# EVALUATE THE EFFECTIVENESS OF SCIENTIFIC RESEARCH ACTIVITIES BASED ON INTERCULTURAL EDUCATION THEORY FOR SOCIAL SCIENCES AT LOCAL PUBLIC UNIVERSITIES

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### **ABSTRACT**

The role of scientific and technological activities in the function of scientific research is one of the activities that show the role and capacity of officials and employees at universities. Intercultural education theory is an appropriate theory that refers to skills and understanding respecting different values, emphasizing integration in the context of university autonomy, including the model of local universities with their own characteristics and characteristics in organizational culture as well as development orientation in scientific research activities. The article presents theories on scientific research activities, evaluation of scientific research activities with specific cases at a local university in Hanoi on that basis, proposing the factors to build a system of criteria to evaluate scientific research activities for the social sciences at the local university.

**Keywords:** Scientific Research Activities, Intercultural Education, Local Public Universities.

### INTRODUCTION

At universities today, scientific research is often encouraged and implemented in the form of applied research in addition to other potential types of research, namely development research (R&D) and basic research. Applied research activities in the fields of science, especially social sciences, are activities that require interaction and connection between research results as well as the quality of effectiveness of scientific products attached to research results of scientific research activities. Intercultural education is a term that refers to the integration and expansion aimed at finding different cultural values of each community and each region, besides these differences are considered, respected and studied from the perspective of the field of social sciences.

The use of intercultural education theory aims to determine the degree of diversity for a social institution in the relationship between individuals in a social community associated with a context and phenomenon. In the field of social sciences and humanities, the diversity of social contexts affecting the methods and results of a particular study requires a method of evaluating the effectiveness of activities for that research to solve the urgent problems needed by social science research results.

Intercultural education sets the context of the university today which is not only within the framework of the organizational culture of the university but also the development of the university for the function associated with activities and society. The link between continuing education and university performance assessment is the relevance of the University's operational objectives to social efficiency, specifically, the results of scientific research in the field of social sciences are considered effective if the research results of these fields come from the requirements and desire to solve outstanding problems in society.

A local public university is a special type of university that expresses the cultural characteristics of each locality and is under the management of the People's Committee of a specific province/city. Local public universities have their own cultural characteristics that distinguish them from other universities due to their local colors as well as having the same responsibilities as other universities in training quality human resources as well as being responsible for local issues. Therefore, the evaluation of the effectiveness of scientific research activities of local universities should be studied based on the theory of local cultural separation to optimize the effectiveness of scientific research activities of local universities in accordance with the context of society in the context of the autonomous development of universities.

### RESEARCH RESULTS

# Overview of scientific research and evaluation of the effectiveness of scientific research activities in the field of social sciences.

Scientific research activities are one of the functions that express the movement and development of society as well as contribute to promoting and providing answers to the nature of a thing or phenomenon in society. The understanding of the nature of things and phenomena contributes to the product of scientific research results, which is the knowledge system that answers the questions of things and phenomena.

Author (Auger 1961) gave the definition of the scientific phrase, this definition was used by UNESCO and became the definition used to give the nature of scientific research activities "Science is understood as the knowledge system of all kinds of laws of matter and the movement of matter, the laws of nature, society, thinking". From this definition, it can be seen that the product of scientific research here is the knowledge system, which is the foundation for the results of scientific research to be used to impact the community and society. This knowledge system is used to solve the problem of the nature of things and phenomena formed and developed by humans, this is a similar characteristic between scientific research activities and cultural factors created and used by human subjects in the community and society.

Science is an activity associated with the formation and development of society, from which it can be seen that the formation and development of this scientific field is an inevitable and objective condition that requires a science of social movement and development.

Author Rick Zostak (2024) has classified in social sciences as well as the definition of the phrase social sciences "Social sciences are the fields of social sciences related to human society and human relationships with each other. These relationships are in the totality of environmental factors, which sets the nature of the connection between the social sciences and the humanities. "The essence of the phrase "society" under the approach of a science is a scientific research on the developmental fields of society, understanding the nature of interaction and relationships in a given social community. One of the factors formed in the human-owned social community along with the difference of this factor of each community or each country is the cultural factor. Cultural factors are different in nature, but in the integration and exchange of human activities, it can lead to the linkage between similar factors and values.

The definition of scientific research activities is also understood and presented in the form of the results of this activity, which is a knowledge system with its own characteristics, which is a scientific knowledge system (The National Council directs the compilation of the Vietnam Encyclopedia, 2011).

