INTRODUCTION

1. Rationale

Science Research (SR) at educational institutions in general, at training institutions (TI) for education managers (EM) in particular is one of basic tasks. As for EMTIs, it not only contributes to enhancing the quality, reputation of those EMTIs but is also an indispensible process in order to train in-service and resource managers in implementation of mission of propagating, applying, reproducing knowledge to meet the needs of economic growth and society progress.

Under regulations, SR management at EMTIs includes many items. However, management of institutional level researches is a regular annual work which is very time-consuming for managers at EMTIs and EMTIs can supervise and control from beginning to the end of this research process.

In order to promote the effectiveness of SR, especially research outcomes of institutional level SRs at EMTIs to be applied in practices, it is necessary to propose solutions: developing procedures in each specific process: Enhance the role, responsibility of management subject by finalizing mechanisms, policies in SR; Finalize specific procedures as well as developing relationship between management subject and relevant subjects during conducting SRs at EMTIs.

It is above mentioned objective reasons of SR at EMTIs and subjective expectations, the author chose to study: "Management of science research at education manager training institutions" with emphasis on management of institutional level SR as doctoral thesis in hope of contributing to innovation in public, explicit management which is appropriate with the roles, responsibilities with a view to improving effectiveness of SR, especially research outcomes of institutional level SRs at EMTIs to be able to apply in practice.

2. Purposes of study

To propose solutions for management of SR at EMTIs so as to enhance effectiveness of SR, especially the outcomes of institutional level SRs at EMTIs to apply in practice.

3. Object and object of study

Objectivity of study: Science research at EMTIs.

Object of study: Management of institutional level SR.

4. Scope of study

<u>Location</u>: On basis of legal personality and similar functions, tasks, this thesis is conducted at 4 institutions including: National Institute of Education Management, Ho Chi Minh city Education Manager Training College, Hanoi Education Manager Training College and Phu Tho Education Manager Training College.

<u>Survey objects</u>: Faculties/Scientists, specialists of SR and education leaders/managers of EMTIs.

<u>Contents</u>: Contents of SR at EMTIs are various but this thesis limits its study to management of institutional level SRs in period 2010 to 2013...

<u>Testing and Experimenting</u>: This thesis tests the necessity and feasibility of solutions; experiments procedures for advice on identifying research theme and research plans of institutional level SR at National Institute of Education Management.

5. Scientific assumption

Currently, outcomes of institutional level SRs are seldom applied in practice. If the roles and responsibilities of management subjects are enhanced via finalization of SR mechanisms, policies, spontaneously along with specific procedures as well as development of the relationship between management subject and relevant ones when conducting institutional level SR at EMTIs, SR effectiveness especially outcomes of institutional level at EMTIs to be applied in practice would be enhanced.

6. Tasks of study

- -Clarify literature review about SR, especially the one about management of institutional level SR at EMTIs.
- -Survey SR real situation, especially the one about management of institutional level SR at EMTIs.
 - Propose solutions for management of SR at EMTIs.
 - Test and Experiment the necessity and feasibility of proposed solutions.
- Experiment procedures for advice on identifying research theme and research plans of institutional level SR at National Institute of Education Management.

7. Approach and research methodology

On the basis of historical materialism, dialectial materialism of Marxism – Leninism and Ho Chi Minh ideology; base on systematic approach, process approach and management approach; the use of theoretical study; practical study on leterature review, survey the real situation then propose solutions for settlement of study tasks...

8. Defending points

- -With systematic approach, process approach and management approach; On the basis of historical materialism, dialectical materialism of Marxism Leninism and Ho Chi Minh ideology, this thesis developed theoretical framework of SR management, especiall management of institutional level SR at EMTIs, including terminologies: Management, EMTIs, SR at EMTIs; institutional level SR at EMTIs; management of institutional level SR at EMTIs; effectiveness of institutional level SR at EMTIs.
- -By developed theoretical framework, this thesis surveyed real situation (via statistics for each school year; questionaires and intensive interviews of experts) at EMTIs from 2010 up to 2013 regarding management of SR, especially the management of institutional level SRs.
- By surveying real situation, this thesis proved the point that: in order to promote quality of SR, especially outcomes of institutional level SRs at EMTIs to be able to apply in practice, it

is necessary to implement solutions: enhancing roles of management subjects by finalization of mechanism, policies for SR at EMTIs; completion of specific procedures for conducting institutional level SRs at EMTIs; developop the relationship between management subject and other relevant subjects during the process of conducting SRs at EMTIs

9. New contributions of thesis

Theories:

- Clarified process for conduction of institutional level SRs at EMTIs.
- -Clarified management contents of institutional level SRs and figured out groups of factors impacting on the management of institutional level SRs at EMTIs.
- -Clarified the roles, responsibilities of management subjects and relevant subjects during management process of institutional level SRs at EMTIs.

Practices:

- Proposed specific procedures for managing institutional level SRs at EMTIs.
- Provided instructions for faculties/scientists' understanding, identifying and creation in SRs so as to solve shortcomings of individuals and organization; so as for outcomes of institutional level SRs to be applicable in reality.

10. Structure of thesis

In addition to the introduction, conclusion and suggestions; this thesis consists of 3 chapters and appendixes.

Chapter 1: Literature review about SR management at EMTIs

Chapter 2: Real situation of SR management at EMTIs

Chapter 3: Solutions for SR management at EMTIs

Chapter 1

LITERATURE REVIEW ABOUT MANAGEMENT OF SCIENCE RESEARCH AT EDUCATION MANAGER TRAINING INSTITUTIONS

1.1. Overview about SR management

1.1.1. Management of SR in the world

Management of SRs in the world has been stable and open from identifying and selecting research theme, research budget allocation and management, a typical examle is Japan, New Zealand. By studying cases of some countries, the research capacity of which is similar to or higher than Vietnam's, Vietnam just ranks among low research capacity countries. To be able to upgrade research productivity, Vietnam needs to consider development strategies for Science and Technology and increase "Knowledge Economic Index" (KEI), first and foremost is to increase knowledge index (KI).

