PROBLEMS OF END USERS ASSOCIATED WITH CURRICULUM CHANGE

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The purpose of this study is to share, publicise and to identify the problems of end users associated with curriculum change at Federal Government secondary school. The study is descriptive in nature. For data collection two separate questionnaires, i.e., one for teachers and another for students were developed on a 5 point Likert scale. The reliability and validity of the instruments were determined by means of Cronbach alpha and this was found to be reliable for teachers' (0.72) and for the students' questionnaire (0.75). The second method to obtain reliability was through experts' opinion. The sample of the study was randomly selected both for teachers and students of 9th and 10th grade from the Federal schools of Bahawalpur, Multan and Lahore region and this consisted of 720 respondents, of whom 360 were teachers and 360 were students. The data was analysed by two ways, i.e., first mean score and measure of dispersion (standard deviation) were calculated and then an independent sample t-test was applied to assess the difference in views between the two groups.

KEYWORDS: Federal Schools, Curriculum Changes

INTRODUCTION

Curriculum is one of the effective and influential tools used to bring change in the society. Moreover, this is the foundation of the teaching-learning process in schools, colleges, and universities or in any other training organization (McNeil, 2006). A conscious effort of learning is impossible without considering the importance of curriculum. Keeping in view the significance of curriculum, it is an area of vital importance for rulers, planners, administrators

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and teachers. If society experiences any change, internally or externally, it becomes evident to modify the curriculum because it reflects society and both have to move side by side. The other reason to address the curriculum change is to make it at par with other parts of the world so that national degree or diploma may be accredited for those who want to study in other countries as well. To consider such objectives, educationist takes into account certain steps like revision of educational objectives, modification in content through text books, introducing teaching training, and provision of new techniques for evaluation and development of new instructional plans become a part of this change. Without curriculum change, it will be difficult for a society to achieve its future goals. A society does not change until the individuals within it change (Hall & Hord, 2011) and this can be done through curriculum. To bring changes in individual, curriculum play its role and teachers role become vital in reshaping youth. Thus, it can be inferred that curriculum reshapes the future of a society by having insight from history and by careful consideration about what other nations are doing. However all the things of the past may not suit to a society. It is essential that one should select only those subjects and activities, which are required by the present generation and have utilization in future. For an ideal change, objectives, contents, the methods of teaching and the evaluation procedure should be modified according to the demand of society. Thus to create a meaningful learning environment, a good understanding of curriculum change along with a clear comprehension of what to change as well as the implementation strategies of new curriculum is necessary i.e. one should focus on the process and the output aspect of this change. The change is not so simple because during and after curriculum change the users face enormous problems. The glimpses of few problems are like shortage of books that creates trouble in covering syllabus, improper teacher training, and examination policy that ultimately affects students' performance both in classroom and in examination. In beginning a confusion about the changed curriculum remains for certain duration due to repeated and doubted information about what is changing, anonymity of publisher, whether teachers require training or teacher guide book will serve the purpose, what will be the new content and impact of that curriculum on the user are interesting points to investigate. This uncertain confusion sometimes may spoil all the benefits of change. The present study is about problems associated with curriculum change by the end user at federal institutions. The content related workshops, selection of personnel for refresher course, the shortage of subject specialist etc. are questions during the process of curriculum change. The process of curriculum change is not linear rather it is a complex and perplexing process because the change includes persons from different schools of thought and those who implement it, often remain on the other side of the river. If we focus only on the

federal examination, they consider that curriculum change means to improve the communication skills especially the foreign language (English) and it is less useable for the teachers of other subjects. So, there is an immense need to consider user feedback and problems associated with curriculum change in an organized manner.

BACKGROUND OF THE STUDY

A perfect curriculum for all ages is hard to find. Therefore it changes according to needs and demand of the society. An appropriate curriculum may cover the future need of the youth. This is the era of art and skill and one of the main reasons for curriculum change may be rapid growth in the field of science and technology particularly in information technology because it is education of science and technology that determines the level of prosperity, welfare and safety of the people. Before advancing the discussion of curriculum change and the problem associated with the curriculum change, it is worth mentioning to address what is meant by curriculum.

