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**A FEASIBILITY STUDY OF SEMI-CENTRALIZED COMPILATION OF TEXTBOOKS
IN KHUZESTAN PROVINCE CONSIDERING THE NATIONAL CURRICULUM AND
THE DOCUMENT OF FUNDAMENTAL TRANSFORMATION**

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ABSTRACT

This is a descriptive-survey study conducted on the most important component which is software. It is consisted of the study of three stages i.e. design, development and edition, and implementation of text books. The main motive for this study is the general policy of education system to decentralize education. The statistical population includes the secondary schools' educational, financial and research assistants and educational experts and group leaders of secondary education in Khuzestan ministry of education. The method of sampling is nonrandom. The size of the sample is determined to be 86 by the use of Morgan table. The data is collected by library and field study and the tools of data collection are researcher-made questionnaire and checklist. Questions on the software aspect of semi-centralized textbook compilation in Khuzestan province are arranged on the Likert scale. The validity of the questionnaire was confirmed by experts of the matter, professionals, managers and university professors. To determine the reliability of the questionnaire the Cronbach's alpha test was employed and the values of 0.829 and 0.904 were obtained. To analyze the data descriptive and inferential statistics such as standard deviation and other indices of distribution and also One-sample t-test and Friedman's test were used.

**Keywords: Centralization, decentralization, software, textbook design, textbook
development, textbook implementation**

1- INTRODUCTION

The national curriculum as a document which defines the general plan of the country's curriculum and educational framework in order to realize goals of education in Islamic Republic of Iran, gives another color to country's curriculum planning [Mousapour et al. 2011]. Also according to the national curriculum, a participatory approach focused on decentralization and inviting experts, managers and teachers to present their innovation and creativity will pave the road for transformation and improvement of the efficiency and effectiveness of education system so that the centralization and concentrations are reduces and scientific capacities and educational creativity are introduced into the cycle of education and most of governmental schools are freed from statistic monotony [Fanni et al. 2009]. The document of transformation resolution which includes the theoretical basis of national education is the foundation of all policies and programs and reforms in education system of IRI [document of transformation resolution, p1]. Considering the goals of the document of fundamental transformation and national curriculum, a new procedure in design, edition and production and implementation of curriculum and textbook and content of

education emerges and one of its most important issues is the level of authority in the field of national curriculum and the role of provincial organization of research and educational planning and the centralization and decentralization concerning this field. Reducing centralization and increasing the provincial and local authority and using the expertise of non-governmental scientific institutions adds richer thoughts and motivations to the workforce for compilation of textbooks and elevates the innovation, creativity and competition in our country's education system [Fanni et al. 2009].

Considering the goals of higher documents the necessity for decentralization for improvement of education system is quite apparent and one of its most important basics is to administer semi-centralized authority to provinces to compile and distribute textbooks with consideration of general policies of IRI education system [Fanni et al. 2009].

In this study, we seek the help of god and consult state's higher documents and regulations and use questionnaires and checklists to conduct a practical research on the feasibility of compilation and edition of textbooks in Khuzestan province.

2- STATEMENT OF PROBLEM

Development of national curriculum document is considered to be a great step

toward reform in education system. Based on the importance of the document, a new workflow and procedure in the process of design and development and production and implementation of curriculum and textbook content is emerged. An important issue in this movement is the level of authority in the field of national curriculum and the role of provincial organization of research and educational planning and the centralization and decentralization concerning this field. Reducing centralization and increasing the provincial and local authority and using the expertise of non-governmental scientific institutions adds richer thoughts and motivations to the workforce for compilation of textbooks and elevates the innovation, creativity and competition in our country's education system [Fanni et al. 2009].

