

Continuing professional development of lecturer's research training model based on research product

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Abstract

This research specifically talks about the continuity development in the university through training model based on research product and publication of scientific work that support the university quality enhancement via qualitative methods with Research and Development (R&D) model approaches. As a result, the ongoing training has not been done programmatically and has not been able to make lecturers learn independently. In conclusion, product based training model development IS done through these steps: (a) analysis; (b) planning; (c) development; (d) implementation; (e) evaluation.

Keywords: Professional development, training, scientific work.

Desarrollo profesional continuo del modelo de capacitación en investigación del profesorado basado en productos de investigación

Resumen

Esta investigación se refiere específicamente al desarrollo de la continuidad en la universidad a través de un modelo de capacitación basado en el producto de investigación y la publicación de trabajos científicos que apoyan la mejora de la calidad de la universidad a través de métodos cualitativos con enfoques de modelos de Investigación y Desarrollo (I + D). Como resultado, la capacitación continua no se ha hecho de manera programática y no ha sido capaz de hacer que los profesores aprendan de forma independiente. En conclusión, el desarrollo del modelo de capacitación basado en productos se realiza a través de estos pasos: (a) análisis; (b) planificación; (c) desarrollo; (d) implementación; (e) evaluación.

Palabras clave: desarrollo profesional, formación, trabajo científico.

1. INTRODUCTION

The law of high education in Indonesia oblige lecturers to spread their researches in scientific works which written in the national journal as well as an international journal. The obligation to make and spread these scientific works become an instrument that decides the lecturer career. Not only because of lecturer research is indeed one of their professional works, but also because the research itself will give many benefits for the life progress of community nationally and governmentally. It is obvious if many universities make training program and even workshop to improve lecturer competency in doing their research. In order to have good research, the lecturer needs to join the programmes that are related to research activity and how to get the research resources. Besides that, in order to measure their capacity in doing their research and how far the lecturer has proficiency in doing and publicize their researches, the adequate competency from lecturers is needed.

Gibson et al. (1994) talked about aspects which influence the form of management, role and mission of researchers. Mark & Alan (2006) acknowledge that research and institution mission is equally important. He found that 75% of the institution which has been researched published their research activities, fundings and the result regularly through media. 50% of the researched institution act in helping lecturer development from the economic side. Differ from Lepori and Attar (2006) in their research found that the lack of lecturer competency because the lecturer mostly does not have an experience to research and this caused by training model structure and development of human resources which were not so good.

In order to publish the research result, a lecturer as a researcher needs to fulfill variant requirements, such as having the willingness and ability to learn and to understand knowledge, to find and to talk research problems, think critically, develop the theoritical concept, analyzing and evaluating the result. said some indicators which generally used to measure the productivity of professional lecturer, such as numbers and quality of his scientific publication, rewards and recognition for his work as well as the integrity of his scientific work and the level of research activity, such as the membership in scientific organizations as well as participation in the seminar, workshop and other activities. Meanwhile, in reality, most of the lecturers are more teaching-learning oriented and lack of motivation to do research and its publication which shown with low numbers of scientific publication, which shown in local journals as well as other equal journals that nationally accredited, and or accredited international journals (Simanjuntak, 2018).

The empirical result strongly refers to the problem of lecturer research works and its publication are the main problem in lecturer professionalism development, that should be given a solution. These problems are related to rules and personnel management such as planning, recruitment, assignment and training, development of lecturer management which suitable with the development of modern science and technology. If these are allowed continuously, it will inflict the university quality improvement. Things that needed to be concerned are continuous upgrading, determining the quality standard, culture changes, and organization changes.

The development of continuous professionalism is a research field that is developing right now, and trending topic which discussed in the academic community (Clegg 2003), especially for the professional group (Friedman et al., 2001). The main debate in the

development of continuous professionalism issue in the university is the relationship between teaching and research which can be articulated coherently (Clegg, 2003). Therefore, variant models of continuous professional development can be learned broadly from the present result, such as Friedman et al. (2001) which had been writing about this topic broadly (Friedman et al., 2001; Friedman et al., 2001). Researches, Mortimore (1998), Cheng (1996) showed that the role of leaders is an essential element in creating changes and successful performance of lecturers in an educational institution (Farrugia, 1996; Lepori & Liliana, 2006; Qurbani, 2017).

