

The advantages of the implementation of test methods in teaching Azerbaijani History

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After gaining independence, the circumstance in social-economic and political life of the Azerbaijan Republic, especially attitude toward education has completely changed. The content of education as well as all spheres of public life has drastically changed; teaching methods were renewed; teaching and studying methods were improved.

Formerly education was considered as a tool of achieving knowledge, abilities and skills, nowadays modern education is considered as a tool of forming general world outlook and the source of the strict system of knowledge and skills. Nowadays, when educational reforms are underway, person-oriented education is taking ahead, the educational activity of the pupils, their efforts in strengthening knowledge and skills are regulated into this direction.

Our experience and researches demonstrate that test exam methods play considerable role in improving the quality of education as well as in deepening the knowledge, abilities and skills of the pupils.

All of us know that test has been used for a long time in most countries and has very positive results.

Test exams have been used during the entrance exams to the higher and secondary professional educational institutions since 1992-1993 by the State Students Admission Commission. SSAC holds exams which are objective, save time and limit the interference of a person by implementing IC technologies.

Test exams are used in the secondary public schools of Azerbaijan widely but traditional exam methods (oral and written) are used to evaluate the pupils during final exams. Though easy and complicated questions are scored equally, the level of complexity is not taken into consideration and other disadvantages, the demand for this kind of exam has increased due to the objectivity of evaluation and time saving. Therefore, we should mention the initiative of the Ministry of Education as a very pleasant fact to implement test methods in final exams at secondary public schools.

We can quote as very fruitful the results of the monitoring which was conducted during teaching of Azerbaijani History and final exams in 2004 and 2006 in order to determine the impact of test exams on the quality of pupils' knowledge and skills, to find out the mistakes and to clarify problems which pupils face.

The monitoring was conducted in seventeen secondary public schools of Baku city and the results were summarized.

Traditional pedagogical test model was used during the monitoring. Pedagogical test model includes the holding of tests and the summarizing of derived results. In this case the testing is a system of exercises which meet proper criteria.

In the pedagogical experiment it was supposed that if test methods are implemented wisely, properly and with system in the teaching of Azerbaijani History and final exams at public secondary schools of Azerbaijan, the pupils' knowledge and skills will be evaluated more objectively, the problems which the pupils face will be found out and at the same time the mistakes of teaching methods will be determined. All these will increase the efficiency of teaching of Azerbaijani History, the quality of teaching and facilitate the forming of personality of pupils.

Before the monitoring the problems of the real situation were investigated. The date and duration of tests, the number of test items, their topics, their types, etc. were determined. Time which is needed for one question was determined.

Experimental classes were determined in the schools where the monitoring was conducted. Before the monitoring the teachers of Azerbaijani History who were involved into the monitoring were informed about the purpose and methods of the monitoring, the essence of test exams, the importance of the full-coverage of study material, easiness and complexity of tests, the determination of ratio of complexity and the test development principles. During the meetings they were explained the interdependence between the level of complexity of tests and readiness of pupils and necessity of using different level of complexity of tests. Test items were prepared according to students' age groups, test items covered the full study material to be able to assess the knowledge of pupils strictly. In order to increase the interests of pupils, not to let them feel excess freedom or not to let them feel indifferent, the pupils were conveyed the feeling of responsibility on the essence of testing. During the testing the teachers also tried to reduce the feeling of stress amongst pupils by explaining the purpose of tests. Because the strong feeling of stress can make the pupils get worried and decrease the results of testing seriously. In order to convey the feeling of self-confidence to the pupils they were offered less difficult tests. During the trainings the pupils were explained that their wrong answers would not affect the general results of tests.