Yet, the question is: what is the most suitable method for our country? What is obvious is that if decentralization of education is bound to decentralization of government's system and structure, such expectation is unachievable; however within that framework there are possibilities for flexibility of programs and performances [Salsabili, 2006]. Therefore, if we pay attention to the essence of the national curriculum we find out that definition of the general goals and the structure and principles of the lesson plans

are done by the national curriculum, yet the action and implementation of the curriculum must be decentralized since one of the features of the development of national curriculum is its flexibility towards various local and cultural conditions. Hence the optimal point of our country's education system is founded on the current conditions in a semi-centralized mode. In other words, concerning curriculum planning we must think nationally and act in a semi-centralized manner [Samiei & Kowsari Moghadam, 2008]. According to national curriculum and transformation resolution document, considering the cultural, economical, regional and geographical conditions especially in rural areas and nomadic tribes, up to 20 percent of the capacity of curriculum and educational media and materials can be determined by province capitals [resolution document 7/10]. However, the motive for this research is the necessity of fundamental reform in political and social life in alignment with education system; one of the pillars of such transformation considering the general policy of education system is the need for decentralization in all aspects of education. For that purpose, on of the most important issues in education, that is semi-centralized compilation of text books considering the

national curriculum and the document of fundamental transformation in Khuzestan province is studied [Ghasempour, 2008].

In this research, the capabilities of Khuzestan province in compilation and development of textbook in two aspects i.e. practicability and documentary study are assessed. The most important component of practicability aspect is the software which includes three sub-components of design, development and implementation of textbook. Capabilities of human resources involved in compilation of textbooks and other accommodations and equipment and printing and financial credits of the province are also studied. The aspect of documentary study, deals with high level documents such as national curriculum, document of fundamental transformation, management charter of the office of programming, constitutional law, political observations and philosophical ideologies governing education system to assess the issue of compilation of textbooks in province capital. The results of this study give us a fair understanding of Khuzestan province capabilities in this area.

3- RESEARCH HISTORY

In a study entitled “contemplating centralization, decentralization and return to centralization and their causes in Iran’s education system” Khandaghi & Deghani

(2010) explain that after a long period of centralization and after experimenting with decentralization since the 90s, the governments’ tendency toward centralized and decentralized systems have been fluctuating.

Fanni et al. (2008) in a study titled “final report of the committee for identification of authorities and level of centralization and decentralization in different layers of ministry of education” reached the following conclusions:

Concerning the design, they concluded that the subjects are more inclined toward semi-centralized approach to curriculum design and its positive results were confirmed.

Concerning curriculum edition and development they concluded that the subjects are more inclined toward semi-centralized approach to curriculum development and planning and its positive results were confirmed.

Concerning curriculum implementation, they concluded that the subjects are more inclined toward semi-centralized approach to curriculum implementation and its positive results were confirmed.

Ranjbar (1998) in a study titled “comparison of the views of executive and staff managers of education on centralization and decentralization” indicated that the tendency

toward decentralization is not a minor and momentary decision at the level of education management. Decentralization must be discussed in general social environment and through education of future generation the background for decentralization must be set. Also the change in view and practical inclination toward decentralization should not be mere instructional and in a top-down manner; to prepare the organizational environment and culture for this issue, mere work experience, official or in-service training and changing managers are not enough.

Shobeiri (1998) in a research titled “studying the view of education managers on centralization and decentralization in Khorasan province” concluded that:

There is a significant relation between longer employment record and higher management experience and the view on decentralization.

Between the average scores of view on centralization and decentralization among the managers with degree of education science and with higher in-service training and managers with other educational degrees and less in-service training, there is no significant relation.

Between the average scores of view on centralization and decentralization among the managers in larger organizations and

managers in smaller organizations, there is no significant relation.

In a research titled “decentralization, a movement from center to side in education” Karlsen (1999) defines decentralization as a movement from center to the sides which gradually reduces concentration and increases decentralization. It of course does not mean absolute decentralization. Therefore by accepting the relativity of the concept of centralization and decentralization, the process of decentralization finds different degrees. On that basis, the concepts of absolute centralization and decentralizations are mere abstractions and in real life there are only degrees of centralization and decentralization. The extents of decentralization may vary from one country to another. In educational institutions decentralization may be limited to educational content and financial management.