In general, researches observe some variables that influence the performance of lecturers. One of them Qurbani (2017) shows that there is no equal competency among lecturers. Therefore, in order to have equally high professionalism competency, Qurbani (2017) suggests lecturers join training related to professionalism improvement itself. Qurbani (2017) in their research article confirmed that the function of research management requires some skills and knowledge that the university should have. Universities need to develop their research strategies and assign academic leaders and administration to support research processing, but the consistency is not found in research management among the twenty-one universities which became their research targets.

2. METHODOLOGY

This research uses qualitative approaches pointed to Research and Development (R &D) steps, with directed toward research models and developments using Borg & Gall (1989) version which include 10 phases. This research is done in Sekolah Tinggi Teologi Kharisma Bandung, involving 20 lecturers, came from three majors. The research has done from April 2017 till December 2018. The research procedures are done through two stages which are preliminary study as well as design and development study. In the preliminary study, the need for training analysis with the interview as the main method of data collection (Silverman, 2000), and document study were done. Data analysis were done in three stages Silverman (2000) which are identifying category and subcategory or themes phase, constant comparison method and category development to analytical outline that is more general by showing some data supported with evidence.

These stages are model that sim

plified from Glaser and Strauss work.

3. RESULT AND DISCUSSION

Based on data analysis, it is found that there is a discrepancy between ideal competency and actual competency. The ideal is lecturers able to do a research and scientific work publication, thus

their promotion does not stop, but the fact stated 52% of lecturers not able to make research and scientific work publication. The causes are lack of training facility given by the organization to the lecturers and the absence of effective and intensive training which enable lecturers to create research and publication of scientific works. Based on problem analysis result and those needs, model outline design is made that support the quality of the university. These management steps are seen in picture 1.1. below:

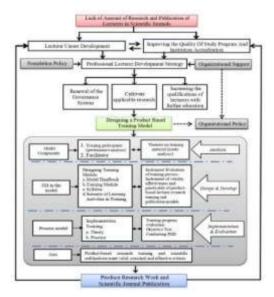


Figure 1: Hypothetical Model Research Training Model and Scientic Work Publication Product Based

Related to this training model validity level product based, trainer expert gives 89% for programme mapping aspect and 86% for

training scenario. Based on the category and trial proficiency criteria, these percentages show that programme mapping evaluation result is on very high category. This means that the programme mapping and training scenario product-based quality are on very high category. The training and media experts give these comments. Training model design, the proficiency average score towards programme mapping and product training scenario shows the average percentage of 89% for programme mapping and 86% for the training scenario. This means programme mapping and training scenario as products of training modules development product-based quality are on high category. The model validation result by an expert shows that average percentage 78% for display aspect, 100% for access aspect, 73% for interaction aspect, 66% for training material design, and 80% for control aspect.

The trial result using research training model and scientific work publication product based result in data average pretest up to 65, and post-test up to 81. Seeing from significance perlakukan seen from Man Whitney U Test trial, in which U is counted 6,00; p= 0,017 (0,017 $< \alpha = 0,050$), means this finding show lecturer performance level after attending higher training significantly compared to before attending the training. In order to get information and and comments from respondents about the training programme, a writer gave 13 questions in a questionarre form which spread to 20 respondents. The result of data processing about respondent comments about research training and scientific publication seen in table 1.1 below (Sears, 2018):