1.1.2. Studies on management of SRs in Vietnam

There have been some researchers working on *management of SRs*... However, they did not mention detailed contents of SR management, not mentioned to building procedures for conducting institutional level SRs, not clearly figured out the roles, responsibilities as well as the interaction among management subjects and other relevant ones when implementing management function for institutional level SRs...

There have been some researchers paying attention to working on application of Information Technology in SR management... Nevertheless, most of them have not mentioned much about application soft wares for SR management...

1.1.3. Feedbacks from literature review

With regards to SR management, all nations consider Strategy for Science and Technology Development; managing investment mode of SR, the effective manner of budget management, preparing procedures of research theme selection, evaluation, acceptance and application of research outcomes in practice in an open and public manner.

Solutions for management of SRs in Vietnam skill contain a great deal of theoretical contents, even though not false but limited possibility of application in practice...

1.2. Science Research at EMTIs

1.2.1. Definition of Education Manager Training Institutions

Based on regulations regarding institutions conducting traning, re-training of education managers; on the basis of current context, it can be understood that EMTIs is an educational institution with features: to be a public institution within national education system, having legal personality, account and official stamp or under MOET or Provincial/Central City People's Committee serving key function in training, retraining of education managers, the main science research mission of which is to carry out researches on education management, knowledge training of education managers.

1.2.2. Concept of science research at EMTIs

Science research at EMTIs is seeking unknown scientific facts: or discovering nature of things, developing scientific perception over the world or creating new method and new technical devices to change things serving for goals of EMTIs or other inquiries according to agreement between leaders of EMTIs and individuals/organizations who benefit from research outcomes under a tight process with a view to enhancing science and technology potentials of EMTIs.

1.2.3. Contents of SR at EMTIs

Contents of SR at EMTIs compromise following tasks: Implement science researches at different levels; carry out programs, projects, project proposals, technology development; development of training curriculum, training programs; develop a textbook or reference books, reference materials; study to seek solutions for innovating teaching method and test, evaluation of a subject; publish research outcomes on international and national science journals according to law, write articles for workshops, international and national science conferences; write articles for subject, faculty's workshops; instruct learners to carry out researches; join international cooperative activities in science and technology researches, participate creativity competitions and other science and research activitites.

1.3. Institutional level SRs at EMTIs

1.3.1. Concept

Institutional level SRs at EMTIs is a kind of SR decided and directly managed by EMTIs, conducted by lecturers/specialists of that EMTI within 1 year at maximum to serve education management, teaching or other needs according to agreement between leaders of EMTIs and beneficiary bodies/organization of research outcomes.

1.3.2. Conducting process of research

On the basis of process concept; pursuit to authorized bodies' regulations regarding conduction of a SR and practices when conducting an institutional level SR at EMTIs has following processes: Consultation on identifying research theme, budget allocation and research plan; implement and check research, evaluation, acceptance; proprietorship and copyright of research outcomes; appy research outcomes in practice.

1.3.3. Specific procedures

From concept of procedures, practices of carrying out institutional level researches at EMTIs, it is possible to develop 6 specific procedures, including: Consultation on identifying research theme, budget allocation and research plan; implement and check research, evaluation, acceptance; proprietorship and copyright of research outcomes; appy research outcomes in practice.

1.4. Management of SRs at EMTIs

1.4.1. Management

Management is the intentive impact of the leader on relevant individuals/organizations in group activities so as to reach agreed targets by processes including: planning, organizing, leading and assessing.

This thesis also defined terminologies, including: Management in management science; leader (or called management subject); relevant individual/organization; intensive impact; thinking act of management subject.

1.4.2. Management of SR at EMTIs

Management of SRs at EMTIs is the intentive impact by leaders of EMTIs towarding conduction of assigned science research tasks to serve education management, teaching or other needs according to agreement between leaders of EMTIs and beneficiary bodies/organization of research outcomes by management functions.

1.4.3. Content of SR management at EMTIs

- Annually, on the basis of upper authorities' instructions, actual situation of EMTIs and units' plans, head of EMTIs requests the Department of Science & Technology the draft school year or periodical plan.
- -In order to implement, head of EMTIs need to assign tasks to Faculties, Departments, Boards in preparing SR plans and carry out approved tasks within their organizations; assign task to Department of Science & Technology in

preparing overall proposals, collect Science & Technology plans of units and timely report unsual cases during draft preparing process and implementing approved SR plan.

- Head of EMTIs regularly allocates enough resources for SR; tries to find other practical measures, along with accurate and regular use of competition, appraisal measure so as to motivate staff in doing SR.
- -Head of EMTIs need to take SR information provided by Department of Science & Technology into regular consideration, especially information from units, Training and Science Council; decisively and timely decides acts such as: complement, bonus, modification or change; comment, criticize or disciplines.

1.5. Management of SR at EMTIs

1.5.1. Concept

Management of institutional level SRs at EMTIs is a targeted ac by management subject to discover, explore by a group of people who altogether perform a research mission and other relevant organizations according to a regulated process with a view to serving education management, training of education management or other requirements agreed by management subject and body/organizations benefiting from research outcomes vie management functions.

In which:

- Management is the head of EMTIs;
- A group of people altogether carry out a research task is the chairmen of research and research group members.
- -Main relevant organizations include: Checking group, assessment acceptance group and beneficiary body/organization or research outcomes.
- 1.5.2. Organization structure in management of institutional level science research

From organizating structure for science research management of each EMTIs and base on practical management, it can be understood that management structure of institutional level science research at EMTIs includes following basic factors:

- -Management subject (A). Head of EMTIs with functional consultation bodies such as: Department of Science Research; Science and Training Council of EMTIs and head of departments having lecturers/researchers as research chairman.
- Other main factors are called relevant subjects, including: Research chairman (B); Leader of Checking group (C); Chairman of Assessment, Acceptance Council (D) and Head of bodies/organization benefiting from research outcomes (E).
- 1.5.3. Roles, responsibilities and specific activities of management subjects and relevant subjects

This thesis figured out roles, responsibilities and specific activities to be reached by management subject and relevant subjects during management of institutional level researches, including: Head of EMTIs - (A) (Management subject); Relevant subjects (Research chairman - (B); Head of checking group –

(C); Chairman of Assessment, Acceptance Council - (D); Head of bodies/organization benefiting from research outcomes - (E)).