Regardless of the methods of exam, the teachers took care of the pupils; ethical issues were paid great attention to. At the beginning of the monitoring, the test exercises for the experimental classes were prepared according to the teaching program (syllabus) on Azerbaijani History. According to the teaching program these sections were determined:

1. Relations amongst different courses
2. Azerbaijan in Ancient era
3. Azerbaijan in the III-XV centuries
4. Azerbaijan in the XVI-XVIII centuries
5. Azerbaijan in the second part of the XVII and XVIII centuries
6. Azerbaijan in the first part of the XIX century
7. Azerbaijan in the second part of the XIX – XX centuries
8. The National Republic of Azerbaijan
9. Soviet Azerbaijan in 1920-1945
10. Soviet Azerbaijan in 1945-1991
11. The Republic of Azerbaijan

Besides the level of complexity of test items, the relevant categories of study materials were taken into consideration:

- terms and concepts
- the factual materials (evidences) on processes and events
- the determination of similar and different aspects of processes and events
- the determination of reason-consequence relations
- the application of studied materials in different forms
- the level of creativity – discovering new materials/topics from the studied materials by the pupils

Test exercises were in the order of increasing complexity. It is important for the productivity of the results. This kind of attitude facilitates to digest and to understand the study materials. This also ensures the using of previous concepts actively. Better results were achieved by those who pay more attention to studying and who digest the study material better. The complexity of the tests depends on how badly the pupils understood the study material or it demonstrated that they did not have skills to work in this way.

Medium difficulty questions were included in the tests as the reliability of their assessment was proved by the application of reliable assessment methods of classical test theory. The indicator of reliability of pedagogical test is correct evaluation of knowledge. It is not “testing” itself but the level of conformity of the obtained results with the real knowledge of pupils.

Experience demonstrates that during the application of testing for assessment of the knowledge both on separate sections and topics as well as the whole subject is, the quality of the pupils’ knowledge, abilities and skills should be determined according to these indicators:

1. The completeness of knowledge – the amount and wideness of comprehension, theoretic concepts, etc.
2. the sustainability of knowledge – the ability of recovering knowledge by pupils after certain amount of time
3. the deepness of knowledge and the level of understanding of knowledge – the knowledge of a pupil on the basis of Azerbaijani History, certain facts/evidences, important theories, their logical thinking and independent decision-making abilities
4. the systematic character of knowledge - interconnections amongst different components of theoretical knowledge
5. the generalization of knowledge – the ability of generalization of historical information in the form of blocks and schemes and the ability of seeing development and dynamics of processes and events
6. the flexibility of knowledge – the ability of using historical knowledge in non-standard circumstances and situations

The monitoring was held in the same classes (9th and 11th) in 2004 and 2006.

The experiment had started in the 9th grades and ended in the 11th grades. 595 pupils of the 9th grades and 528 pupils of the 11th grades were involved into the monitoring.

The test items were prepared from the indicated sections of Azerbaijan History to assess the knowledge of pupils, afterwards certain number of test items were selected randomly. Test items were arranged in special order and distributed amongst the students. The date of the test was defined. The duration of the test was determined as only the pupils with high grades could respond to all questions. The pupils were also explained the rules of the examination.

The examinations were held in the second (final) semester both in the 9th and 11th grades. 30 test items were given to the 9th and 11th experimental classes,

The levels of the knowledge of the pupils were determined according to the percentage of the correct answers to the tests. The tests were based on the mentioned sections and shown in the table:

TABLE 1

YEAR	CLASSES	SECTIONS and EXERCISES											TOTAL	
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	The number of exercises	The medium-level of complexity (%)
2004	IX Experimental	10	2	7	3	5	3	0	0	0	0	0	30	44
2006	XI Experimental	8	1	3	2	2	2	3	3	2	2	2	30	48

As you can see from the tables, the test items did not include VII-XI sections for the 9th grades as they had not studied these materials yet.

During the monitoring we tried to explore in mastering of which section of Azerbaijani History the pupils faced difficulties and in which kind of questions they made mistakes.

The results of every section were analyzed and reflected in the table. The level of complexity/difficulty of a question is determined by the ratio of those who responded correctly to the number of participants, i.e. the percentage of correct answers:

$$X = \frac{C}{N} \times 100$$

X – is the level of difficulty of a section, C – is the number of those who responded correctly, N – is the number of examination participants. If the most part of the pupils responded to a question wrongly, the question was considered hard or if the most part of the pupils responded to a question correctly, the question was considered easy. (See tables 3,4 and graphs 1,2). If a question remained unanswered at all, it has no ability of differentiating and this kind of questions should be reviewed and revised.

The results of both classes were compared and analyzed. The highest and lowest knowledge levels of the pupils were determined. The reasons of the common and typical mistakes of the pupils were defined.