Table 1: Respondent Statement Analysis about the Training

Statement	SA	A	DA	SD	N	Total	Average	Notes
						10.1		
Materials given in the training are very clear and correspond with what the working need	7%	8	3%	%	%	124	4.13	В
The instructor/trainner explanation clear and very helpful in understanding the	7 23%	0% 22 73%	1 3%	0 0%	0 0%	126	4.20	SB
material Materials training (book, handout, brochures) given in training help me in understanding the material	9 30%	20 67%	1 3%	0 0%	0 0%	128	4.27	SB
Facilities and training room are comfortable and support the training activity very well	6 20%	21 70%	3 10%	0 0%	0 0%	123	4.10	В
Election criteria is clear and fair	2 7%	14 47%	13 43%	1 3%	0 0%	107	3.57	В
Training method (seminar, talk, etc) attended attend correspond with training	3 10%	22 73%	5 17%	0 0%	0 0%	118	3.93	В
material Education and training really helped me improve abilities and expertise I needed A nature of work	4 13%	23 77%	3 10%	0 0%	0 0%	121	4.03	В
Additional useful knowldeges gained from the training attended	9 30%	21 70%	0 0%	0 0%	0 0%	129	4.30	SB
I am getting more discipline in daily working after attending the training	4 13%	17 57%	8 27%	1 3%	0 0%	114	3.80	В
Getting motivated to participate in institution activity after attending the	4 13%	22 73%	4 13%	0 0%	0 0%	120	4.00	В
training The work result in my department is better after the lecturer attended education and training	4 13%	20 67%	6 20%	0 0%	0 0%	118	3.93	В
Less complaint after the lecturer attended education and training	2 7%	14 47%	9 30%	5 17%	0 0%	103	3.43	В
The presence level of lecturer in my department is better after attending the training	2 7%	19 63%	8 27%	1 3%	0 0%	112	3.73	В
Σ Average							51.00	
Average							4.00	В

Programme

Note: SA= Strongly Agree; A= Agree; DA=Disagree; SD= Strongly Disagree, N=Neutral

From the table above, it can be concluded that the training program is good. This can be seen from positive response from each respondent toward indicators such as training material, instructor, facilities, participant election, ability improvement, proficiency and knowledge, discipline, participation, work result, complaints and attendance can be said agree with average number 4 and goes to interval 3,40-4,19. Based on the analysis of Main Indicator Research items as a measurement of created research product and scientific work publication through the training, image of the amount of research product and scientific work publication seen on table 1.2 below:

 Table 2: Research Product and Scientific Work Publication Resulted

 From the Lecturer Through the Training

Superior	No		Product	Indikator Capaian				
Product				Draft	Submitted	Accepted	Published	
Research	1.	Research	Research proposal	12	12	12	х	
Excellence			Research achievement (research result report)	12	12	12	Х	
Scientific work publication	2.	Scientific work article	National Journal Publication	4	4	4	4	
excellence			National Accredited Journal Publication	7	7	7	7	
			International Journal Publication	х	х	х	4	
			Scopus Indexed Journals	1	Х	х	Х	

The improvement of lecturers ability in research and scientific work publication done in many strategies. A form of the strategy reflected through programmes that have been made, facility allocation, and budget allocation. Those forms of strategy had corresponded with Hunger and Thomas opinion who stated that strategy can be implemented in the form of programme, budget and procedures development. Besides that, forms of strategy done can be categorized as specific strategy. This corresponds with Siagian comments that specific strategy is a strategy that form specific actions to achieve a goal (Soo et al., 2019).

The first form of lecturer ability improvement in writing scientific work is through training activity. Training is a form of strategy which mostly done by each organizations as an effort to improve the quality of human resources, including nonprofit education organization. Through the training, lecturers are expected to improve their ability in research and scientific work publication and can motivate lecturer to be productive in creating scientific work.

The research result reviewed from training design theory, research training and product based scientific publication has been corresponding with the concept of Qurbani (2017), in which need analysis is done to fulfill the need of identifying knowledge, proficiency and new action needed to fulfill the organization and its worker development needs. The need analysis had described the placement position of human resources in an organization as an organization strategic partner such as conceived by (Qurbani, 2017). The practice of product based research training and scientific

The practice of product based research training and scientific publication had been focused on the collection of information,

analyzing, mainly on the strategic development aspect. Some of the activities have been corresponding, such as the result of need analysis used for creating training design.

The training target has a time period. Although the time period in the beginning design described difficultly done with new training material, but because of an organization support, support from competent and experienced speaker, facilitator who continuously observing the product created by participant, as well as the right module that suitable with adult way of learning, thus the time period can be predicted. The training curriculum and product based scientific publication are designed to answer that need, referring to Qurbani (2017) thinking which seen in Hamalik (2000) thinking. The curriculum making is started by determining the participant needs through deficiencies diagnosis and participants background.

