of research outputs,
 - Clear definition of reputable and high-quality publications: ISI/Scopus-indexed journals, journals with high impact factors,
 - Emphasis on quality of publications: H-index, citations, papers in multidisciplinary leading journals like Nature,
 - Popular articles for the community are encouraged.

A summary of these differences is given in the following table.

Criteria Indicator	Vietnam		Malaysia
	Associate	Full	
Seniority	A candidate is required to only submit his or her application after three years he or she gets a doctoral degree, or a candidate should have a research record double that requested if submitting an application earlier than the three years he or she gets a doctoral degree	One must be an associate professor at least three years	This is less important than others and applied for candidates in the early part of their careers having excellent contribution to a university such as establishing the university's units or even the university as such.
Teaching experience	Candidates must complete a minimum amount of teaching hours. No evaluation of teaching is needed		Candidates must do teaching, but does not specify a minimum

			amount of teaching hours. An evaluation of teaching made by students is considered
Graduate supervision	Main supervisor of two master theses, or supervisor of a doctoral thesis	Main supervisor of two doctoral theses	Candidates are generally required to supervise master and doctoral theses but no minimum record is specified. Remarkably the parameter of “graduate on time” of supervised students is considered
Scientific research	This is measured by research marks for different kinds of scientific research outputs including papers in journals and conferences, books, research programs, research projects and doctoral supervision		This is divided into two indicators, M3 and M4: <ul style="list-style-type: none"> ● M3: Research grants, research impact, technology transfer, research commercialization ● M4: ISI/Scopus papers, books/book chapters, impact factors (IF) of journals that candidates publish their papers in, H-indices and scientific citations of candidates, popular papers are encouraged

Table 7: Differences in shared indicators

3.1.2. Different indicators from the two professorial systems

In Section 3.1.1, we analyzed the common indicators from the two systems. This section is devoted to the different indicators from the two systems.

First of all, the indicators from the Vietnamese criteria not covered by the Malaysian criteria include:

- Academic presentation (V2),
- Language proficiency (V3).

V2 requires each candidate to give a presentation about his education contributions and

research records at two meetings of institutional and national committees. This requirement is quite confused. Since these records are presented in a candidate's application, it should be unnecessary for him to recall them in a presentation. What a candidate may do is to answer questions from committees; and this is shared by the corresponding requirement of the Malaysian system since an interview is arranged for each candidate.

V3 is devoted to the foreign language proficiency of candidates. All candidates are requested to master at least one foreign language for his academic tasks and to be able to communicate in English. This means that if one is fluent in English, then he obviously fulfils this indicator. As the analysis of V2 as above, V3 can be checked during an interview for each candidate according to the Malaysian system.

Secondly, the professorial criteria of Malaysia have the following indicators not considered by the Vietnamese one:

- Academic recognition/leadership (M6),
- Community services and nation building (M7),
- Consultancy and industrial links (M8),
- Administrative roles/contributions to university (M9).

M6 absolutely proves candidates' maturity in their fields not only nationally but also internationally. It is clear that only experts in their fields can be invited to do the following important tasks:

- Examination of theses,
- Participation in evaluation panels for research grant applications or promotion exercise,
- Reviews of manuscripts, journal articles and papers,
- Delivering plenary, invited or keynote presentations at scientific conferences,
- Visiting professorships,

- Editors of indexed journals and books,
- Participating in academic committees as an advisory panel/committee member for governmental/non-governmental agencies and industries.

In addition, receiving awards such as academic and research awards is also counted for M6.

M7 relies upon the academic's involvement and participation in activities such as chair or member of committees in the community both nationally and internationally, and upon participation in governmental bodies such as think tanks and committees at ministerial levels for national interests.

M8 is based upon both consultancy services and industry linkages provided by a candidate. These may include research/service contracts, serving on advisory/expert panels, industrial attachment, advisory panels, research collaborators, technology transfer and commercialization.

Finally, M9 mainly measures leadership capacity for not only the administration but also research.

3.2. Highlights that Vietnam should consider when upgrading its professorial criteria

Based upon the differences between the two professorial criteria of Vietnam and Malaysia, it is clear that Vietnam must upgrade its professorial criteria. This is extremely important for Vietnam to improve its quality in higher education. Some indicators should be removed and many aspects must be modified.

3.2.1. What should be removed

First, Seniority (V1) is quite unnecessary. Because all candidates should be treated equally, V1 becomes useless. In addition, promotion is based upon candidates' academic performance. Actually, younger candidates should be given more opportunities, since they are able over time to, of course, make more contributions to their

institutions. This indicator is a core one for Vietnam, where candidates recently completing doctoral degrees may not always be young candidates but still must have research marks double those requested for others. Therefore, V1 should be removed, or made less important as in the case in Malaysia.