The term "curriculum" can be described in different ways and it is difficult to find unanimous definition. That is why certain experts use the term in limited context as "curriculum as a runway", a course on which one-can run to reach the goal (Robert, 1976). According to this definition curriculum consists of limited number of subjects taught in the school and students need to gain expertise in the respective subjects when compared with his/her fellow students. This is a narrow point of view. Because life is not only restricted to subjects, but society and environment also have influence on individual life. Likewise, in broad sense, curriculum is used as "all the learning experiences, which are planned and guided by the school, whether it is carried out in groups or individually, inside or outside the school" (Kerr, 1968, p.5). This explanation shows that curriculum is meant of all the school activities planned and unplanned either in the classroom, library, laboratory, on a field trip, or in a playground etc. So, according to some experts "curriculum" is prescriptive and descriptive in nature. The concept of prescriptive explains what "ought" to happen, a future program, or some kind of expert opinion about what need to take place in the course of study (Ellis, 2004, p.4). According to this definition curriculum is a plan for providing sets of learning opportunities for persons to be educated. Whereas the descriptive definition of curriculum focus on "what curriculum is"? This shows the experiences that children have under the supervision of teachers. The perspective aspect mainly focuses on idealism, whereas the descriptive lays emphasis on realism or implemented curriculum. However, there are certain activities that are planned, for example to motivate students to read, but due to certain experience, they may dislike reading.

Hence, both the experiences i.e. liking and disliking reading are counted as part of curriculum.

Culture in every society is an expression of what people think, feel, believe and do? To understand the structure and function of curriculum, it is necessary to understand "culture" and the essential "elements of culture". According to Smith, Stanley and Shores (1957), "Culture consists of characteristics, habits, ideals, attitudes, beliefs and ways of thinking of particular group of people". So culture is an appearance of society which man himself has made. It varies from society to society. While the elements of culture may be put into three categories: universals, specialities and alternatives (Bukhari, 2002). Universals are those elements of curriculum that are universally accepted by the adult members of the society. The universals comprise those values, beliefs and custom that are generally held by the entire adult population. For example religion, use of same language called national language and same style of clothes etc. Similarly specialities are those elements of a culture that are found among only a portion of population. It is associated with vocational group or social classes or both. Special education is based upon the interest of either one or both. For example if the purpose is to make the political leader then special subject like politics will be taught to the learner. Hence it will be designed to train the individual for particular social or vocational purposes i.e. doctors, engineer, politician and businessman. Thus regarding these vocational specialities curriculum is designed. Equally alternatives represent those elements of culture, which the individuals exercise in option or in the choice e.g. creativity, new ways of teaching and use of technology. When these alternatives are entered from one culture to another culture, they have to compete the universal of those elements and if they are strong enough they become the part of that society otherwise they lose their value with time. Changing design of jewellery is an example of weak alternatives and the use of computer for calligraphy and writing manuscripts is a strong alternative. Consequently, alternatives from other culture changed into universals. These interventions change the fabric of the culture and ultimately curriculum of that society changes on the basis of, needs, culture and values. Therefore, curriculum planners consider society as well as the events and changes happening in the world. Besides society, curriculum also plays a vital role in shaping the attitudes of the people.

OBJECTIVE OF THE STUDY

The Major objective of the study is to describe the problems of users (head teachers, teachers, students and parents) associated with curriculum change at secondary level.

Hypotheses

The following hypotheses have been framed for the study:

H0:   End user faces same nature of problems.

H1:   End user faces different nature of problems.

Research Methodology

The present study deals with the problems of end users associated with curriculum change at Federal Government secondary schools. Since, the study is related to the present situation therefore, descriptive method of research was considered appropriate. Among various techniques of descriptive research, questionnaire was used for students and teachers data collection. The five point Likert scale consisting of 13 items was used to collect the quantitative data. It was a self-prepared questionnaire and overall reliability of the instrument was determined by Cronbach alpha using SPSS. This was found reliable as the value for teachers' questionnaire and for students' questionnaire was found to be 0.72 and 0.75 respectively.

Sample

The target population of this study were the students of grade 9th and 10th and the male and female teachers of Federal Government secondary schools. The sample was selected randomly consisting of 360 students and teachers from 18 Federal schools of central and southern Punjab. Among them, 20 students were from grade 9th and 10th and 20 teachers from each federal Secondary School were selected randomly by giving representation to all the schools. Comprehensive guidance was prepared for the respondents. The data of 714 teachers and students was collected using triangulation/ mix method approach. Data was analysed quantitatively as well as qualitatively. The qualitative data was obtained by using open-ended questionnaire. Later, both the methods were converged to a single point.