1.5.4. Contents of institutional level science research management

Base on general regulation texts and practical management of institutional level SR at EMTIs, this thesis summarizes 6 contents (specific processes) when conducting institutional level SRs (already mentioned concepts, significance and management contents – showing roles, responsibilities of the management subject when implementing their management functions) as base for surveying real situation and finding solutions. Six contents are: Managing identification of research theme; description of research plan (Training & Science Council and Head of body/organization benefiting from SR outcomes are mainly in charge of consultation; Head of EMTIs makes decision); Managing conduction and checking; Assessment, acceptance; Author right and SR outcomes copyright; application of SR outcomes in practice

1.5.5. Impacting factors

This thesis mentions subjective factor: role, responsibility of management subject and relevant subjects is a subjectively important factor. This thesis also mentions basic objective factors: 09 other factors impacting on the management of institutional level science research at EMTIs.

Conclusion - chapter 1

This thesis suggests concept of management in the way of management subject approach.

Additionally, in order to create theoretical system to serve tasks of thesis, this thesis also clarified concepts such as: EMTIs, SR at EMTIs; Institutional level SRs at EMTIs; Management of SR at EMTIs, Management of Institutional level SRs at EMTIs, SR effectiveness at EMTIs.

With process approach, combining contents of conducting SRs, this thesis figured out conduction process of institutional level science researches at EMTIs.

On the basis of process concept and practical experience, this thesis pointed out 6 specific processes of conducting institutional level science researches at EMTIs (illustrated step sequence that all relevant stakeholders must follow).

From organization structure of science & technology management, and practical organization structure of institutional level science researches at EMTIs, this thesis clarified the organization structure for management of institutional level science researches at EMTIs.

From concepts of management and regulations, this thesis identified the roles, responsibilities and specific actions to be taken by management subject and other relevant subjects when managing institutional level science researches at EMTIs.

On the basis of theoretical outcomes and management policies of authorities in science research, this thesis expicited 06 management contents (specific process) of institutional level science researches at EMTIs (clarified concepts, significance

and management contents – showing the roles, responsibilities of management subject when implementing management functions.

This thesis also explicated the group of factors impacting on the management of institutional level science researches at EMTIs, including: basic subjective and objective factors.

Chapter 2

REAL SITUATION OF SCIENCE RESEARCH MANAGEMENT AT EDUCATION MANAGER TRAINING INSTITUTIONS

2.1. An overview about EMTIs

2.1.1. Development of EMTIs

In order to have a functional department as a focal point for conduction of training, on 01/9/1964, Ministry of Education issued Circular No 46/TT providing instructions for establishment of local Manager Training Colleges.

Afterwards, education managers training colleges developed in a different tendency: except for 04 institutions sustaining distinctive roles, tasks and functions of training of education managers and developed and impacted by provincial/city or central authorities, the majority has transfered...

2.1.2. Roles, tasks of EMTIs

In this part, the thesis legal status of name, functions and basic tasks.

2.1.3. Similarities of EMTIs

Four institutions have functions, tasks of training of in-service staff, civil servants working in educational and training institutions with occupational knowledge and professions.

Four institutions have functions, tasks of conducting SRs in education management, of training of in-service staff, civil servants working in educational and training institutions with occupational knowledge and professions and implementing education science innovations, education management innovations in educational institution.

2.2. Conduct survey on real situation of SR at EMTIs

This part of the thesis mentions: objectives of survey, scope (organizations, time) and survey contents, survey object samples and survey metho.

2.3. Real situation of SR tasks at EMTI

2.3.1. Awareness on importance of SR tasks

77,1% people asked said important and very important, in which 57,3% supposed very important. By intensive interview; managers of SR at EMTIs, answers are as follows: Lecturers/researchers all have correct awareness on the importance of SR.

2.3.2. Conduction level of SR tasks

Overall, the highest rate for conduction of task 11 is at moderate level (32,8% agreed), at good level accounts for 22,9% agreed, 19,1% supposed that conduction level is not good and 25,2% confirmed not yet done.

Statistics via end-of-year reports of 4 EMTIs within 3 school years 2010-2011, 2011-2012 and 2012-2013, summary of science tasks other than SR also indicates the same results: Outstanding activity when carrying out science tasks is supporting learners in doing sciene researches (within 3 years, 4 institutions supported 1.680 researchers) and wrote publications for Institution, Faculty, Subject workshops (within 3 years, 4 institutions had 432 publications).

Intensive interview persons in charge of SR at 4 EMTIs came to one common consideration: Lecturers' completion of science research tasks usually includes instruction of learners in doing SRs by writing articles for workshops of all levels, writing textbooks, materials served for teaching – These are tasks that lecturers can be proactive and creative.

2.3.3. Conduction level of SRs

Overall, those who answered not good accounts for 60,3%; not yet done: 22,2%.

Statistic results of SRs at EMTIs from 2010 to 2013 also indicate similarly, total number of SRs at all levels within three years in 4 institutions is 68 đề tài (State level: 01; Ministerial level /Critical ministerial level: 23; institutional level: 41; others: 03).

By intensive interviews of leader representative, the main reason is: lecturers spent most of their time on teaching; EMTIs have not issued policies regulating obligations, encouragement, motivation of lecturers, researchers, managers to do science researches.

2.3.4. Implementation level according to procedures in each specific process Overall, 53,4% confirmed not very good and not yet done is 37,4%.

Intensive interview leader representative, the main reason is: In 2010, Ministry issued the regulation changing management of researches; 50% these institutions have not had functional staff to provide consultation for leaders of EMTIs in science researches.

2.3.5. Implementation level of teaching and doing researches

Overall, 42,7% answered good and 28,2% answered average.

Statistics of reports at EMTIs within 3 years from 2010 to 2013, detailed results for teaching at EMTIs is bigger than the number of lecturers (on everage a year more than 184 classes/for average number of lecturer 66 lecturers).

Intensive interview leader representative: the main reason is: heavy preasure of teaching on lecturers; there are many ways for lecturers to fulfill their science research responsibilities as regulated.