Secondly, Academic presentation (V2) should also be removed, since it is simply a part of the procedure of promotion. In a candidate's application, all indicators of their academic competences are presented. So, an interview of a promotion committee arranged for a candidate should be enough. And this is also applied for the criterion Language proficiency (V3), which should be removed as well.

3.2.2. What should be modified

From Section 3.1.1, it is clear that V4, V5 and V6 should be modified, so that the quality of the professorial promotion in Vietnam can be improved.

- ❖ V4: In Vietnam, the criterion of teaching experience can only be measured with quantity; it means that a candidate simply completes a requested amount of teaching hours. To consider the quality of this criterion, a candidate's teaching performance should be evaluated by students, as in Malaysia.
- ❖ V5: The requirement of graduation on time for supervised students should be added to the supervision indicator for Vietnam, since it indicates enhanced quality of supervision.
- ❖ V6: The research record criterion is the most considerable one that Vietnam should upgrade based upon reference to that of Malaysia. Considering the differences in research requirements for the two criteria systems in Section 3.1.1, Vietnam would do well to modify its criterion of scientific

research by taking the following items into account. We believe this is a unique way for Vietnam to improve its appointed professors' quality.

- For research projects, Vietnam should also measure magnitudes and scales, rather than only a number of projects requested.
- Effectiveness of research must be considered. A candidate should be asked to prove whether his research outputs provide good contributions to the society thanks to impact, technology transfer and commercialization.
- Impact of research must be measured. Reputation and quality of publications must be considered such as ISI/Scopus indices, impact factors, H-index, citations, papers in multidisciplinary leading journals as Nature, popular articles to bring scientific research to the community.

3.2.3. What should be added

There are four indicators of Malaysia that Vietnam may add into its criteria:

- Academic recognition/leadership (M6),
- Community services and nation building (M7),
- Consultancy and industrial links (M8),
- Administrative roles/contributions to university (M9).

These basically improve the quality and diversity of evaluating on candidates. And candidates are more encouraged to associate and to serve the community thanks to these requirements.

4. Discussion

The professorial criteria of Vietnam were investigated based upon comparison with those of Malaysia, a close neighbor of Vietnam whose higher education is quite successful. Thanks to differences in the two promotion systems, looking at shared and non-shared indicators, we argue that

three indicators in the professorial criteria for Vietnam should be modified, especially that of the quality of the research record; in addition, there are at least four indicators from Malaysia that Vietnam should add to its professorial criteria. If the professorial criteria of Vietnam are considerably upgraded as proposed, the quality of its appointed professors and also its higher education provision in general will significantly be improved.

Although the professorial criteria of Malaysia were the comparative focus in this paper, this does not mean that only those of Malaysia are relevant. The fact is that the professorial criteria of Malaysia are quite similar to those of other developed countries and excellent universities across the world; therefore, the proposed changes for the professorial criteria of Vietnam in this paper were not only based upon the observed case of Malaysia but also shared by other excellent universities in the world.

The next step for this research is to investigate the performance of appointed professors in Vietnam recently. The authors have pursued several projects related to this research for several provincial universities in the south of Vietnam (Loc 2015, 2016, 2017; Loc, Nguyen and Le 2020); but these results are more about relevant to the research capacity of lecturers in these provincial universities, rather than their appointed professors.

In addition, this paper was primarily about the professorial criteria of Vietnam. It would be more interesting to investigate variations of promotion procedure. Actually, in 2018 Vietnam issued upgraded professorial criteria, No. 37/2018/QĐ-TTg; however, these criteria are mostly similar to the extant State Council for Professorial Promotion (2016). The key difference of the two is that the criteria in No. 37/2018/QĐ-TTg requires professorial candidates to have international peer-reviewed papers and these impacts are also considered. In subsequent work, it will be necessary

to study the quality of appointed professors based upon the latest criteria in Vietnam.

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6.References

- [1] Altbach, P. G. (2008); The complex roles of universities in a period of globalization, in higher education in the world 3: New Challenges and Emerging Roles for Human and Social Development, (Basingstoke, UK: Macmillan and GUNI, 2008), pp. 5-14.
- [2] Azman, N., Omar, I. C., Yunus, A. S. Md. and Zain, A. N. Md. (2016); Academic promotion in Malaysian public universities: a critical look at issues and challenges; *Oxford Review of Education*, 42:1, pp. 71-88.
- [3] Akkaya, B. (2019). The Relationship between Primary School Teachers' Organizational Citizenship Behaviors and Counter-productive Work Behaviors. *Eurasian Journal of Educational Research*, 84, 1-28.
- [4] Aydın, İ. S. (2019). Improvement of preservice Turkish teachers' perceived writing self-efficacy beliefs. *Educational Sciences: Theory & Practice*, 19(1).
- [5] Armijos-Bravo, G. (2019). Inequidades socioeconómicas en el uso de cuidados paliativos en Europa. *Cuadernos de Economía*, 42(118).