From the definition of the terms "science" and "social science", it can be seen that the nature of scientific research activities is an activity associated with the community and society, this activity contributes to the search and takes on the characteristics of "novelty" due to the human being as the subject. For scientific research activities, novelty is reflected in the use of research methods to evaluate or propose solutions to solve research objectives and impact on research subjects in society.

Regarding the definition of "scientific research activities", it is a research activity with specific research methods with the object of research being a phenomenon and the evidences of scientific research activities in the form of references, data, and knowledge that are completed through a specific research method to detect the nature of a field, specifically the field in society on that basis, providing solutions to develop and improve the effectiveness of the research problem.

On the basis of scientific and social science perspectives, scientific research can provide a definition used as a basis for scientific research activities in the field of social science that is "Scientific research in the field of social science based on exploration and discovery activities with the goal of researching the nature of things and phenomena existing in society, on that basis to propose solutions to affect things and phenomena for the purpose of human and social activities".

On the basis of determining the definition of scientific research activities in the field of social sciences in order to be able to determine the effectiveness of this activity, it is necessary to have an evaluation function for scientific research activities. Evaluation activities contribute to determining the effectiveness of scientific research activities, the evaluation should be based on the results of scientific research activities as well as on the basis of what changes or impacts such research results have on the community and society.

The author (Vu Cao Dam, 2011) has given a definition of evaluation activity that is the consideration and comparison of the quantity and quality of one thing compared to another thing chosen as a standard. The standards here are the requirements for a scientific research topic including the quality of research and the accompanying products of research in a scientific field.

This is an appropriate definition for scientific research evaluation activities, this definition has similarities to the assessment of scientific and technological activities in the United States, which is the use of criteria related to scientific and technological activities as a standard for scientific research activities, these criteria include: product quality, research time, financial resources for activities, and research results achieved. The evaluation method here is the use of a specific comparison method that uses the results of scientific research to compare with the existing situation in the previous society for the field of social sciences to evaluate the effectiveness of research results in the field of social sciences.

The author (Vu Cao Dam, 2008) has given a quantitative definition of the evaluation activity that is the effectiveness of scientific research is the benefit obtained after applying the results of scientific research.

Thus, it can be seen that for the scientific field, including social sciences, the evaluation of the effectiveness is reflected in whether the research ensures the conditions of research results and research products and is approved by the Professional Council. On that basis, the evaluation of scientific research results is approved with the objectives of research approved at the final level. The effectiveness of scientific research activities is reflected in the fact that such research is specifically applied to an activity of the community and society to bring about specific effects in the field of economy, environment and efficiency to society before the research results are used.

# Overview of the theory of intercultural education and the application of intercultural education theory to the evaluation of the effectiveness of scientific research activities

Intercultural is a phrase defined based on the definitions of culture as well as the meaning of related words in expressing the interconnected nature of culture as products of human communities in cultural and social life. The trend of globalization has the effect of increasing relationships with communities and societies, contributing to the formation of cultural exchanges. This is a specific condition for conducting cultural exchanges between communities of people in regions, countries and territories. This is a circumstantial factor that plays a decisive role in forming theories of intercultural studies. Interculturalism is approached and studied based on studies in the field of philosophy and studies in the field of cultural studies.

The author (Huyndok.C, 2013) in the article Intercultural Philosophy, the content of the scientific article on philosophy has shown the nature of interculturalism here is the relationship and cultural exchange between different cultures. The most important feature of the inter-cultural phrase is that cultures are equal and equal among different cultures in the community or in the world. From this definition, it can be seen that intercultural is the communication between cultures on which to seek cooperation in applying the appropriate characteristics of each culture to jointly develop the community and society.

Author Nicolas Journet (2011) in the study of interculturalism under the approach of culturology stated that the nature and context of the formation of interculturalism is the context of globalization and the time of formation of intercultural definition was in the 60s and 70s of the twentieth century.

From the above two definitions based on philosophy and the cultural field, it can be affirmed that from the context of globalization to the present time when the Fourth Industrial Revolution with scientific achievements and the development of technology at the highest level, the current trend of scientific and technological activities is the trend of exchange and cooperation between countries and regions in a specific field.

Intercultural education is the formation and application of appropriate perspectives in educational activities of a particular level of education of countries with applicable and appropriate similarities to improve operational efficiency or a function in the field of education and training. The application of intercultural education theory in evaluating the effectiveness of scientific research activities, especially in the field of social sciences, is the promotion of the process of applying and using appropriate assessment experiences and criteria of countries around the world, especially the experience of evaluating scientific research activities with higher education institutions. The core values of intercultural education are the development of understanding and skills to respect differences, which is very important for scientific research.