The analysis of evidences demonstrate that the correctness, clearness, logicity and comprehensiveness of questions allow the pupils to respond to them successfully.

Let us follow the results.

Table 2. The analysis of the responds of the 9th classes to the tests and questions (2004)

SCHOOLS	The number of pupils	The number of questions	SECTIONS																						the level of complexity in 2004 (%)		
			I		II		III		IV		V		VI		VII		VIII		IX		X		XI				
			Right	%	Right	%	Right	%	Right	%	Right	%	Right	%	Right	%	Right	%	Right	%	Right	%	Right	%			
98	37	30	10	27	22	59	11	30	12	32	17	46	21	57	-	-	-	-	-	-	-	-	-	-	-	-	42
116	35	30	9	26	21	60	19	29	11	31	17	49	21	60	-	-	-	-	-	-	-	-	-	-	-	-	42
55	31	30	8	26	18	58	12	29	10	32	15	48	18	58	-	-	-	-	-	-	-	-	-	-	-	-	42
82	34	30	11	32	11	62	11	32	12	35	17	50	20	59	-	-	-	-	-	-	-	-	-	-	-	-	45
160	36	30	13	36	21	58	11	31	12	33	17	47	21	58	-	-	-	-	-	-	-	-	-	-	-	-	44
145	32	30	10	31	19	59	11	34	10	31	16	50	19	59	-	-	-	-	-	-	-	-	-	-	-	-	44
276	33	30	12	36	20	61	11	33	12	36	15	45	20	61	-	-	-	-	-	-	-	-	-	-	-	-	45
88	36	30	12	33	20	56	11	31	12	33	18	50	20	56	-	-	-	-	-	-	-	-	-	-	-	-	43
248	37	30	14	38	23	62	12	32	13	35	20	54	23	62	-	-	-	-	-	-	-	-	-	-	-	-	47
239	37	30	13	35	22	59	13	35	12	32	20	54	22	57	-	-	-	-	-	-	-	-	-	-	-	-	46
76	34	30	12	35	20	59	10	29	10	29	16	47	20	59	-	-	-	-	-	-	-	-	-	-	-	-	43
63	35	30	9	26	21	60	10	29	11	31	17	49	21	60	-	-	-	-	-	-	-	-	-	-	-	-	43
258	36	30	12	33	22	61	11	31	12	33	19	53	21	58	-	-	-	-	-	-	-	-	-	-	-	-	45
18	37	30	10	27	22	59	11	30	12	32	17	46	21	57	-	-	-	-	-	-	-	-	-	-	-	-	42
266	34	30	11	32	19	56	10	29	11	32	16	47	19	56	-	-	-	-	-	-	-	-	-	-	-	-	42
193	34	30	12	35	20	59	11	32	12	35	17	50	20	59	-	-	-	-	-	-	-	-	-	-	-	-	45
291	37	30	12	32	25	62	13	35	12	32	20	54	23	62	-	-	-	-	-	-	-	-	-	-	-	-	46