Results Of The Study

The results of the study and testing of hypotheses have been discussed in this section.

Table 1

Lack of Teachers Training.

Statement	Group	Mean	SD	t	Sig
Problems in implementing new curriculum due to lack of teachers training.	Teachers	3.44	1.231	2.48	0.013
	Students	3.66	1.143		

Teachers = 354   Students = 360

Table 1 illustrates that majority of respondents strongly agreed with the statement that problems persist in implementing new curriculum due to lack of teachers training. The mean score also support the statement. The mean score of students is greater than the mean score of teachers because students directly observe the performance of the teachers. The t-value depicts significant difference as p <0.05 between two groups. On this basis, it can be concluded that there is a significant difference between teachers and students response. Thus alternative hypothesis is accepted that teachers and students face different nature of problems in tabulated statement.

Table 2

Shortage of Books.

Statement	Group	Mean	SD	t	Sig
Shortage of books creates problem in covering syllabus.	Teachers	3.79	1.168	4.72	0.000
	Students	4.20	1.127		

Teachers=354   Students=360

Table 2 demonstrates that majority of teachers and students strongly agreed with the statement that shortage of books creates problem in covering syllabus. The mean score also supported the statement. The mean score of students is greater than the mean score of teachers because they directly suffer due to the shortage of books. The high value indicates that difference is highly significant i.e. p<0.01 between two groups. On this basis, it can be concluded that there is a significant difference between teachers and student views. Thus alternative hypothesis is accepted that teachers and students face different nature of problems in tabulated statement.

Table 3

Information About Books.

Statement	Group	Mean	SD	t	Sig
Less information about books after curriculum change due to repeated information from directorate.	Teachers	3.53	1.164	2.70	0.007
	Students	3.77	1.164		

Teachers=354   Students=360

Results in Table 3 show that majority of teachers and students strongly agreed with the statements that teachers are less informed about new books after curriculum change due to repeated information from directorate. The mean score also supported the statements. The mean score of students is greater than the mean score of teachers because they might have greater concern with the textbooks. The high value indicates that difference is highly significant i.e. $p < 0.05$ between two groups. On this basis, it can be concluded that there is a significant difference between teachers and students views. Thus alternative hypothesis is accepted that teachers and students face different nature of problems in tabulated statement.

Table 4

Students' Performance.

Statement	Group	Mean	SD	t	Sig
Unavailability of books affects students' performance in the examination.	Teachers	3.72	1.204	2.08	0.037
	Students	3.91	1.204		

Teachers=354 Students=360

Table 4 indicates that majority of teachers and students strongly agreed with the statement that unavailability of books affects students' performance in the examination. The mean score also supported the statement. It can be seen that the mean score of students is greater than the mean score of teachers because unavailability of proper reading material affect their performance. The high value indicates that difference is highly significant i.e. $p < 0.05$ between the two groups. On this basis, it can be concluded that there is a significant difference in view between teachers and student. Thus alternative hypothesis is accepted in above statement.

Table 5

Problems Due to Changed Medium of Instruction.

Statement	Group	Mean	SD	t	Sig
Problems due to changed medium of instruction from Urdu to English.	Teachers	3.45	1.236	2.80	0.005
	Students	3.17	1.417		

Teachers=354 Students=360

Table 5 reflects that majority of teachers and students agreed with the statements that problems exist due to varied medium of instruction i.e. from Urdu to English. The mean score also supported the statements. The mean score of teachers is greater than the mean score of students because teachers remain confused due to non-availability of proper information regarding change in the medium of instruction. The table value indicates that difference

is highly significant i.e. p<0.05 between the two groups. On this basis, it can be concluded that there is a significant difference between teachers and student. Thus alternative hypothesis is accepted in above statement.

Table 6
Concepts of Science.