Hansen (1998) in a research entitled “the best works of decentralization in education” defines three types of decentralization:

- 1- Transfer of tasks, not power: in this type of decentralization, the mere carrying of tasks is transferred and the right to decide is reserved for the central government.

2- Representation: it is a type of decentralization identified with transfer of the power of decision-making from higher levels to lower levels; of course it includes the kind of power which can be overlooked by the center (the issues are controlled by the center)

3- Delegation of authority: transfer of the power of decision making to a single self-governing unit which can act independently and without authorization from the center. In fact the right to decide is given to a lower institutional unit which can act independently and without getting permission from government or central ministry.

Levy (1991) in his book titled “special activities in school-based curriculum planning” explains that in school-based curriculum planning the needs and requests of the school concerning the curriculum must be taken into consideration. The needs and requests of the school include issues such as providing a situation for redistribution of power and responsibility and distribution of control among local and central authorities. Levy identifies the official sources affecting school-based curriculum as follows: authorities, local education authorities, school community, school manager, teacher,

parents, students, evaluation system, and educational content.

4- RESEARCH GOALS AND QUESTIONS:

4-1- Research goals:

Feasibility of compilation of textbooks for curriculum planning in province capitals considering the national curriculum

Specific goals:

Feasibility study of the software facilities for compilation of textbook and educational content for secondary education

4-2- Research questions:

1- Does Khuzestan province have the capability required for secondary education textbook design?

2- Does Khuzestan province have the capability required for secondary education textbook development and edition?

3- Does Khuzestan province have the capability required for secondary education textbook implementation and evaluation?

4- Do the capabilities of Khuzestan province concerning different components of secondary school textbook design, development, and implementation have the same priority?

-Software: assessment of all qualitative capacities for textbook compilation in four aspects of design, development and edition, implementation and evaluation.

-Design: defining a main framework and general purposes and principles of textbook.

-Development and Edition: defining the content and production of educational materials for the textbooks.

-Implementation and evaluation: teaching the compiled textbooks to students and then, criticizing and analysis of points of strength and weakness. It is necessary to mention that at first, this process is carried out in a few selected cities or provinces and then implemented nationwide.

5-RESEARCH METHODOLOGY:

Considering the type of goals, this research falls into the category of field studies and descriptive-survey method has been used. . The statistical population includes the secondary schools' educational, financial and research assistants and educational experts and group leaders of secondary education in Khuzestan ministry of education. The method of sampling is nonrandom. The size of the sample is determined to be 86 by the use of Morgan table. The data is collected by library and field study and the tools of data collection are researcher-made questionnaire and checklist. Questions on the software aspect of semi-centralized textbook compilation in Khuzestan province are arranged on the Likert scale. The validity of the questionnaire was confirmed by experts

of the matter, professionals, managers and university professors. To determine the reliability of the questionnaire the Cronbach's alpha test was employed and the values of 0.829 and 0.904 were obtained, hence the reliability of the questionnaire is confirmed. To analyze the data descriptive and inferential statistics such as standard deviation and other indices of distribution and also One-sample t-test and Friedman's test were used.

6- RESEARCH FINDINGS

6-1- Demographic characteristics of the subjects

According to the managerial records of the subjects, the experts had the highest frequency (36 persons) with 40 percent, and staff members had the lowest frequency (24 persons) with 26.7 percent. From the employment record perspective, the highest frequency went to individuals with 21-25 years of employment with 28.9% (26 individuals), and individuals with 6-10 years of work experience had the lowest frequency of about 4.4 percent (4 individuals).

Considering the education of the subjects, the highest frequency went to individuals with M.A or higher educational degree with 61% (55 individuals), and individuals with B.A degree had the lowest frequency of about 38.9 percent (35 individuals).

As far as the subjects' workplace is concerned, the frequency of the sample members in all six districts is equally distributed so that biased scoring for certain districts could not occur.