The teacher identified participant problems, conditions, difficulties, and needs in the learning process. The training quality should not be separated from the facilitator quality. Hasibuan (2005) said the importance of teacher who completes all the requirements and thus the target development is achieved. The good teacher is someone who has the technical skill, communication skill, personality authority, social skill, technical competence, and emotional stability. If reviewed from the requirements of a good teacher, facilitators had been evaluated by participants through nine indicators with sufficient average score (Yang et al., 2019).

The candidate participant criteria are allowed to join the training which done based on organization need toward lecturer total number and competency level expected. Human Resources head did verification of candidate participants suggested based on the compatibility with normative criteria which had been assigned. Identifying discrepancy of lecturers knowledge and identifying organization needs toward lecturers would be the major head authority which is assumed have been through these processes. In the total number of training participant in one class, Fauzi (2011) stated that a large number is considered less effective for interactive training process between participant and facilitator as well as a training participant. The ideal number is between 20 to 30 participants. The total participant in a class during this training had met the effective number which is 20 people (Tambunan, 2019: Bahremand, 2015).

After the module title is decided on the need analysis step, draft writing can be started with determining the final goal, which is an ability that should be achieved by students after learning one module and other goals such as specific ability that supports final goal. Draft module trial is module uses activity on limited participants to be aware of modules viability and uses in learning before this module used publicly. Module draft trial aims to know participant knowledge and convenience in understanding and using the module, knowing the efficiency of studying time in using the

module and module effectivity in helping the participant to learn and master learning material.

Evaluation concept about lecturers' research training effectivity and scientific work publication had been evaluated as a whole started from participant respond toward knowledge and skills, performance (created product), as well as their behaviours and its effects on the organization as one whole training effectivity evaluation. The evaluation of effectivity of achievement of the created product had corresponded with the training model effectivity model which stated by (Kirkpatrick, 1998).

This means the whole function from training management had been corresponding such as told by Drucker (2012) that management is related with efficiency and effectivity action to achieve the goal including in the training which done for lecturers. Training evaluation had been done by using observation technique which later featured descriptively with the assumption that the training advantages will be proven by itself on created research product and scientific work, and later seen on the improvement of lecturer rank, learning upgrading, improvement of community service quality and finally impact on the improvement of programme and institution accreditation (Indriastuti, 2019).

4. CONCLUSION

Based on the research results which stated earlier, thus advice below can be concluded and suggested: First, product based training

model development done through these steps: (a) analysis; (b) planning; (c) development; (d) implementation; (e) evaluation. Product based training model validity is on the good category (72%). The training result using product based training model is higher compared to before using the training model. Second, product as a result of lecturer performance in research and publication area for each study programme is enough for accreditation needs. However, lecturer participants still needed to be improved, because those who participate in research are just 54% Bachelor in Theology, 56% Bachelor in Christian Education, and 31% Master Theology. Participant level in the publication is just 28% Bachelor in Theology, 45% Bachelor in Christian Education, and 25% Master Theology. Therefore, universities should apply rules that correspond with the findings that appeal lecturers to do research and publication actively, as and individual as well as a group.

Universities need to have lecturer performance evaluation, it is either able to motivate lecturer to have more achievements that can improve institution accreditation as well as the faculty of each major. Other than that, controlling as well as openness will make lecturers be more appreciated and they can determine their targets. Appraisal, openness, and objectivity to the lecturers might improve to the work satisfaction which influences the whole universities achievement. The institution also gives motivation to the lecturers to write an article in an accredited journal so that research target or publication each year. The study program also purposely decrease the lecturers' teaching time and involvement in committees. The lecturers are compulsory to attend the training until there is a research result done including punishment given by the institution as well as the study programme.