- [6] Clarivate Analytics (2016); Acquisition of the Thomson Reuters Intellectual Property and Science Business by Onex and Baring Asia Completed Independent business becomes Clarivate Analytics; News. Available at <http://ipsceience.thomsonreuters.com/news/ip-and-science-launched-as-independent-company/> (Accessed on 2017-06-2).
- [7] Dai, Tran Quang (2018); Re-evaluate promoted professors: How many incompetent cases are cognized? Lao Dong News, 04/04/2018.
- [8] Education Malaysia Global Services – EMGS 2019; *the Ministry of Education*; Retrieved at <https://educationmalaysia.gov.my/> on September 14, 2019
- [9] Malaysian Ministry of Education - MME 2012; the guidelines on the appointment and promotion of professors in institutions of higher learning in Malaysia, 2nd edition.
- [10] Finnegan, D. F. and Hyle, A. E. (2009); Assistant to full: Rank and development of expertise; *Research Management Review*, 16/1, pp. 1-17.
- [11] Hanh, Hong (2019); Debates about professorial promotion: Could promotion committees not be convinced by excellent research records? DanTriNews, 26/11/2019
- [12] Le, Ut V. (2012); The sorrow of a professor, *VietNamNet*, 23/10/2012
- [13] Le, Ut V. (2012); Does Vietnam lack of professors? *VietNamNet*, 09/10/2012
- [14] Loc, V.V., L. Nguyen, Ut V. Le (2020); The status of provincial universities in the Mekong Delta area of Vietnam; *International Journal of Innovation, Creativity and Change*; Volume 11, Issue 6, 2020, pp. 105-120
- [15] Loc, V.V. (2017); Research outputs of the faculty of universities in the Southwestern and the Southeastern areas of Vietnam; *Project funded by Ministry of Education and Training in Vietnam*, 2014-2017.
- [16] Loc, V.V. (2016); How to improve scientific research capability of the faculty of universities in the Southeastern and Southwestern areas of Vietnam; *Journal of Science of University of Pedagogy in Ho Chi Minh City*, Vol. 1(79), pp. 119-128.
- [17] Loc, V.V. (2015); An investigation of research capacity of the faculty of universities in the Southwestern and the Southeastern areas of Vietnam, *Journal of Educational Management of Institute of Leadership in Education*, Vol. 3 (97), 10 pp.
- [18] Ministry of Education and Training – MOET 2018; *Statistics of Vietnam Education and Training 2018*; Retrieved from <https://moet.gov.vn/>
- [19] Nguyen, Mai (2019); Many people applied for professors because of fake honors, *Science and Life*, 09/09/2019
- [20] Omar, I. C., Zain, A. N. M., Yunus, A. S. Md. and Azman, N. (2014); Academic promotion: the Malaysian perspectives; *UNESCO ERI-NET Seminar*, Penang 20-21 May, 17 pp.
- [21] Sidek, S., Dora, M. T., Kudus, N. and Hassan, M. A. (2012); Academic career in the Malaysian higher education: becoming a professor; *Journal of Human Capital Development*, ISSN: 1985-7012, Vol. 5, No. 2, pp. 127-140
- [22] State Council for Professorial Promotion (2016); Guidebook for professorial promotion in Vietnam; *Hanoi University of Science and Technology Press*, 287 pp. (in Vietnamese).

- [23] Stewart, P., Ornstein, M. and Drakich, H. (2009); Gender and promotion at Canadian universities; *Teachers College Record*, 111: pp. 443-479.
- [24] Taylor, J. (2007); The teaching-research nexus and the importance of context: a comparative study of England and Sweden; *Compare*, 38(1), pp. 53-69.
- [25] Vo, Duc Hong; Quang, Van Tuan and Pham, Trung Vu-Thanh (2019); Sectoral risks in Vietnam and Malaysia: A comparative analysis, *Advances in Decision Sciences*, Asia University, Taiwan, Vol. 23(1), pages 62-87.
- [26] Yunus, A. S. Md., Pang V. (2015); Academic Promotion in Malaysia:
- [27] Meeting academics' expectation and institutional needs; *RIHE International Seminar Reports*, No.23, pp. 61-81
- [28] Wang, L., Teter, W. (eds. 2017); Recalibrating Careers in Academia: Professional Advancement Policies and Practices in Asia-Pacific; *the United Nations Educational, Scientific and Cultural Organization (UNESCO)*, 410 pp.