Graphic 1

IX CLASSES

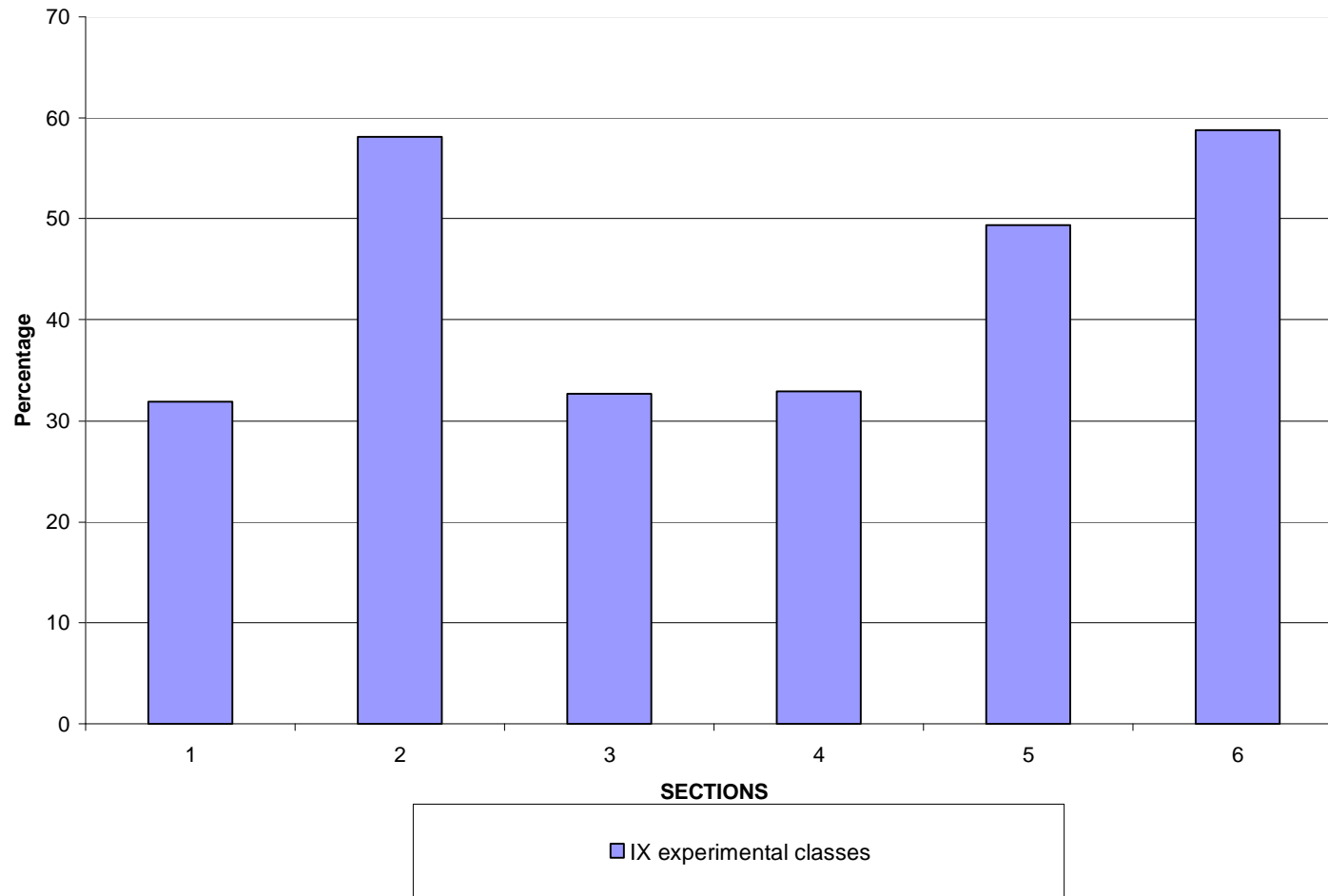
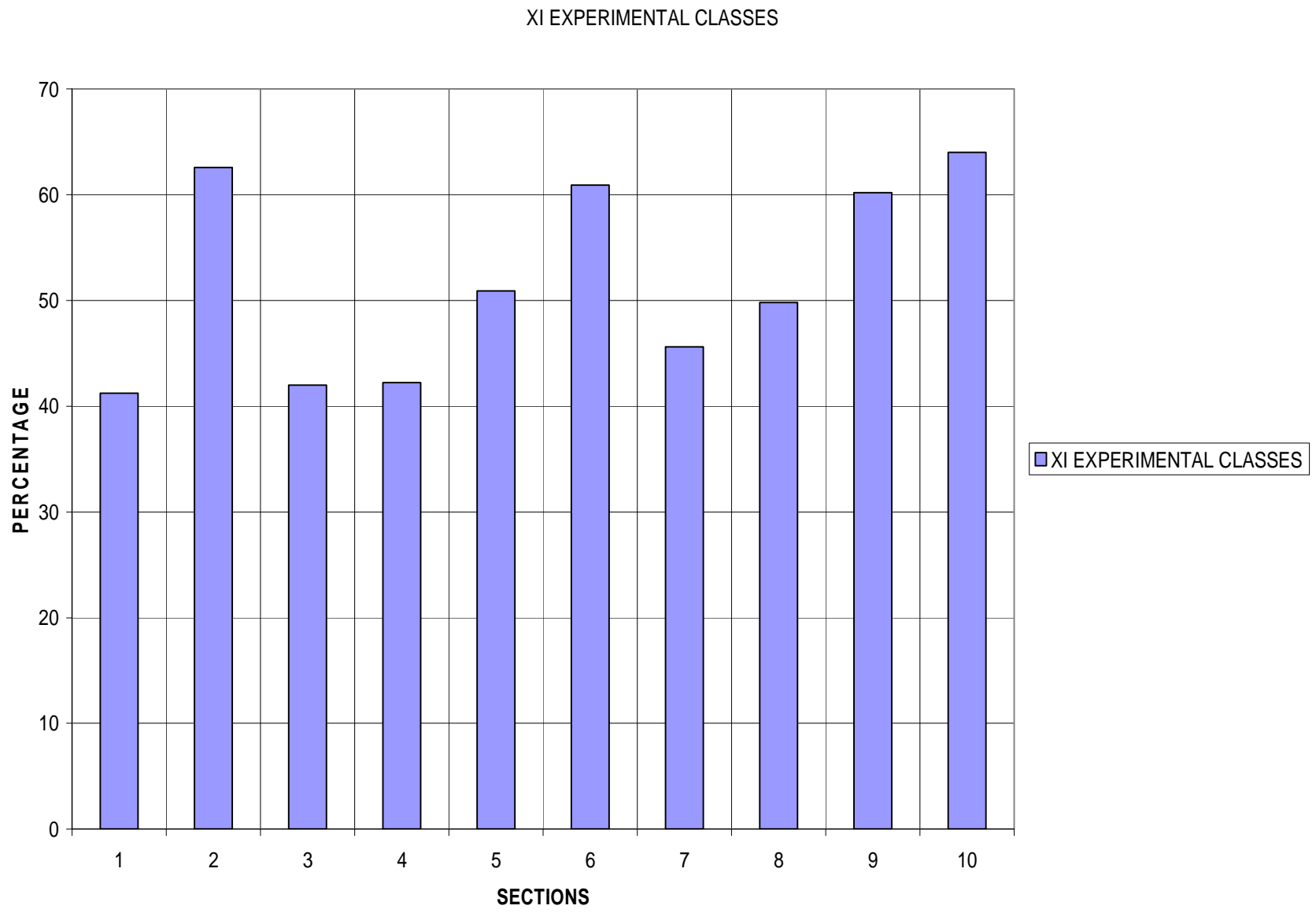