REFERENCES

- BORG, W., & GALL, M. 1989. Educational research. An introduction (5th ed.). White Plains. NY: Longman. USA.
- CHENG, Y. 1996. School Based Management: A Mechanism for development. Washington, D.C.: The Falmer Press. USA.
- CLEGG, S. 2003. Problematising Ourselves: Continuing Professional Development in Higher Education. The International Journal for Academic Development. Vol. 8, N° 1/2: 37–50. UK.
- DRUCKER, P. 2012. Management Challenges for the 21st Century. California: Perfectbound. USA.
- FARRUGIA, C. 1994. A Continuing Professional Development

Model for Quality Assurance in Higher Education. Journal Quality Assurance in Education. UK.

FAUZI, I. 2011. Mengelola Pelatihan Partisipatif. Bandung:

Alfabeta. Indonesia.

FRIEDMAN, A., DAVIS, K., & PHILLIPS, M. 2001. Continuing Professional Development in the UK: Attitudes and Experiences of Practitioners. Bristol, PARN Friedman, A., Phillips, M. and Timlett, R. The Ethical Codes of UK Professional Associations. Bristol, PARN. UK.

GIBSON, M., LIMOGES, C., NOWONTHY, H.,

> SCHARTZMAN, S., SCOTT, P., & TROW, M. 1994. The New Production of Knoledge: The Dynamic of Science and Research in Contemporary Societies. London, UK. : Sage Publications. UK.

- HAMALIK, O. 2000. **Pengembangan Sumber Daya Manusia**. Manajemen Pelatihan Ketenagakerjaan Pendekatan Terpadu. Jakarta: Bumi Aksara. Indonesia.
- HASIBUAN, M. 2005. Manajemen Sumber Daya Manusia.

(Edisi Revisi). Jakarta: Bumi Aksara. Indonesia.

- INDRIASTUTI, H. 2019. Entrepreneurial inattentiveness, relational capabilities and value co-creation to enhance marketing performance. Giap journals. Vol 7. N° 3. India.
- KIRKPATRICK, D. 1998. Evaluation Training Program (2nd Edition). San Fransisco: Koehler. USA.
- LEPORI, B., & ATTAR, L. 2006. Research Strategies and Framework Conditions for Research in Swiss Universities of Applied Sciences. KTI/CTI. Diakses dari wwww.kti-cti.ch. Switzerland.
- MARK, E., & ALAN, R. 2006. A Report on Research Activities at Research Universities. Research Management Review. Vol. 15, N° 1. UK.
- MORTIMORE, P. 1998. School effectiveness and the management of effective learning and teaching. School Effectiveness and School Improvement. Vol. 44, pp. 290–310. UK.
- QURBANI, D. 2017. Peningkatan Kompetensi Dosen dalam Cara Mengajar melaluiPpengembangan Training Need Analysis (Studi Kasus di Prodi Manajemen Fakultas Ekonomi Universitas Pamulang). Jurnal ilmiah

Manajemen fork amma. Vol. 1, Nº 1. Indonesia.

- SEARS, R. 2018. The Implications of a Pacing Guide on the Development of Students Ability to Prove in Geometry. International Electronic Journal of Mathematics Education. Vol 13. Nº 3. pp. 171-183. UK.
- SILVERMAN, D. 2000. **Doing Qualitative Research**. A Practical Handbook. London: Sage. UK.

SIMANJUNTAK, M. 2018. Desertasi: Manajemen

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Berbasis Produk). Bandung: Universitas Pendidikan Indoensia. Indoensia.

- SOO, M., SHELBY, R., & JOHNSON, K. 2019. Optimizing the patient experience during breast biopsy. Journal of Breast Imaging. wbz001, <u>https://doi.org/10.1093/jbi/wbz001</u>. UK.
- YANG, Y., PAN, T., & ZHANG, J. 2019. Global optimization of Norris derivative filtering with application for nearinfrared analysis of serum urea nitrogen. Scientific Research Publishing. Vol 10. N° 5. China.
- TAMBUNAN, H. (2019). The Effectiveness of the Problem Solving Strategy and the Scientific Approach to Students' Mathematical Capabilities in High Order Thinking Skills. International Electronic Journal of Mathematics Education, 14(2), 293-302. <u>https://doi.org/10.29333/iejme/5715</u>
- BAHREMAND, A. (2015). The concept of translation in different teaching approaches and methods. UCT Journal of Social Sciences and Humanities Research, 3(1), 5-9.



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