6-2- study and examination of research hypotheses

Hypothesis 1:

$$\begin{cases} H_0 : \mu \leq 3 \\ H_1 : \mu > 3 \end{cases}$$

Table 1: one-sample t-test for design aspect

Component	N	Mean	Std. deviation	Standard error
Design	90	27.7111	6.66240	0.70228

Component	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean difference	95% confidence interval of difference	
					Lower	Upper
Design	35.187	89	0.000	24.71111	23.3157	26.1065

One-sample t-test is used for the analysis of hypothesis 1.

Since the P-value (level of significance) is smaller than $\alpha=0.05$, therefor the significant difference between the obtained mean and the Likert scale mean (3) is apparent. In that case we must refer to the sign of the T statistic; and since the T statistic is positive therefor the results lean toward the larger side of the Likert scale; that means the obtained result is greater than Likert scale mean (3). Since the obtained results are in H_1 zone therefor with 95% confidence it can be said that the H_1 hypothesis is accepted. This means according to the subjects of the study,

H_0 : according to the subjects of the study, Khuzestan province is not capable of secondary education textbook design.

H_1 : according to the subjects of the study, Khuzestan province is capable of secondary education textbook design.

The significance of the hypotheses is explained as bellow:

Khuzestan province is capable of secondary education textbook design.

Hypothesis 2:

H_0 : according to the subjects of the study, Khuzestan province is not capable of secondary education textbook development and edition.

H_1 : according to the subjects of the study, Khuzestan province is capable of secondary education textbook development and edition

The significance of the hypotheses is explained as bellow:

$$\begin{cases} H_0 : \mu \leq 3 \\ H_1 : \mu > 3 \end{cases}$$

Table 2: one-sample t-test for development and edition aspect

Component	N	Mean	Std. deviation	Standard error
Development	90	36.6444	9.37042	0.98773

Component	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean difference	95% confidence interval of difference	
					Lower	Upper
Development	34.062	89	0.000	3.64444	31.6818	35.6070

One-sample t-test is used for the analysis of hypothesis 2.

Since the P-value (level of significance) is smaller than $\alpha=0.05$, therefor the significant difference between the obtained mean and the Likert scale mean (3) is apparent. In that case we must refer to the sign of the T statistic; and since the T statistic is positive therefor the results lean toward the larger side of the Likert scale; that means the obtained result is greater than Likert scale mean (3). Since the obtained results are in H_1 zone therefor with 95% confidence it can be said that the H_2 hypothesis is accepted. This

$$\begin{cases} H_0 : \mu \leq 3 \\ H_1 : \mu > 3 \end{cases}$$

according to the subjects of the study, Khuzestan province is capable of secondary education textbook development and edition.

Hypothesis 3:

H_0 : according to the subjects of the study, Khuzestan province is not capable of secondary education textbook implementation and evaluation.

H_1 : according to the subjects of the study, Khuzestan province is capable of secondary education textbook implementation and evaluation.

The significance of the hypotheses is explained as bellow:

Table 3: one-sample t-test for implementation and evaluation aspect

Component	N	Mean	Std. deviation	Standard error
implementation and evaluation	90	59.7333	13.05632	1.37626

Component	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean difference	95% confidence interval of difference	
					Lower	Upper
implementation and evaluation	41.2231	89	0.000	56.73333	53.9987	59.4679

One-sample t-test is used for the analysis of hypothesis 3.

Since the P-value (level of significance) is smaller than $\alpha=0.05$, therefor the significant difference between the obtained mean and

the Likert scale mean (3) is apparent. In that case we must refer to the sign of the T statistic; and since the T statistic is positive therefor the results lean toward the larger side of the Likert scale; that means the

obtained result is greater than Likert scale mean (3). Since the obtained results are in H₁ zone therefor with 95% confidence it can be said that the H₃ hypothesis is accepted. This according to the subjects of the study, Khuzestan province is capable of secondary education textbook implementation and evaluation.

Sub-hypothesis 4:

H₀: according to the subjects of the study the components of design, development and implementation of secondary school

textbooks in Khuzestan province are of the same priority.