2.4. Real situation of managing institutional level SRs at EMTIs

2.4.1. Managing identification of research themes at institutional level Overall, 64,9% answered not yet done.

Intensive interview leader representative, the main reason is: there's just new official legal regulation by MOET regarding consultation in idenfication of research themes in 2010; not yet forcused on application of research outcomes into practice; not yet had regulations regarding obligations, ecouragement and motivation.

2.4.2. Managing financial consultation and research plan description at institutional level

Overall, 61,1% answered not yet done.

Intenstive interview leader representative, the main reason is: propaganda, dissemination and instruction of SR management legal texts has not been seriously considered; objective quatities have not been enhanced in identification and review of reseraches.

2.4.3. Managing implementation and review of institutional level SRs

Overall, 34,4% answered at average level 29% answered not very good and 36,6% confirmed not yet done.

Overall interview of leader representative, the majority confirmed: individuals in charge of management of institutional level SRs follow correctly upper level authorities' regulations but not yet widely worked with staff; Riview of researching process just remains as a part of research schedule, not a sudden inspection.

2.4.4. Managing assessment, acceptance of institutional level SRs

Overall, 18% answered good; 22,1% answered average. However, still 25,2% answered not very good and 35,9% confirmed not yet done.

Intensive interview leader representatives, the main reason is: not yet widely dissemminated, public under the form of training of procedures for assessment, acceptance of institutional level SRs; assessment and acceptance council has not highly appreciated objectivity and scientificness when assessing.

2.4.5. Managing insurance of copyright, proprietorship of research outcomes of institutional level SRs

Overall, not good : 42.8 %; Unrealized : 51.1 %; normal : 0.8 %.

Depth interviews with representatives of the main reason is: This is the very new; The EMTIs did not have personnel to undertake this activity

2.4.6. Managing the application of research outcomes of institutional level SRs into practice

Overall, 94.6 % of respondents affirmed unrealized.

Depth interviews with representatives of the leadership, the biggest reason is: In the study identification of problem grassroots and the financial budget overs Research topics grassroots EMTIs not been properly concerned when considering the possibility of in practical application; The managers and researchers have yet to incorporate the majority of the units / organizations will benefit from research outcomes.

2.5. Real situation of basic factors impacting on management of institutional level SRs at EMTIs

2.5.1. Subjective factors

Influence of heads of EMTIs

Overall, less: 35.6 % were confirmed; No contents of the elements: 32.1 % were assert; 22.1 % assessed as normal and 12.2 % said that a greater degree.

Through direct exchanges with representatives of the main reason is: The role of the general staff person assigned to manage this task and responsibility of the heads EMTIs in shaping the annual study issues no; Using the power of emulation and commendation of staff motivate, encourage research is blurry.

Influence of research chairman

Overall, 22.1 % assess the impacts , 44.1 % rated the impact of the normal range, 16 % rated the impact less , 15.3 % confirmed no content elements and 2.3% of respondents did not answer.

Through direct exchanges with representatives of the main reason is: The success of the project at the local level mostly due EMTIs effort and sense of responsibility of the head of the subject during the study research.

Influence of checking group leader/Chairman of assessment, acceptance committee

Overall, the normal level: 82.4 %.

Influence of heads of benificiary bodies/organizations of research outcomes

Overall, the majority of respondents have confirmed that no content elements.

Through direct exchange, the representative leaders are confident that these factors will promote a positive impact in the coming period, when management role Grassroots Research topics are enhanced.

2.5.2. Basic objective factors

Influence of traning and self-training awareness

Overall, 35.9 % have not yet confirmed the contents of this element; 30.5 % less impact level, 29.8 % affected in the normal range, 3.8 % did not answer.

In the opinion of representatives of the leadership, the degree of influence of factors training, retraining will automatically have a high impact if the EMTIs as well the plan and have specific solutions to motivate, encourage individual / collective in scientific research.

Influence of competition, commendation and reward policies

Overall, 74.8 % have not yet confirmed the contents of this element; 22.1 % confirmed little influence, 3.1% did not answer.

Interviews with individuals related to the operation of emulation and commendation , the basic causes are : Leaders are not interested in active emulation and reward a substantive way ; Leadership has not considered emulation and commendation is an effective tool to arouse latent Research fad in each staff , lecturers and scientists from their establishments .

<u>Influence of policies in prioritization of institutional level SRs of applied pedagogical science research</u>

Overall, this factor can not: 97.7 % of the respondents confirmed.

<u>Influence of recruitment policies, mobilization, evaluation and appoitment of science researchers</u>

Overall, 67.2% of respondents do not have the content of this element .

Interviews with relevant individuals and awareness work in practice, this situation is a consequence of insufficient awareness about human use in each particular job.

Influence of management informatiom system

76.3 % of respondents have not yet confirmed the contents of the building element management information systems and 27.3 % said that this content but low levels of influence . Through in-depth interviews with this situation is due to : the new EMTIs stop at managing research outcomes as the main report and the summary report , have not developed the software to manage the research process and manage research outcomes .

Influence of combination between teaching and science reseach

Overall, low levels: 52.7 %; no element content: 40.5 %.

IDI representative leaders affirmed with this situation is inevitable; This situation is very difficult to overcome, and not just in the EMTIs.

Influence of positive attitude in doing science research

Overall, no content of this factor : 54.2 % were confirmed ; 25.2 % assert influence at normal levels and 20.6 % said it had little effect .

Influence of infrastructure, facilities and budget support

Overall, more influential : 29 % ; affect normal : 26.7 % ; affects less : 10.7 % ; No factors : 33.6 %

Through discussions with representatives of specialized scientific research department and department of Planning and Finance of the EMTIs, important highlights are outlined as follows: Never any idea EMTIs funding for projects grassroots Research; disbursements through the contract with the scientists accounted for about 60 % of the project budget (according to research notes); the transfer of money to the scientists after the contract is performed in accordance with the current financial regulations.

<u>Influence of outcomes application of institutional level science researches into practice</u> Overall, at less: 51.1 %; the remaining states: Never content elements.

Through in-depth interviews of experts , all of them states: In the annual plan , EMTIs no applicable items of theses research outcomes into practical basis in the annual plan . When identification of research issues as well as topics Research overs financial budget grassroots not pay much attention to usability research outcomes into reality . The biggest reason is because of this fact : The funding for scientific research projects at grassroots level too low , so most just interested in the logic of the proposed ballot , notes the study and final report .