On that basis, the application of intercultural theory in evaluating the effectiveness of scientific research is the study of the evaluation experience of countries with cultural similarities with Vietnam to find and apply the criteria for evaluating scientific research activities effectively and in accordance with organizational cultural factors at a specific organization. The university, in which the local university has the appropriate features to use intercultural theory with common and distinct characteristics about the organizational culture that influences and impacts scientific research activities.

# Organizational culture from the perspective of intercultural education and impacts on scientific research activities at local public universities

A local university is a term defined based on the nature of the operation of multidisciplinary public universities under the management of the Provincial/Municipal People's Committee. The difference between a public university and a local university is reflected in two characteristics of management and operational function (Education Law 2019). From there, it can be seen that the organizational culture of the local university is also influenced by intercultural factors.

Firstly, for a local university that is a public non-business unit under local management, the university will be influenced by the development orientation of the locality as well as have its own cultural features of a specific locality in the operation of the university. For example, in science and technology activities, local universities will focus and conduct scientific research to make arguments to solve local problems.

Secondly, besides the traditional culture of the locality, local universities are also influenced by intercultural factors, which are the impact trends of the world such as the context of the fourth industrial revolution, the trend of university autonomy. Therefore, it is possible to accept universities that are also influenced by organizational culture as well as new influencing factors. This trend also affects scientific research activities at local universities, which is the shift in applied research at local universities based on the strengths of the Universities.

Thus, for local universities, the development and development of intercultural theory in a specific activity plays an important role, this theory can be used to build and specific assessment criteria for this activity at local universities. Evaluation of scientific research activities at local universities will be based on the criteria of meeting the standards as prescribed, along with the application of this theory to develop and perfect the specific quantitative criteria for local universities. Within the scope of the research, the criteria for evaluation of scientific research activities for the field of social sciences will be completed at Hanoi Metropolitan University, a local university under the management of Hanoi City.

# Evaluation of scientific research activities in the field of social sciences at local public universities

With the research method, it is the study of documents and observation of scientific and technological activities at the local public university. The scope of research of that article is research at the only local public university in Hanoi, which is Hanoi Metropolitan University.

Hanoi Metropolitan University is a public training institution, upgraded on the basis of Hanoi College of Education, established on January 6, 1959. Hanoi Metropolitan University was established under Decision No. 2402/QD-TTg dated December 31, 2014 of the Prime Minister, under the People's Committee of Hanoi, under the State management of education of the Ministry of Education and Training. Over the past 8 years of construction and development, the University has increasingly affirmed its position in the university system of Vietnam, as well as its role and position in the socio-economic development of Hanoi City. Scientific research activities are one of the three important functions of Hanoi Metropolitan University. In the orientation of important research areas of Hanoi Metropolitan University, the field of social sciences and the field of educational sciences play an important role, these are two areas of research associated with applied tasks, associated with the requirements of training high-quality human resources associated with the requirements and tasks of Hanoi City.

Hanoi Metropolitan University (2024) in the Preliminary Evaluation Report on the Implementation of the Law on Higher Education in the period of 2019 – 2023, the report assessed the results of achievements in scientific research activities of Hanoi Metropolitan University. The number of scientific research projects of the University as well as scientific products of the University's staff and employees.

Table 1 STATISTICS OF THE NUMBER OF SCIENTIFIC RESEARCH TOPICS PERIOD 2019 – 2023							
Year	Classification of the topic						
	Public	Ministry Level	Grassroots level	Total			
2019	02	03	50	58			
2020	01	01	46	49			
2021	01	01	46	48			
2022	00	01	41	42			
2023	00	00	34	34			
Total	05	06	217	239			

Source: Hanoi Metropolitan University (2024) in the Preliminary Assessment Report on the Implementation of the Law on Higher Education in the period of 2019-2023

From the above data table 1, it can be seen that the development efficiency of scientific research activities at Hanoi Metropolitan University through the number of topics is a clear criterion for evaluating the level of development.

The total number of topics according to the statistical method out of 239 approved topics of the University in the period from 2019 to 2023, the number of topics in the social field is 120 topics with a rate of 50%. This is suitable for the field of strengths of Hanoi Metropolitan University with the starting point being a university with a tradition of training in pedagogical human resources as well as social sciences, so the scientific and technological human resources are mainly in the field of social sciences.