H₁: according to the subjects of the study at least two of the components of design, development and implementation of secondary school textbooks in Khuzestan province are not of the same priority.

In order to prioritize the components of the software aspect in Khuzestan province based on the obtained answers to each factor, the Friedman’s test has been used.

Table 4: prioritization of the components in electronic municipality conceptual framework questionnaire based on Friedman’s test

Average score	Component
1.05	Design
1.95	Development
3.00	Implementation and evaluation

As demonstrated in table 4, the component of design has the highest score and priority in Khuzestan province and components of development and implementation and evaluation are in the second and third place respectively.

Also based on the SPSS software output as demonstrated in table 5, it can be concluded that since the level of significance is less than 5 percent, therefore H₀ is rejected and the claim of same prioritization is not accepted.

Table 5: Friedman’s test for sub hypothesis 4:

90	Number
174.850	Chi square
2	Degree of freedom
0.000	Level of significance

7- CONCLUSION:

Hypothesis 1:

The results of the tests indicate that this hypothesis is accepted. That means with 95% confidence it can be said that according to most of experts, Khuzestan province has the capability to design secondary education textbooks. The results of the test show the

effectiveness and capacity of the component of design in compilation of textbooks in Khuzestan province. In addition to indication of the important role of this aspect in compilation of textbooks, confirmation of this hypothesis enables us to study the acceptance or rejection of the factors that are sub-components of this aspect. Also the

study of the existing conditions in Khuzestan province indicates that this component is the most prioritized the highest ranking among other components of the software aspect in Khuzestan province.

Hypothesis 2

The results of the tests indicate that this hypothesis is accepted. That means with 95% confidence it can be said that according to most of experts, Khuzestan province has the capability to secondary education textbooks implementation and evaluation .The results of the test show the effectiveness and capacity of the component of *development* in compilation of textbooks in Khuzestan province. In addition to indication of the important role of this aspect in compilation of textbooks, confirmation of this hypothesis enables us to study the acceptance or rejection of the factors that are sub-components of this aspect. Also the study of the existing conditions in Khuzestan province indicates that this component is the (2nd level) the highest ranking among other components of the software aspect in Khuzestan province

Hypothesis 3

The results of the tests indicate that this hypothesis is accepted. That means with 95% confidence it can be said that according to most of experts, Khuzestan province has the

capability to secondary education textbooks development and edition.The results of the test show the effectiveness and capacity of the component of *development* in compilation of textbooks in Khuzestan province. In addition to indication of the important role of this aspect in compilation of textbooks, confirmation of this hypothesis enables us to study the acceptance or rejection of the factors that are sub-components of this aspect. Also the study of the existing conditions in Khuzestan province indicates that this component is the (3nd level) the highest ranking among other components of the software aspect in Khuzestan province

Comparative studies (meta-analysis) and investigating the opinions of the experts on the current situation of curriculum planning indicate that in order to use the scientific capacities of schools and districts and to create the motivation for participation of professional and present opportunities for emergence of innovation and creativity, movement toward reducing the centralization of national curriculum in all stages and with consideration of national expediency is both desirable and reasonable.

Based on a summary of the present study, the approach toward decentralization with

consideration of the following three principles is advised:

1- The principle of centralization in basics and fundamentals 2- the principle of the decentralization proportionate to competence and beneficence 3- the principle of gradual process of decentralization

It must be noted that considering the findings about development and implementation, designation of learning fields and preparation of curriculum guides must be flexible enough to accommodate required backgrounds for participation in development of diverse educational materials; otherwise the production of diverse educational material and implementation of multi-compilation policies would become impossible. Considering the results of the study it is suggested that the local part of the curriculum planning is delegated to the provinces, the central staff would define the duties of the province for realization of this part. If the required criteria are met, through coordination with the central staff, provinces can delegate the curriculum planning to local districts and schools.

Results of high level documentary studies

Investigation of the constitutional law, education regulations and instructions, and Iran's education historical review indicate that the national curriculum can move away

from the centralized state and approach decentralization.

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