2.6. Evaluation on the real situation of management of SRs at EMTIs

2.6.1. Strengths

The EMTIs are assigned an individual (concurrently) or set up an organization in the unit; Are determined in their establishments: Research is the responsibility of the faculty, research staff and is a form of self- improving professional qualifications;

Has the idea of bringing scientific research and scientific research management system to emulate in their establishments. In its specific conditions, the EMTIs are facilitating the infrastructure and support funding for scientific research.

In managing the implementation of the Grassroots Research topics:

The specific process of managing the Grassroots Research topics were conducted EMTIs relatively objective and is gradually chemical processes that promote a sense of responsibility and creativity of the study.

Research topics grassroots level have focused on improving the content and teaching methods in their unit.

2.6.2. Weaknesses

Unfinished processes in the management process for research projects at grassroots level; Never to enact binding regulations, motivate and encourage teachers/researchers to develop scientific research missions; Not yet well organized and coordinate relationships between entities in managing grassroots level scientific research topics; Unresolved relationship between teaching with the implementation of scientific research tasks; No heavy investment in infrastructure and financial support for the implementation of scientific research projects at grassroots level; No plan and budget for application of theses research outcomes basis in reality.

2.6.3. Causes of weaknesses

- Every year. the EMTIs not actively offer study problems of a privilege; less attention and orientation to the nature theme application service management and teaching; has not been a uniform process is stable and objective in each specific process management .
- Researchers and teachers inclined to choose activities of individual efforts such as Writing articles, writing textbooks or study participants, study guide ... to perform research tasks his science .
- Never thoroughly grasp, correct and complete operation of emulation and commendation in scientific research in their units; EMTIs still not issued the regulation of scientific research in their organizations; EMTIs also assign people responsible for scientific research in the form of part-time work; The majority of EMTIs yet to find funding from businesses and social service of scientific research.

Conclusion chapter 2

When the state of scientific research surveys, scientific research management situation, especially the situation manage Grassroots Research topics at the EMTIs, combining in-depth interviews, in addition to the advantages, to generalize the specific weaknesses from 2010 to 2013 at the EMTIs as follows:

- In the deployment EMTIs Research topics less. The topic has not met deploy management activities, not carry high applicability .
- Pressure in the teaching lonva EMTIs not actively investing funds for scientific research projects .

There is an imbalance between the two tasks: teaching and scientific research. Most of the teachers were selected without completing scientific research through the implementation of scientific research projects.

All EMTIs not implemented towards scientific research studies spud, unrealized unscheduled inspections in the management process.

When surveying the status management Grassroots Research themes , combining in-depth interviews , can generalize specific weaknesses in the period from 2010 to 2013 at the EMTIs

Roles and responsibilities of heads of EMTIs and heads of agencies/organizations will benefit research outcomes in shaping the research problem and consider the contents of the proposed bond issue as well as content research presentations intelligent Research topics grassroots, combining in-depth interviews, the results show, still faint.

The influence of subjective factors: Entity management in problem -oriented research organization annually and emulation and commendation in scientific research is blurry. Effects of Home Manager is great to research outcomes Grassroots Research topics. Head of inspection and chairman of the board evaluation, influence acceptance only in the normal range. Heads of agencies/organizations will benefit research outcomes almost no influence research outcomes Research topics at the local level EMTIs. The interaction between the actors when performing its management function in the management process through a particular process is limited, does not ensure publicity and transparency

Regarding the influence of objective factors: no specific policy in operation training, self-training; Never use the power of emulation and commendation in scientific research; No priority policy for Grassroots Research topics Research direction spud service management and teaching; No recruitment policies, layout, assess and appoint scientific staff; Never use the power of management information systems in scientific research; Unresolved rational implementation of two important tasks of teachers: Teaching and Research; Never create a positive attitude in scientific research; Unrealized the funding for scientific research projects at grassroots level; No plan and budget for application of theses Research outcomes basis in reality.

Chapter 3

SOLUTIONS FOR MANAGEMENT OF SCIENCE RESEARCHES AT EDUCATION MANAGERS TRAINING INSTITUTIONS

3.1. Orientations for proposed solutions

- 3.1.1.Contributing to Science & Technology development strategy and education development strategy 2011-2020
- 3.1.2 Priority implementation of scientific research mission to serve the educational administration and teaching within the functions and tasks of EMTIs Firstly, EMTIs must:

- o Ensuring grassroots Research topics are addressed in the application service management education and teaching .
- o Focus on: Enhancing the role and responsibilities of the entities managed through the improvement of mechanisms and policies in scientific research.
- Complete the process as well as developing specific relations between management entities with relevant stakeholders in the process of implementing research projects at the local level EMTIs

3.2. Principles for proposing solutions

Ensure openness, transparency and fair competition: All the solutions must be published before implementation; There is a scientific basis and comprehensive: The solution must be based on the theoretical basis of scientific research management; Feasibility: The solution is capable of being applied at the EMTIs; Ensure consistency: The solution must not violate other provisions of EMTIs and of higher level competent management Scientific Research; Competence: The solution must fit properly and the authority of the entity; Legacy: The solution must ensure succession appropriate selective and not destabilizing in the EMTIs; Economical and highly effective: The solution must remain focused on the application of practical research outcomes.

3.3. Proposed solutions

3.3.1. Solution 1: Enhance the roles, responsibilities of management subject by finalizing mechanisms, policies in science research

Solution objectives:

To suggest subjects manage to find ways to make the role and responsibility of proving (performing the functions) in Management Research in EMTIs openly, transparently and properly accountable.

Contents and implementation:

After reporting to superiors and Research announced the plan during the year/period, subject to the current management plan formalized and perform the role, his responsibilities expressed in concrete actions .