Table 3. . The analysis of the responds of the 11th classes to the tests and questions (2006)

SCHOOLS	The number pupils	The number of question	SECTIONS																						the level of complexity in 2006 (%)
			I		II		III		IV		V		VI		VII		VIII		IX		X		XI		
			Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	Right respond	%	
98	33	30	13	39	21	64	14	42	15	45	17	52	20	61	14	42	15	45	16	48	20	61	21	64	51
116	32	30	12	38	20	63	14	44	15	47	16	50	20	63	13	41	14	44	15	47	20	63	20	63	51
55	29	30	11	38	18	62	12	41	14	48	15	52	18	62	10	34	11	38	12	41	17	59	18	62	49
82	31	30	13	42	19	61	13	42	13	42	16	52	19	61	11	35	14	45	16	52	18	58	19	61	50
160	32	30	14	44	20	63	15	47	15	47	16	50	20	63	13	41	15	47	16	50	19	59	20	63	52
145	29	30	12	41	17	59	12	41	11	38	14	48	17	59	13	45	14	48	15	52	16	55	17	59	50
276	30	30	14	47	18	60	13	43	12	40	15	50	19	63	16	53	17	57	18	60	18	60	18	60	54
88	30	30	12	40	17	57	12	40	12	40	15	50	17	57	16	53	17	57	18	60	18	60	18	60	52
248	34	30	14	41	21	62	14	41	14	41	17	50	20	59	18	53	19	56	20	59	20	59	22	65	53
239	35	30	15	43	22	63	14	40	14	40	18	51	21	60	18	51	19	54	20	57	22	63	22	63	53
76	29	30	11	38	17	59	12	41	11	38	15	52	17	59	13	45	14	48	15	52	18	62	19	66	51
63	30	30	12	40	19	63	12	40	12	40	15	50	18	60	15	50	16	53	17	57	18	60	20	67	53
258	31	30	13	42	20	65	13	42	13	42	16	52	19	61	13	42	15	48	16	52	19	61	21	68	52
18	31	30	13	42	21	68	13	42	13	42	16	52	19	61	13	42	15	48	16	52	19	61	21	68	53
266	30	30	12	40	20	67	13	43	12	40	16	53	19	63	15	50	16	53	17	57	18	60	20	67	54
193	32	30	13	43	20	67	12	40	13	43	16	53	19	63	15	50	16	53	17	57	18	60	20	67	54
291	32	30	14	44	21	66	14	44	14	44	16	50	20	63	15	47	16	50	17	53	20	63	22	69	54

