

# Scientific approaches to developing critical thinking in Asian-Pacific region

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**Abstract.** This article deals with the study of critical thinking, the need and the ways to apply it in regional studies. It analyzes scientific and educational approaches to developing critical thinking in Asia-Pacific region. It studies them in a theoretical level and tests across regional studies. It gives the reasons to develop critical thinking across regional studies to improve a complex regional analysis in the modern conditions of informatization. It proves the need of integration of critical thinking and regional studies. The author offers to enlarge the model of professional competences of regional studies experts with critical thinking development, emphasizing the purposeful and systematic way of this development. The hypothesis of the work is that investigation of the scientific approaches to developing critical thinking in Asian-Pacific region will promote critical thinking of regional studies experts and their ability to analyse the region. It presents the results showing the effectiveness of the given professional competence model and higher level of critical thinking developed by purposeful and systematic steps during regional studies activities.

## 1 Introduction

In dynamic processes of the world, critical thinking technologies provide a non-standard approach to solving professional problems in the regional analytics that do not have templates. In order to achieve better results in a complex regional analysis the regional studies expert is supposed to find the necessary information about the definite region, analyse it, evaluate it critically, perceive latent arguments, understand the author's motives and the engaged nature of the sources. The criticality of the mind allows you to see more broadly, evaluate hidden arguments, be able to resist manipulative influences and inaccurate information. Today science has accumulated a certain amount of theoretical knowledge to form critical thinking of regional studies experts. The basics of regional analysis were studied by W. Isard, R. Miller, J. Vogt, A. Voskresensky, I. Vitver and others. The issues of critical thinking were investigated by A. Silverblatt, A. Ward-Barnes, D. Willingham, R. Johnson A.V. Fedorov and others. However, the study of scientific research and curricular for regional studies experts shows the lack of focused development of critical thinking. The learning of regional science disciplines takes place through standard analytical activities. Critical analysis at classes is usually used sporadically, unsystematically and it is not aimed to develop critical thinking of the student. While the potential for critical thinking in a complex regional analysis is solid.

So, the relevance of this study is that the new conditions of the society, the conditions of chaotic information flow, information wars and engagement of

the media cause the need to develop critical thinking of regional studies experts for integrated regional analysis. The study of scientific and educational approaches to developing critical thinking of regional studies experts is a necessary and promising direction in the field of regional studies. We identified the object of the study the development of critical thinking across regional studies. And the subject of the research is scientific and educational approaches to develop critical thinking of regional studies experts in Asia-Pacific region research.

The purpose of the paper is to give the description the scientific approaches to develop critical thinking in Asia-Pacific region.

The objectives are to:

- consider the concept of critical thinking;
- study the main approaches to develop critical thinking in Asia-Pacific region;
- use the scientific approaches to develop critical thinking of regional studies experts;
- renovate a professional competence model of regional studies experts with critical thinking;
- check up the effectiveness of the work.

We believe that to study scientific and educational approaches to developing critical thinking of regional studies experts at Asia-Pacific region research will promote the purposeful and successful development of students' critical thinking while they learn regional sciences.

## 2 Theoretical basis of study

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We suppose the theoretical basis as the study, dedicated to the problems of regional studies of foreign scientists: W. Isard, F.K Schaefer, G.H.T. Kimble, E. Lagemann, D.L. Szanton and others, domestic scientists I.M. Maergoyz, Y.G. Malibitsa, N.N. Kolosovsky and others; basics of regional analysis: A.V. Voskresensky, N.N. Baransky, I.A. Vitver and others; and works on critical thinking theory by R. Kubey, L. Masterman A. Ward-Barnes, D. Klooster, D. Willingham, G. Chen, A. V. Fedorov and others.

### 3 Methodology and materials

The materials of the study are the literature from the different fields of science written by foreign and Russian authors on regional studies, sociology, economics, media education, methodology; US official statistics, theses on the studied problem, monographs and analytical articles, collections of official documents, statistical data presented on the Websites joannecantor.com, plato.stanford.edu, mirznanii.com, econbooks.ru, nsportal.ru, multiurok.ru, studopedia.su, etc. were sources of materials of this research.

The research methods are the study and analyses of the scientific literature of domestic and foreign authors on regional studies, pedagogy, media education, journalism, media criticism, theses on the problem, synthesis, generalization, comparison.

### 4 Results and discussion

In order to solve the task of our research, we have analyzed the study of the main approaches to developing critical thinking.

The study of literature (R. Kubey, A. Ward-Barnes, G. Chen, A. Silverblatt, L. Masterman, A. V. Fedorov and others) shows that one of the most common and popular ways to develop critical thinking in Asia-Pacific region is across media education. This is a scientific field that studies the concept of critical thinking, mechanisms and models to develop it. Media education is considered a section of pedagogy, which studies the process to develop critical thinking regarding the person, based on general principles and laws of pedagogy.