Statement	Group	Mean	SD	t	Sig
Certain concepts of science subjects at secondary level are new and broader. Which create difficulty for teachers?	Teachers	3.37	1.207	2.75	0.006
	Students	3.11	1.325		

Teachers=354   Students=360

Table 6 reveals that majority of teachers and students agreed with the statements that certain concepts of science subjects at secondary level are new and broader, which create difficulty for teachers. The mean score also supported the statements. The mean score of teachers is greater than the mean score of students because teacher can understand the scope of the material and the level of difficulty. The high value of significance level indicates that difference is highly significant i.e. p<0.05 between the two groups. On this basis, it can be concluded that there is a significant difference between teachers and student. Thus alternative hypothesis is accepted in above statement.

Table 7
Global Changes.

Statement	Group	Mean	SD	t	Sig
Global changes are included for updating the curriculum.	Teachers	3.51	1.099	4.93	0.000
	Students	3.93	1.126		

Teachers=354   Students=360

Results in Table 7 indicate that majority of teachers and students strongly agreed with the statements that global changes are included for updating the curriculum. The mean score also supported the statements. The mean score of students is greater than the mean score of teachers and this may be due to students' access towards the technology and ample time for surfing the material through Internet. The table value indicates that difference is highly significant i.e. p<0.05 between two groups. Thus alternative hypothesis is accepted that teachers and students face different nature of problems in tabulated statement.

Table 8

Cultural Values.

Statement	Group	Mean	S.D	t	Sig
Curriculum changes are derived from cultural values.	Teachers	3.13	1.136	0.284	0.777
	Students	3.15	1.276		

Teachers=354   Students=360

Table 8 depicts that majority of teachers and students did not agree with the statement that Curriculum changes are derived from cultural values. The mean score also supported the statements. The mean difference is not significant as p >0.05. Thus it can be concluded that there is no significant difference between teachers and students views. Thus null hypothesis is accepted that teachers and students face same nature of problems in tabulated statement.

Table 9

Formulation by the Policy Makers.

Statement	Group	Mean	SD	t	Sig
Curriculum is formulated by the policy makers only.	Teachers	3.99	0.95	4.88	0.000
	Students	3.56	1.32		

Teachers=354   Students=360

Data in Table 9 indicates that majority of teachers and students strongly agreed with the statements that the policy makers formulate the curriculum only. The mean score also supported the statement. The mean score of teachers is greater than the mean score of students because teachers know much about the practices of curriculum formation and its implementation. The table value shows that difference is highly significant i.e. $p < 0.05$ between the two groups. On this basis, it can be concluded that there is a significant difference between teachers and student. Thus alternative hypothesis is accepted in the above statement.

Table 10

Opinions of Teachers and Students.

Statement	Group	Mean	SD	t	Sig
Federal Directorate of Education considers opinions of teachers and students on curriculum change.	Teachers	2.18	1.267	0.722	0.471
	Students	2.25	1.394		

Teachers=354   Students=360

Table 10 demonstrates that majority of teachers and students strongly disagreed with the statements that Federal Directorate of Education considers

opinions of teachers and students on curriculum change. The mean score also did not support the statement. The difference is also not significant as p >0.05. Thus it can be concluded that there is no significant difference between teachers and students views. Thus null hypothesis is accepted.

Table 11

Shortage of Teachers Makes the Teaching Learning Process Difficult.

Statement	Group	Mean	SD	t	Sig
Shortage of teachers makes the teaching learning process difficult for students to learn the changed curriculum.	Teachers	3.96	1.167	0.87	0.381
	Students	3.89	1.183		

Teachers=354   Students=360

Table 11 shows that majority of teachers and students did not agree with the statement that shortage of teachers makes the teaching learning process difficult for students to learn the changed curriculum. The difference is also not significant as p>0.05. Thus it can be concluded that there is no significant difference between teachers and students views. Thus null hypothesis is accepted.

Table 12

Contents of New Books.

Statement	Group	Mean	SD	t	Sig
Contents of new books are difficult and more conceptual as compared to old books.	Teachers	3.77	1.145	3.17	0.002
	Students	3.48	1.374		

Teachers=354   Students=360

Data in Table 12 indicates that majority of teachers and students strongly agreed with the statement that contents of new books are difficult and more conceptual as compared to old books. The mean score of teachers is greater than the mean score of students because the teachers have to make the first contact with the content and they know the level of difficulty. The high value of significance level indicates that difference is highly significant i.e. p<0.05 between two groups. On this basis, it can be concluded that there is a significant difference between teachers and students. Thus alternative hypothesis is accepted in above statements.