- 3.3.1.1. Issue/modify science research regulations.
- 3.3.1.2. Issue policies for completion, commend and reward in science research
- 3.3.1.3. Issue recruitment requirements, arrangement, evaluation and appointment of researchers.
- 3.3.1.4. Issue regulations for management information systems in order to create a favorable environment for scientific research (Yes illustration structure, the data entry requirements and guidelines when accessing data in scientific research management software).
- 3.3.1.5. Issue regulations in order to create a positive attitude to participate in scientific research
- 3.3.1.6. Resolving the relationship between teaching and performing scientific research work of faculty

3.3.1.7. Strengthening infrastructure and financial support in the implementation of scientific research

Conditions for subjects to be able to implement:

EMTIs for someone to manage the implementation of scientific research subject in a stable, long-term; EMTIs have specific rules on the responsibilities of managers of schemes and regulations to handle (the reward, or discipline reminder) of individuals involved in the process of implementation and management; EMTIs to use software applications to manage and compare the activities of the managing entity; Check or assessment, scientific research subject to acceptance in strict compliance with the spirit of science, open, fair and accountable .

3.3.2. Solution 2: Finalize specific procedures in managing institutional level SRs at EMTIs

Solution objectives:

In order to complete specific processes when managing scientific research topics at the local level EMTIs ...

Contents and implementation:

3.3.2.1: Finalize management of consultation in choosing research themes

On the basis of the provisions of the superior authorities, experience in the educational institutions especially the EMTIs complete the process identification of research issues so as to achieve the following contents: There orientation research in the year; Organized write patterns proposed research problems; There are liability rules making the collection and handling of scientific research topics proposed for the meeting prepared by the Board of MPI; There are meetings of the Board of MPI to exchange and officially rated on a scale has been consistently creating counseling centers advising the heads of EMTIs the research tasks at grassroots level in the year/period (Yes wallet illustration a scoreboard).

3.3.2.2: Finalize management of financial budget and research plan preparation

Based on research issues were identified during the year, on the basis of the provisions of the superior authorities, experience in the educational institutions especially the EMTIs complete the process TVTC research notes that achievement of content: organization for the faculty/staff/scientific institutions engaged in scientific research notes written in the standard form; There are liability rules when making gathers, handles the study notes prepared for meetings of the Board of MPI; Council meeting MPI (Yes illustration a scoreboard).

3.3.2.3: Finalize management of research conduction and checking procedures

When disclosures Grassroots Research topics are heads of EMTIs accepted, on the basis of the provisions of the superior authorities, experience in the educational institutions especially the EMTIs complete deployment process research and testing so as to achieve the following contents: Organization for

the faculty/staff scientist/organization Research revised disclosures studies the conclusions of the Board of MPI; Having defined the responsibility for drafting the contract research and process unit leaders signed research contracts with research notes; Having defined the responsibility for guiding the research team conducting the procedure perform the contract between the Manager with the scientists and method transfer payment funding for contracts and other activities of study groups; Having defined the responsibility of the establishment to inspect the implementation of scientific research projects and timing and conditions for the test; Having defined the responsibilities of managers of schemes in employment inspection report (form), prepared products, records were made in the course of study for submission to the group/organization checks; Provisions shall perform its tasks checked.

3.3.2.4: Finalize assessment, acceptance procedures

Upcoming evaluation period, acceptance (contract research), on the basis of the provisions of the superior authorities, experience in the educational institutions especially EMTIs the complete rules managers assess and collect stars to reach the content: Issued Notice assess the schedule; Having defined responsibilities in the preparation of procedures for the establishment of the Council for Evaluation and accepting the right ingredients as stated on both sides: state management and the capacity to understand the contents of the research project resource/task at hand assessment and acceptance; Having defined responsibilities in the implementation of procedures and the conditions for the Board evaluation and acceptance is conducted in a normal way in accordance with regulations and procedures of the sessions properly evaluated and accepted; Having defined the responsibility of the management to handle the results due to the project manager must comply with the Council conclusions of evaluation, testing and reporting to superiors authorized prescribed (Yes wallet illustration a scoreboard).

3.3.2.5: Finalize management of copyright, proprietorship of research outcomes

After having concluded evaluation and acceptance Grassroots Research topics (research outcomes accepted), on the basis of the provisions of the superior authorities, experience in the educational institutions especially EMTIs complete the process for implementation of copyright and ownership research outcomes stars for achieving content: Regarding the management responsibility to the project manager and team editing the conclusions of the Council for Evaluation and acceptance: Rules editing time after the Board reviews, research outcomes accept acceptance; Regarding personal assignment in specialized scientific research department examine the editing of the Council conclusions evaluation and acceptance; Regarding the responsibility for entering the information (as defined) in storage software to manage and exploit as well as the endorsement to the project manager has to submit products (including products and floppy key

store the main products) to perform research outcomes ownership; A written certification team has done research to implement copyright.

3.3.2.6: Finalize procedures for applying research outcomes in practices

In addition to conducting the procedure for exercising the right of ownership over the Council research outcomes was evaluated and accepted recognition on the basis of the provisions of the superior management agencies, experienced in the institution, Special education is the EMTIs complete process management application in practical RO for meeting content: About responsible for conducting the procedure to get the contract between the owners EMTIs Manager and agency/organization will benefit RO: The specialized scientific research plan review application deployment RO of Research topics; The heads of agreement with the owners EMTIs Manager and agencies / organizations will be the beneficiary of theses research outcomes basis of RO content will be applied and concluding contracts between owners EMTIs Manager and agency / organization will benefit RO; Regulation shall manage the team during deployment under certain contracts RO into practice: Appointing a responsible part in scientific research directly monitor contract implementation process.

Conditions for Procedures to be finalized:

EMTIs annually to publish research directions for the whole team; EMTIs must have rules to motivate and encourage teachers, scientists engaged proposed scientific ideas have real value and participate in writing the scientific explanations follow issues was selected and claims; To create objectivity and fairness in the selection process research disclosures way: Increase the quantity of the assessment criteria in addition to qualitative assessment of research capabilities of the team research; In considering the issue of research and study notes, a section specialized in scientific research and science councils and training to assess interest to the "Overview Research Issues", "Products expected" and "Efficiency is expected", must be attached to this position is an important position at the point of evaluation;

There are specific rules about the procedures, duties and responsibilities of both researchers and managers in the deployment process and test study research process with rules for handling (Merit prize, reminder or discipline) for the team and the managers in this process; EMTIs must specify the scoring criteria explicitly suitable for each type of facility-level scientific research when conducting the evaluation and acceptance; Research division responsible must consider in advising selected members assess Council, has accepted objectivity appropriate to the content that scientific subjects studied; EMTIs to build application software for managing scientific research and keep RO to propaganda, comparing, reporting and protection of copyright products of scientific research has been assessed, successful acceptance; In the planning of scientific research division responsible must be brought to RO content of topics to solve one of the problems in real life.