Asia-Pacific region studies define media education in different ways, but everything somehow proceeds from the definition formulated by UNESCO: "teaching a theory and practical skills for mastering modern media of communication, considered as a part of a specific and autonomous field of knowledge in pedagogical theory and practice" [1]. Here they emphasize the purpose of media education as to develop media literacy of a person and his critical thinking.

The analysis of these works let us conclude that the need to be media educated in general and think critically in particular appeared in early years of the 20th century when media started to spread quickly and impact widely. New conditions, informatization of the society, information flow required certain qualities of personality and means of their development. The process of media

education began and proceeded differently in Asia-Pacific countries, generally later than in the European part.

The media educational movement is believed to appear in Western Europe, firstly in France. It was connected with cinema and film impact on a human. The USA is one of the first countries of the Asia-Pacific region to start to study critical thinking and make media education as a separate scientific field. In early years of the 21st century, the interest in media education noticeably increased in Asia-Pacific countries. In this direction there have been numerous studies and works written on various aspects, media educational models developed to form media literacy of a person and his critical thinking.

In Asia media education appeared much later. Today, this is a relatively young, but dynamically developing branch of educational knowledge. Despite the use of leading Western and American media educational models, theoretical reliance on foreign research there are many adaptive differences related to culture, heritage, beliefs, values, educational strategy.

UNESCO has a major role in the development and dissemination of media education and critical thinking in Asian-Pacific countries.

The UNESCO World Communications Report (1989) describes the international trend and environment of media education and critical thinking in Asia-Pacific region, Europe and Latin America, aimed to have a free flow of information, both nationally and internationally. The report highlights the need for wider and more balanced dissemination of information, unhindered freedom of expression; Strengthening the communication capacity of developing countries through the International Program for the Development of Communication (UNESCO, 1989). Thus, they strengthened the trend of society informatization and singled out the issue of interaction with the information flow.

Media education has a terminological divergence. The scientists in Asian-Pacific region differently define the concept of critical thinking, set different priorities to develop it. The most common way is to consider critical thinking as a component of the media literacy – the ability to decode, perceive, analyze, critically evaluate information and carry out communication in various forms [2-6].

Art Silverblatt believes that media literacy promotes critical thinking across a broad range of disciplines, providing individuals with the skills and abilities so necessary to the survival of democracy [6]. Critical thinking is the latent goal of any educational discipline in which it is supposed to work with information.

Critical thinking is defined as "the ability to analyze information and put forward a reasoned judgment based on an assessment of sources, information, facts" [7]; as "the ability to raise a question and identify problems to solve across convincing reasoning" [3]; as "the totality of three types of thinking: reasoning, making your own judgments and solving problem situations" [8]; as "a special type of mental activity that allows a person to make a sound judgment about the point of view or a model of behavior proposed to him" [9]. One way or other, critical thinking means analytics with an

assessment of information based on verification of data, source, author, making their own clear position. Criticism here is a constructive doubt aimed to find the truth.

The researchers emphasize the relevance of critical thinking, study its nature, highlight characteristic features that must be taken into account to develop it. In general, the following can be concluded.

Critical thinking is considered as an independent type of thinking.

Any information is a basis for analysis, critical evaluation and the creation of own conviction.

Critical analysis begins with questions to answer and problems to solve.

Critical thinking's aim is to substantiate the position, enhanced evidence and argumentation.

Critical thinking involves multilateral activities, the ability to consider the same event from different perspectives.

Critical thinking is individual in nature, as it forms a personal strategy for working with information and informational sources.

Critical thinking development is a priority task of journalism area called Media criticism. In this scientific and educational approach critical thinking is developed across the analysis of the media, their mechanisms to impact the viewer, the algorithm to submit information, and the subjective activation of event information. The goal of media criticism is to study media production through the assessment and interpretation of media text. According to Davis Foulger, media critic describes a set of methods, which provide understanding of the capabilities, effects and practices associated with different types of media, in various meanings, forms of perception, biases and purposes related to communications, which we create in these media, in the cultures that produce and consume these messages, in the ideologies that shape these messages and in ourselves as consumers and producers of these messages [10].

According to Canadian researcher Nikos Metallinos, this is the oldest approach to criticizing visual media arts, but it has become popular recently. The common forms of it are a review, a note, a commentary, a report, an article, an essay on various types of media products [11].

A.P. Korochensky considers media criticism as "a creative and cognitive activity aimed to learn and evaluate the current creative, vocational-ethical, corporate-organizational, legal, economic and technological aspects of information production in the media to emphasize the creative side of media content" [12]. The author emphasizes the need to keep in touch with the audience to better perceive information by the analysis, interpretation, assessment.