Table 13
Changes Bring Confusion.

Statement	Group	Mean	SD	t	Sig
Too many changes bring confusion to the teachers	Teachers	3.80	1.123	1.56	0.119
	Students	3.93	1.215		

Teachers=354   Students=360

Results in Table 13 reveal that majority of teachers and students did not agree with the statements that too many changes bring confusion to the teachers.   The mean score also supported the statement. The difference is not significant as p>0.05. Thus it can be concluded that there is no significant difference between teachers and students. Thus null hypothesis is accepted.

PROBLEMS ASSOCIATED WITH CURRICULUM CHANGE

During qualitative analysis, the following problems associated with curriculum change at secondary level were also observed and mentioned by the respondents during data collection. The issues are mention below:

Bilingual Instructions

Bi-lingual medium of instructions in schools affects the teaching learning process. For example, now days, both English and Urdu medium of instruction are being used in federal schools. After summer vacation in 2010, Federal Government Directorate had issued an order to teach social studies to the students in English instead of Urdu. On this notification both the teachers and students were upset due to time management for covering the syllabus and sudden change in the medium of instruction for the subject of social studies created confusion among students and teachers. Now at middle level in federal school the medium of instruction for social studies is English. But at secondary level students can choose Urdu and English medium for social studies. Hence for a teacher it is difficult to manage both mediums. But teachers try to manage the medium and under stressful conditions teachers fail to create meaningful learning environment in class.

Unavailability of Textbooks

A textbook is a "powerful media" for teaching and learning (Tanner, 1988, p. 141). It is a vital element of instruction and has many purposes. For example it is used to run the educational programme. Moreover it is a necessary tool for regular students and guide for the good teachers (Govt. of Pakistan, 2000, p.23). A textbook is one of the most important sources of content (Farooq, 1993). For the proper facilitation of curriculum change textbooks have been part and parcel of the education system. The textbook is the main accessible learning

material in schools. The teachers prepare their students according to external examination system by using textbooks. Similarly the most obvious way of creating the awareness among people about any change is the textbook. So books are good printing materials to implement the change that provide a bright future to a learner (Yates & Grumet, 2011). The unavailability of text books would derail the system of education completely.

Provision of Text Book

For federal institutions the timely provision of changed textbooks remains a problem. This creates difficulty for the teachers, parents and students. For example the federal board had issued a notification for a change in Chemistry Book at secondary level before the start of the New Year in February 2011. But after passing a year, textbooks were not available in the market for 9th class. Similarly in 2013, textbook of chemistry for 10th class were not available in the market due to election campaign. Books were available in market after two months. As a result, students faced many problems. In addition to this, teachers' guide was difficult to find in the market. So the provision of textbook and teachers' guide is necessary.

Lack of Trained Teaching Staff

Teaching is a professional activity and it requires trained professional. But in Pakistan, schools have lack of trained teaching staff (Kahlid, 1998). It is because no special training is given to teachers after introducing new curriculum. Computer, Mathematics and Science subjects cannot be taught without training and knowledge. This creates more problems for the users at the time of curriculum change. Now latest concepts in science are included in the syllabus such as significant figure, dengue fever and computer education etc. This requires trained teaching staff. In this situation the teachers try to cover the syllabus and just fulfil their duties. This situation has increased more stress on the teachers. As a result, teachers face many problems during teaching learning process (Saleem, 2002).

Multiple Textbooks Board

In federal school text books of national book foundation and Punjab textbook board are used. It also creates setback for the users. Because some books like Physics, Biology and Mathematics are of Punjab textbook board, while Chemistry and Computers manuscripts are of national book foundation. To teach English at middle level Punjab textbooks were used. But at secondary level federal textbook is used. As a result, users face difficulties regarding selection of textbook. This is due to lack of co-ordination and requires teachers training before curriculum change and no feedback is taken from the end user

on curriculum change.