Solution 3: Develop the relationship between management subject and other relevant subjects in conducting institutional level SRs at EMTIs Solution objectives:

Suggestive content and orientation of the subjects fundamental to management and relevant stakeholders develop relationships in the process of implementing research projects at the local level to create EMTIs publicity, transparency in management and is an important basis for the RO of grassroots Research topics applicable to practice.

Contents and implementation

Develop legal relationship in management of institutional level SRs <u>Management subject – Head of EMTI</u>

- 3.3.3.1. Orientation and direction of the forces participating in the study write patterns proposed research problems and building / adjusting the eligibility criteria together with us to increase the quantitative point of evaluation .
- 3.3.3.2. Define and publish research issues are selected each year / period and build / adjust the eligibility criteria attached to selection point system research notes on research issues selected; Signing research notes and research contracts
- 3.3.3.3. Signing establishment inspection and assessment council, correct composition and acceptance regulations and build / adjust the eligibility criteria attached to the Council point system evaluation and acceptance is based underestimated, fair for RO.
- 3.3.3.4. Directed the implementation procedures of copyright and ownership RO as well as procedures to put into practice RO .
- 3.3.3.5. Issuing regulations priorities for scientific research topics towards spud service management and teaching.

Chairman of institutional level SR

When notes were accepted EMTIs heads, to the project manager performs the role, his responsibilities through:

- 3.3.3.6. Adapt the study notes. Special attention here: Overview research issues; Research content and progress of implementation; Products are planned; Expected efficiency; Detailed estimates the allocation of funding; Signed research contracts with EMTIS and contracting with scientists under the approved content.
- 3.3.3.7. Detailed plan, namely (in content, execution time and funds) to be able to execute scientific research contracts on schedule; There shall report RO with the competent authorities in accordance Contract research or at the request of the superior authorities.
- 3.3.3.8. Done right, all the procedures and administrative requirements, requirements RO with agencies/organization management; Responsible for the transfer and application RO to solve these problems in practice.

Checking group leader

When the decision of the competent authorities , its head test performed roles , their responsibilities through :

- 3.3.3.9. Head of inspection based on the research already, the contents registered in the research notes and reports of results to the project manager and the comments of the members of the audit team confirmed on progress the team's research.
- 3.3.3.10. Group leaders to check with the members of inspection teams to solve problems faced by research group.

Chairman of assessment, acceptance committee for institutional level SRs

When the decision of the competent authorities, chairman of the board evaluation and acceptance Grassroots Research subjects perform the role, his responsibilities through:

- 3.3.3.11. Council leaders have assessed and accepted conduct regulations.
- 3.3.3.12. Council leaders have to evaluate, assess and acceptance fair and accurate to the point.

Head of beneficiary bodies/organizations of SR outcomes of institutional level SRs

As a consultant, advising and supervising the process of implementing research projects, heads of agencies/organizations will benefit RO perform the role, his responsibilities through:

- 3.3.3.13. Every year, there must be problem oriented research with the research facilities they expect to benefit RO such an order (a very specific and explicit). Actively participate in and contribute to the team EMTIS and identify problems since the research , selection and editing notes; During test and evaluation, and acceptance; In the process of implementation of copyright and ownership as well as applicable RO into practice.
- 3.3.3.14. By its capabilities and requirements of the individual/organization studies, agency/organization will benefit from the results of scientific research to support the individual/organization for funding research, facilities, other conditions as contract research in a specific way, explicitly. Regular sharing of practical experience and monitoring all the processes of implementing research projects.

Develop the interactive relationship between management subject and other relevant subjects in conducting institutional level SRs

3.3.3.15. When managing inputs, there are two specific procedures.

Management owners and two related entities as to the project manager and head of the agency / organization will benefit RO should interact with each other while performing their management function according to the following criteria:

Problem management and construction consulting and management study notes research financial budget conducted under procedures and processes that have not been publicized yet?; The result of two specific processes that use scores to decide whether and system evaluation point was public not ?; Had the policies, rules to bind, motivate and encourage the team in two specific process?; Following information technology software to manage and exploit the history of this particular two yet? The main content management should include: Name issue / topic? Urgency/overview research? Objectives and main content/method, progress? Products and expected results? Expected efficiency? The budget and the allocation of funds?

3.3.3.16. When managing change, there are two specific procedures

With the process of managing and developing research and testing, management owners and three related entities (to the project manager, group leaders and heads of inspection agencies/organizations will benefit RO) for relative work together to perform their management function according to the following criteria:

Managing and developing research and test conducted in accordance with procedures and processes that have not been publicized yet?; Members of the inspection was not correct as specified?; Had the policies, rules to bind, motivate and encourage team in this particular process? Following information technology software to manage and exploit the history of this particular process has not?; The main content management needs including: Demonstration study has been edited exactly as their requirements MPI contract yet? The contract between the Manager with the scientists? The RO been achieved? Progress? The disbursement and payment and settlement? These concerns and suggestions of the team?

With the management process evaluation, acceptance and management owners and three related entities (to the project manager, chairman of the board evaluation, acceptance and heads of agencies/organizations will benefit RO) should interact with each other while performing their management function according to the following criteria:

Management reviews have conducted according to accepted procedures and processes that have not been publicized yet?; Members of the Council reviews, acceptance has not specified exactly like ?; Had the policies, rules to bind, motivate and encourage team in this particular process ?; Following information technology software to manage and exploit the history of this particular process has not?; The main content management needs including: Tested to complete the main profile and main procedures before signing the Council established evaluation and acceptance yet? Conditions for Board evaluation and acceptance can conduct meetings? Checked the records after the Board reviews, conducted over test session is finished? Tested perfection major products and major procedures to the project manager after the meeting? How to handle the results after the meeting?