The analysis of media criticism [10, 11, 13, 14] let us conclude that media criticism is based on critical thinking and has the following characteristics.

1. Subjectivity. Any media review is a subjective opinion of the author, made on the basis of critical analysis.

2. Mass character. A review or a comment is addressed to a large audience.

3. Media criticism stands out in a special literary genre, does not belong to traditional literary genres.

4. It can be both on behalf of a professional author and a resident.

5. It is more informative and entertaining than informational.

6. It reflects the analysis of social problems raised in any media text by the author, and not the artistic potential.

Media criticism is conditionally divided into three types: *professional*, used in the work of journalists, *unprofessional*, media criticism at the level of the average, where anyone can leave a comment, a review or an essay on a certain media product, and *educational*, used by teachers in educational process of to build certain personality qualities.

Various genres of professional media criticism are popular in Asia-Pacific region, for example, in American publications: The Washington Post, The New York Times, The Globe, The Saturday Review, The Los Angeles Times, etc.

Regarding the critical thinking, it is not always possible to identify a clear boundary between media education and media criticism, especially of the educational type. In this case, we talk about the integration or synthesis of these areas, in which theoretical and practical ways of media education are implemented in order to develop critical thinking as an instrument to protect the individual from the negative influence of mass media. As for media criticism it is aimed to increase the media activity of the audience in creating and disseminating media text. The prospect of such synthesis is noted in a number of studies. For example, N.A. Chumakolenko, studying the synthesis of media criticism and media education in the process of teaching pupils and students in Asian countries, came to the conclusion that "for all Asian countries, without exception, it is important. Media education and media criticism attach great importance to the development of analytical/critical thinking among school and student audiences" [14].

A. Fedorov emphasizes the importance of this synthesis and explains that, "one of the most important tasks of media education is precisely to teach the audience not only to analyze media texts of all kinds and types, but also to understand the mechanisms of their creation and functioning in the society. Actually, media criticism is also doing the same, while turning to both professional and so to the widest audience" [15]. Thus, we need all these mechanisms to operate with the information to study a region for a complex regional analysis.

Looking at professional competence models of regional studies we can see only the abilities to analyze. Critical thinking is not emphasized. There is a need to search the information. But the skill how to do it in the wide stream of information does not appear.

Professional competences (PC) of the regional studies expert are based on analysis, evaluation and thinking. PC 1 says: the regional studies expert is able to search for the necessary information in the sphere of foreign regional studies and country studies using current information and communication technologies. To find the verified information to select and check it, the regional studies expert is supposed to think critically.

As for PC 5 the regional studies expert is able to write

comments and other texts in editorial policy, processing

**Table 1.** Expert and analytical professional tasks in regional studies

<b>Professional Competence</b>	<b>Traditional</b>	<b>Integrated with critical thinking</b>
PC 1	The regional studies expert is able to search for the necessary information in the sphere of foreign regional studies and country studies using current information and communication technologies.	The regional studies expert is able to find the verified information in the sphere of foreign regional studies and country studies using current information and communication technologies, to select and check it, the resources included foreign ones, compare their positions, motives, make own neutral opinion.
PC 5	The regional studies expert is able to write comments and other texts in editorial policy, processing and verification of received information, monitoring of information reasons and planning of activities.	The regional studies expert is able to write comments and other texts in editorial policy, processing and verification of received information, monitoring of information reasons and planning of activities thinking critically and objectively, avoiding nihilism.
PC 11	The regional studies expert is able to use in professional activities comprehensive knowledge of the specialization region (country), taking into account natural, economic, geographical, social, historical, political, legal, demographic, cultural, linguistic, religious, ethnic and other features.	The regional studies expert is able to use comprehensive knowledge of the specialization region (country) in professional activities, taking into account natural, economic, geographical, social, historical, political, legal, demographic, cultural, linguistic, religious, ethnic and other features evaluating the information, its manipulative nature and consequences.
PC 12	The regional studies expert is able to interpret independently and give justified assessment of different scientific interpretations of regional developments, phenomena and concepts in national, interregional and global contexts.	The regional studies expert is able to interpret independently and critically and give justified and objective assessment of different scientific interpretations of regional developments, phenomena and concepts in national, interregional and global contexts.

and verification of received information, monitoring of information reasons and planning of activities. To complete these duties the regional studies expert must be developed critical thinking purposefully and systematically. If it is formed chaotically or minor, we cannot get high results.

The integration of critical thinking and region analysis seems to be the best way. A number of works describe it. The work, devoted to critical thinking development at regional studies, proved that “there are particular features and characteristics of critical thinking formation of students specializing in different fields. Students specializing in regional studies should also cultivate critical thinking. The regional factor is becoming increasingly important in the specifics of modern international relations [16]. And this interconnected character of critical thinking and regional studies improves analytical activity of the experts, promoting them to reason and make decisions without protesting and nihilism.