Lack of Professional Development

Professional development of teachers is accomplished on the assumption that it improves teacher capabilities (Moyle, 2007). For example, to add educational technologies in their instruction, will in turn improve student-learning outcomes. According to Olivia (2009), "professional development is a program of activities planned and carried out to support the personnel and professional growth of teachers". It is known fact that teachers are the backbone of education system in any country. But country is facing the deficiency of subject specialist especially in science and mathematics at secondary level (Siddique, 1990). On the other hand changes in science subjects are on continuous basis around the world. So the need of teachers' professional development has been accepted for the improvement of education before curriculum change. Therefore the expectation for excellence in teacher education is highly demanding. So teachers are needed to be continuously abreast with latest theories, research and new knowledge with training facilities. In Pakistan teacher education is based on traditional method and it requires continuous update so that the practical aspect can be enhanced. The link between the theory and practice cannot be denied. Thus the curriculum of teacher education requires improvement so that the expectations can be met.

Communication Gap

Communication is the backbone of any system or organization. It connects the various parts of a system and develops sound coordination (Borman & Kimball, 2005). Co-ordination helps at the time of curriculum change. Most of the time teachers remain uninformed about the new policies and plans framed at the governmental level due to miscommunication. Thus lack of communication between the policy makers and school staff deprives the teachers of first hand information. Teachers remain unaware of existing policies for many years (Zafar, 2003). All this affects the quality of teaching and learning in schools. So at the time of curriculum change, communication with head teachers is very necessary and this enables them to inform new changes in curriculum and they may able to convey it to staff member. So it is necessary to conduct regular meetings with different school to share ideas and problems before curriculum change.

DISCUSSION OF RESULTS

There was a consensus that teachers encounter problems in implementing new curriculum due to lack of teacher training. The reason is that expectation for excellence in teacher education cannot be realized without overcoming the

difficulties. In addition to this, teachers are needed to be continuously abreast with the latest theories, research and new knowledge with training facilities. This is because some topics are new and broader and these demand explanation and clarification of concepts in detail etc. There was also a strong message from the respondent's attitude that shortage of books creates problems in covering the syllabus, especially when the textbook is the only accessible learning material in schools. The majority of respondents were of the view that they are less informed about new books after the curriculum change due to repeated information from directorate. The information about new course fluctuates rapidly. As a result of this ambiguous situation teachers are less informed about changes in curriculum. There is a consensus that global and cultural changes should be included for updating the curriculum. The government in power provides objectives to reform the curriculum. There was also a strong view that respondents feel problem in implementing curriculum when the medium of instruction was being changed from Urdu to English for certain subjects which shows that curriculum should be in national language to avoid any issue and teacher voice should be heard. The respondents disagreed with the statements that the Federal Directorate of Education considers the opinions of teachers and students on curriculum change and most of the time teachers remain uninformed about the new policies. This shows a wider gap between policy makers and implementation agencies. Respondents also agreed with the statement that shortage of trained teachers makes teaching learning process difficult for students because teachers are the backbone of any education system and in case of shortage of staff extra work load falls on shoulder of existing teachers. The other reason to induct the specialized teacher is that contents of new books are difficult and more conceptual as compared to old books. For example, changed books of physics and mathematics brought confusion to the teachers and students due to improper training and lack of comprehension about new curriculum. That is the reason that majority of respondents were reluctant to accept changes because it brings confusion to the educators.

CONCLUSIONS

Changing the curriculum is considered as a powerful activity in bringing about desirable changes in the society so the shortage and unavailability of books creates problem in covering syllabus and it affects their performance in the examination. Global changes are being included for updating the curriculum and without providing training to teachers, it will be hard to realize. In addition to this teachers are forced to teach those subjects, which

need specialization. In this situation the teachers just try to cover the syllabus and fulfil their duties. Such types of practices are hindrances in meaningful learning. The policy makers formulate curriculum only and the communication process between policy makers and teachers (implementers) is a missing link and teachers remain unaware of new policies. On the basis of research we can conclude that changes in the curriculum should be made gradually not suddenly as the majority of respondents opined that too many changes bring confusion to the teachers and students. Therefore, for meaningful learning one should have a good understanding of the curriculum. Moreover experts should know the dimension and affects of change. Before revision of a curriculum, clear conceptions about what to change and why to change are required along with implementation practice. Finally it can be concluded that although curriculum change is a vital tool to restructure the society but improvement is not possible without preparing the teachers to accept and then transfer that change. Teachers should be part of this change so that they may feel and share their contributions in this process.

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