This is a factor related to organizational culture to be able to identify and evaluate the effectiveness of scientific and technological activities. Based on the factors related to the organizational culture of the University developed from the training of the pedagogical and social sciences, the evaluation of the effectiveness of scientific and technological activities in the scientific field based on the intercultural approach should be based on the assessment according to the roadmap from the development of the breadth based on quantity and the development of the depth based on quality. This is appropriate because through the development stage of a local university from a college level to a multidisciplinary university, there are changes in the formation and construction of research and implementation skills for a scientific research topic, from which the use of topics to improve research skills for the staff and employees of the University is appropriate. In addition, when the research skills of the staff and employees have developed, it is reflected in the participation in scientific research tasks at many levels along with the field of social sciences as well as determining the applicability of scientific research topics in order to meet the requirements of solving social problems as well as the requirements of improving the quality of the university's operations, which requires funding resources for scientific research activities and the quality of scientific research products. This leads to a reduction in the number of university-level research projects in a lower number, but the quality and product requirements for scientific research activities as well as funding for activities will also be provided at a higher level with more resources to form a level of quality in evaluating the effectiveness of scientific research activities. The formation and change in organizational culture for the evaluation of the effectiveness of scientific research projects, especially the evaluation of the effectiveness of scientific research activities in the field of social sciences according to the quality of products in scientific research and the feasibility and application of research results, is appropriate to demonstrate the change in the approach to building organizational culture, as well as the application of views on intercultural education in evaluating the effectiveness of scientific research activities at Hanoi Metropolitan University.

The evaluation of the effectiveness of scientific research activities at Hanoi Metropolitan University can also be considered and evaluated based on the quality and quantity of scientific research products of the University's staff and employees.

Table 2 STATISTICS OF THE NUMBER OF SCIENTIFIC RESEARCH WORKS IN THE PERIOD O 2019 – 2023							
Year	There are scientific research works						
	WoS	Scopus	aci	International Journal of Sciences:	National scientific journals		
2019	6	4	0	6	61		
2020	12	2	0	15	49		
2021	12	7	0	10	67		
2022	4	4	1	20	80		
2023	9	5	1	15	88		
Total	43	22	2	66	345		

Source: Hanoi Metropolitan University (2024) in the Preliminary Assessment Report on the Implementation of the Law on Higher Education in the period of 2019 – 2023.

From the above data table 2, it can be seen that the number of scientific research works of Hanoi Metropolitan University has developed, which is consistent with the development orientation and culture of the University, which is the research in the field of social sciences associated with the application orientation. Of the total number of scientific research works, the statistical method used to evaluate the proportion of scientific research works has similarities with the number of scientific research projects.

The habitual and cultural characteristics of research in the field of social sciences are that often the works that will be studied are directed to domestic scientific journals, which is also relevant to the field of research. However, in the trend of intercultural education, the need to have criteria to evaluate the effectiveness of scientific research activities based on scientific research works at the international level is consistent with the development trend. For the intercultural approach in the field of social sciences, the cultural change in scientific research activities based on the number of international research works in this field will contribute to the development of the University's research team, reflected in the improvement of qualifications through higher level learning activities of employees and more experts in the field of research to form strong research groups.

Books and textbooks are also one of the products of the scientific research process. Currently, the evaluation of whether a syllabus is effective or not is the same as a scientific research project, which depends on the opinion of the Professional Council to decide whether the syllabus is eligible for acceptance or not to be accepted, thereby serving as a basis for the publication and use of the syllabus. The number of syllabus published in 2023 has a sharp

decrease with 22 syllabus published down 5 times compared to 137 syllabus published in 2023. This shows the quality and effectiveness of the syllabuses that need to be reviewed and evaluated to improve the effectiveness of scientific materials to meet the needs of the training disciplines, including the training disciplines in the field of social sciences of the University.

Thus, for the evaluation of scientific research activities in the field of social sciences at Hanoi Metropolitan University, there are characteristics consistent with the theory of performance assessment on scientific research activities as well as the theory of intercultural education leading to changes in scientific research activities. The completion of the evaluation of the effectiveness of scientific research activities in the field of social sciences at local universities, including Hanoi Metropolitan University, should use intercultural education theory as well as theories on evaluating the effectiveness of scientific research activities to overcome the shortcomings in scientific research activities in the context of inter culturalism and the impact of the inevitable trend of university autonomy in accordance with the development orientation of education and training activities.