The theoretical review let us integrate a critical thinking element to a professional competence model of regional studies in order to develop critical thinking purposefully and systematically. (See Table 1. Expert and analytical professional tasks in regional studies).

To check up our idea we organized an experimental work to develop critical thinking in a synthesis of media education and media criticism. During one academic year

two groups of students, studying regional studies in Irkutsk State University, took part in it. One group (a control group) was taught due to the traditional model without paying special attention to critical thinking and the other one (an experimental group) was taught according to the new model with critical thinking integration. At the beginning we tested the students. They showed practically the same low level of critical thinking. See Table 2. The first diagnostics of critical thinking. The most difficult for them was to reason and argue; only 3% in control group and 4% in experimental one succeeded the task. Then the whole academic year the control group study regional studies, work with information, analyze the regional issues not being taught to make it critically, they did not study the mechanisms and ways of informational circulation, manipulative nature of media. The experimental group was educated according to the set of rules or procedures to develop critical thinking purposefully and systematically. They studied both theoretical and practical media education and media production in their synthesis to be able to be active users of information and know how informational stream works. In the end of the year all students were diagnosed again. And here the results were much different. (See table 3. The final diagnostic of critical thinking). The students of the experimental group showed a high level of critical thinking in all criteria. They oriented in the

information far better than the students of the control group. They found the verified information of regional studies quicker than the control group, for sure selected, checked it and resources, comparing different positions,

points of view, author's motives, identified cherry-picking data. As for control group many of the students omitted this important step.

**Table 2.** The first diagnostics of critical thinking

Critical thinking					
Groups	Find and select the information about a definite region	Check and evaluate the information, resources, authors	Put topical questions, identify burning problems, offer the solutions	Reason and argue	Make own decisions and opinions
experimental	24%	15%	24%	4%	30%
control	24%	10%	26%	3%	33%

**Table 3.** The final diagnostics of critical thinking

Critical thinking					
Groups	Find and select the information about a definite region	Check and evaluate the information, resources, authors	Put topical questions, identify burning problems, offer the solutions	Reason and argue	Make own decisions and opinions
experimental	99%	96%	98%	97%	99%
control	68%	24%	71%	23%	64%

They believed and used the unchecked information, ignored relevant contradictory evidences. The experimental group wrote comments, texts, essays using received information, monitoring of information reasons and planning of activities thinking critically and objectively, avoiding nihilism. Some students of the control group got up some facts in arms, showing the lost of trust and belief in media. Generally, the level of the experimental group was higher to use comprehensive knowledge of the specialization region, they easily took into account economic-geographical, historical, political, legal, social, economic, demographic, linguistic, ethnic, cultural, religious features, evaluated the found information, its manipulative nature and consequences. It proves that the development of critical thinking promotes a regional analysis. A number of control group students failed to interpret independently and critically, they could not give justified and objective assessment of different scientific interpretations of regional developments, phenomena and concepts in national, interregional and global contexts. So, the experimental work shows that critical thinking is a core skill in a regional analysis to study Asian-Pacific region.

## 5 Conclusion

Having studied the research how to develop critical thinking, we can conclude that critical thinking is a core issue in Asia-Pacific region to deal with new challenges of informatization and new needs of modern society. They analyze critical thinking as a necessary skill to live

today. We can conclude that critical thinking should be developed purposely in academic disciplines including regional studies. It is a mistake to believe that critical thinking is hidden in all curricular as a latent aim and self-implying. Regional studies experts must learn to think critically and be active users of information. They are supposed to analyze broader and deeper to single out a region problem and offer an effective way to solve it. We have found several approaches available to help Asian-Pacific countries develop critical thinking. It is investigated in media education, media criticism and their synthesis. These scientific approaches study the concept, the characteristics, the mechanisms to develop critical thinking, the ways to use it in practice. The general provisions are that critical thinking is based on analytical activity, involving the search of information, the study of sources, the authors, their motives and goals, reasoning and making decisions. But if media education emphasizes critical thinking in order to protect individual from information, volume of the media, then journalism and media criticism study media production and critical thinking in order to influence the person, mechanisms of manipulative influence. A compromise option is the synthesis of these two approaches, which develops critical thinking based on the postulates of media education across active media activity. We have applied it to develop critical thinking of regional studies experts. The new model of professional competences with integrated critical thinking was effective due to the experimental work held to check it. It seems obvious that critical thinking promotes a complex regional analysis and improve the quality and effectiveness of educational process.

We believe that this study will promote the purposeful and successful development of students' critical thinking while they learn regional sciences.

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