3.3.3.17. When managing outputs, there are two specific procedures.

With the process of managing the implementation of copyright and ownership RO, management owners and two related entities (to the project manager and head of the agency /organization will benefit RO) should interact with each other while performing their management function according to criteria specified .

The main content management should include procedures to be conducted RO ownership? The procedures to be able to recognize copyright?

With the management process applied in the actual results, the management entity and two related entities (to the project manager and head of the agency/organization will benefit RO - agency/organization will benefit RO grassroots Research topics usually are: Enterprises, EMTIs units, classes due EMIs responsible management and teaching) should interact with each other while performing management functions of her according to criteria specified .

The main content management needs including: Planning to deploy the application RO into reality? The deployment procedure? Results RO deploy the application in practice and the solutions for new research phase will be how?

Conditions for solution to be applicable:

Agencies / organizations will benefit from the results of scientific research subject to regular interest and actively checks progress to the individual study / research institutions to remove obstacles or additional commitments Contracts so as to obtain results with high quality research; EMTIs heads must actively, responsibly and in compliance with the procedures in the management of scientific research topics grassroots level; EMTIs heads must ensure the establishment of check signing and the Council assessed strictly collecting as prescribed, especially the management capacity and capability to understand the contents of the research team members check/Council assessed and accepted.

3.4. Experiment the necessity and feasibility of proposed solutions

Of respondents agreed that the necessary measures are necessary and quite high: 89.7%, 56.4% affirmed that is necessary and 33.3% claimed to be necessary.

Of respondents agree that these solutions viable and feasible is quite high: $93.1\,\%$, $70.9\,\%$ affirmed that very feasible and $22.2\,\%$ confirmed to be feasible .

3.5. Experiment the development of procedures for identification of research themes and institutional level research plan description

After determining the purpose; Criteria for assessing empirical results; Objects, experimental forms; Location time experiment; Experimental Procedures, the thesis was presented experimental results, including:

- May 2014, Director of Educational Management Academy unified through two processes.
- Before issuing 2 identification of process research issues and financial budget study notes that 71.8 % of respondents do not have an interest and after

issuing two processes then the mean 82.1 % is the opposite: very benefits and benefits for the managers explain their activities.

When comparing the total% 2 levels and benefits are benefits in two phases before and after the enactment process research and problem identification of study notes grassroots topics in Educational Management Academy, Results obtained are for positive values (up to 87.2 and the lowest was 20.6). This result confirmed that the experimental hypothesis is correct.

Otherwise, the thesis using scientific theory pedagogical applications: Because the figures have been derived from "the count", therefore, to confirm the impact doviec issued two processes identification of research problem and study notes are meant to use "permit verification when squared" to a value of p and compared with a value of 0.0001.

Through in-depth interviews, has confirmed: The build process of the first two phases have created a good environment for scientific research topics grassroots level.

CONCLUSION AND SUGGESTIONS

Conclusion:

Based on the management concept has, the thesis has proposed defining the concept of managing the perspective towards the interaction of actors manage to perform the role and its responsibilities. In addition, the thesis was to clarify the concept as: EMTIs; Research at the EMTIs; Research topics at the local level EMTIs; Management and Research at the EMTIs manage Grassroots Research topics at the EMTIs.

Based on the regulations and practices when implementing scientific research topics at the local level EMTIs , concretize thesis six processes when performing scientific research topics at the local level EMTIs.

Based on the process approach , the thesis points out the process of implementing research projects at the local level EMTIs

Combining management concepts and systems approach , the thesis has defined roles, responsibilities and specific actions of management owners and stakeholders involved in the management process level Research topics EMTIs host the EMTIs

Since the role and responsibility of management entities and entities related , to handle six content management Grassroots Research topics .

The thesis investigated comprehensively situation in EMTIs Research from 2010 to 2013 , which, was particularly interested in two areas: First, the content management Situation Research topics levels host the EMTIs; Secondly, the status of the basic elements affecting management process Research topics at the local level EMTIs, including the subjective element and the basic objective factors .

The thesis proposes solutions 1, referring to the role and responsibilities of the heads of EMTIs to enhance the role and responsibilities of the entities managed

through the improvement of mechanisms and policies in Research at the EMTIs premise is to create effective environments enhance scientific research.

With the purpose of perfecting the specific process towards openness, transparency and proper accountability when managing scientific research topics at the local level EMTIs, the thesis has proposed the complete 06 procedures in the 2nd law, include: process Engineering Consulting research issues; processes financial budget; Deployment process research and testing; The evaluation process and accepted; Process of implementation of copyright and ownership RO; Procedures applicable RO into practice.

The thesis also proposes solutions to 3rd mention when the basic content management owners and relevant stakeholders should relate to each other in both the legal aspects and interaction (negotiation) to reach a consensus in the process of implementing research projects at grassroots level.

The thesis has made the task of testing the necessity and feasibility of the proposed solution at the Academy of Management Education and build experimental process research identification of issues and processes research notes in the Solution 2 at Academy of education administration .

Suggestions:

- The focus should EMTIs implement solutions, which, in the immediate need to focus on the solution 2 (Improving the specific processes in the implementation of research projects at the local level EMTIs) and solution 3 (Developing relationships between management entities with relevant stakeholders in the implementation of research projects at the local level EMTIs)
- Solution 1 (Enhancing the role and responsibilities of the entities managed through the improvement of mechanisms and policies in Research at the EMTIs) is very important, because the owner can manage to comply role, its responsibilities through specific actions openly and transparently creates order and fairness of responsibility and interest in scientific research. Before the current situation, stakeholders should implement the following specific action 4/7: Issued/edit Regulation of scientific research (3.3.1.1); Issuing regulations on emulation and commendation in scientific research (3.3.1.2); Promulgate regulations to have management information systems in order to create a favorable environment for scientific research (3.3.1.4); Strengthening infrastructure and financial support in the implementation of scientific research (3.3.2.7).
- On the basis of the thesis approaches , the EMTIs Research topics should have to find the solution for better management of content beyond Research topics grassroots level to create favorable conditions for scientific research in the growing EMTIs meet fundamental innovation , comprehensive education in Vietnam .