Firstly, it is necessary to determine the effectiveness of researches in the field of social sciences associated with the University's application orientation that this research objective is financially effective; this evaluation to optimize the funding resources for scientific and technological activities is still limited at local universities such as Hanoi Metropolitan University.

Second, intercultural approach is associated with the effectiveness of scientific and technological activities on the values brought to the community and society.

Thirdly, the approach to intercultural education requires effective scientific and technological activities that affect other areas of the university's operations without requiring criteria to evaluate the effectiveness between training and scientific research activities.

# Proposing some criteria for evaluating the effectiveness of scientific research activities in the field of social sciences at local universities

The evaluation of the effectiveness of scientific and technological activities at local universities, including Hanoi Metropolitan University, is appropriate, but it is necessary to have more criteria to evaluate the coordination between the effectiveness of scientific and technological activities with the resources and fields of activities of the university in addition to the completion of the results of scientific research activities.

Firstly, perfecting the criteria of financial efficiency for the field of social sciences is the effectiveness of the research results in the field of social sciences, which clarifies the benefits of the research results and the approved costs for scientific research topics. Quantitative criteria can be used to evaluate the efficiency that is the determination of economic efficiency by the calculation formula including:

Financial efficiency = Total financial value to be obtained - Total cost for scientific research projects.

For the field of social sciences, the determination of the obtained financial value can also use a number of qualitative criteria such as: Social impact on the research results of the topic; new scientific arguments from the research results of the topic.

In some research projects in the field of social sciences, qualitative criteria need to be evaluated for a long time after the research results are accepted and published, the evaluation of the effectiveness of scientific research activities in the field of social sciences can be further used. Other efficiency evaluation criteria close to the field of research such as social efficiency for research in the field of social sciences. The evaluation of financial efficiency can solve the problem of having financial resources with more invested financial resources to promote scientific research products that are more quality and quantity works, articles or textbooks.

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Secondly, the effectiveness criterion for society, this is an important criterion for the evaluation of effectiveness in the field of social sciences, the field of society is the object of research of the social sciences major. The current theory of intercultural education is a theory that expands the scope and impact of a topic from the perspective of the impact of intercultural factors. Evaluation of the effect on society can be applied in the evaluation of scientific research in the field of social sciences. Intercultural education theory can be applied in evaluating the effectiveness of scientific research in the field of social sciences as well as scientific and technological products; textbooks in this field are the skills of the research team in solving the problems of society through research results. The effectiveness of scientific research activities is to promote the solution of social problems; this is the first criterion to evaluate the effectiveness of a research activity in the field of social sciences.

For example, the use of quantitative criteria in research objectives for scientific research activities in the field of social sciences is also an interdisciplinary approach to evaluate the effectiveness and clarify the "novelty" of scientific and technological activities.

Thirdly, the effectiveness criteria in the field of training, the effectiveness criteria in the field of training show the role of scientific and technological activities on training activities contributing to the operation of the University. Criteria for evaluating the effectiveness of scientific research activities in the field of training related to the quality of human resources. In the field of social sciences, intercultural education theory provides skills for each individual. This applies to evaluating the effectiveness of activities to improve the quality of human resources in evaluating the effectiveness of scientific research activities reflected in research skills and the development of research skills for scientific research activities. Criteria for evaluating the effectiveness of scientific research activities in the field of training for universities are reflected in the fact that the textbooks and monographs of the field of social sciences have a role and influence on the major of training, on that basis, it is possible to determine the role of influence, effectiveness and necessity of the textbooks associated with the field of training of the University, which initially contributes to solving the situation of the number of textbooks and monographs in a modest number of local universities.

Thus, for the field of social sciences at local universities, intercultural theory plays an important role in scientific research activities, in addition, it is possible to apply and use the criteria for evaluating the effectiveness of this theory for scientific research activities based on the effectiveness of financial efficiency for society and the effectiveness of training activities are the criteria frameworks that are determined to be able to research and supplement to become the criteria for evaluating the effectiveness of scientific research activities in the field of social sciences in the context of university autonomy in the current context.

### **CONCLUSION**

Scientific research activities in the field of social sciences are characterized by factors affecting economic and social efficiency and training activities in the field of social sciences. The use of theories on the evaluation of the effectiveness of scientific research activities using educational intercultural theory as well as the development of performance assessment criteria is feasible, contributing to the identification of appropriate factors to be able to develop criteria for evaluating the effectiveness of scientific research activities for local universities, including the initial research to propose criteria for evaluating the effectiveness of scientific research activities in the field of social sciences at universities.

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