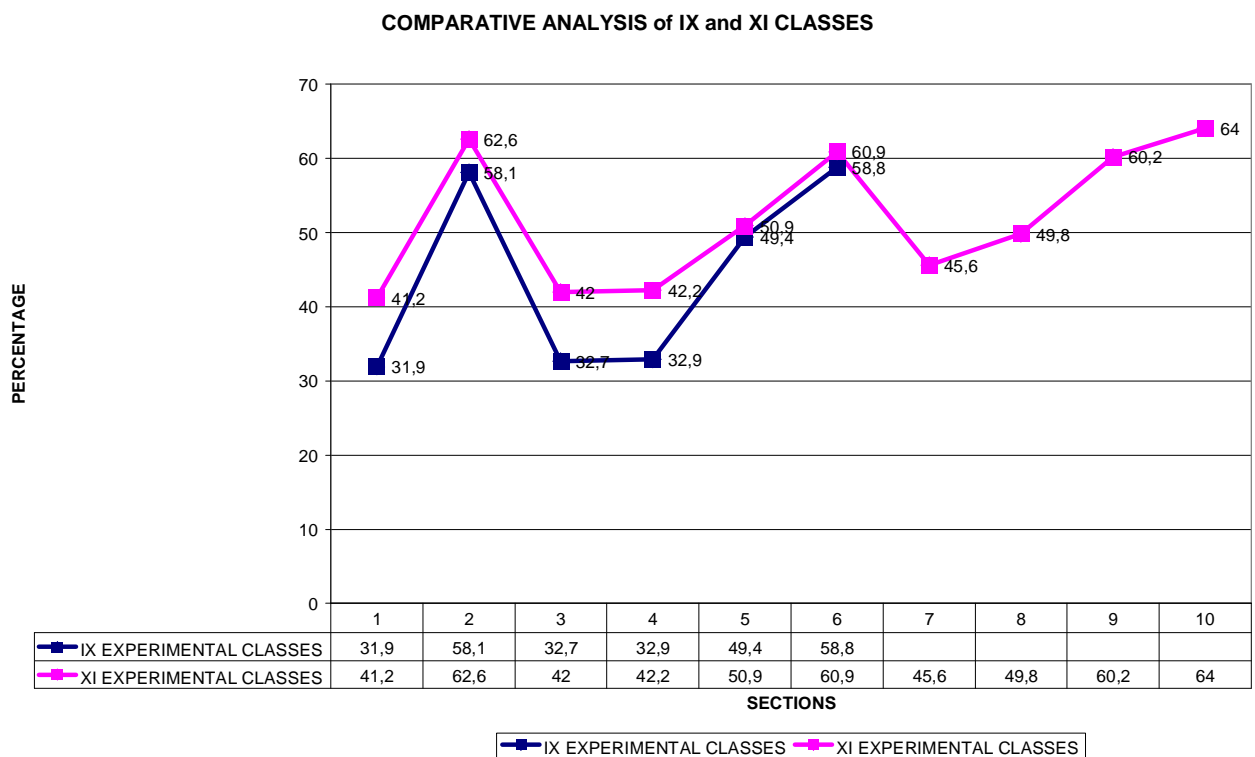
Graphic 2



While analyzing the results of the tests and questions during the monitoring, it was found out that the responds of the 9th grades to different sections were not same. The responds to different sections had different level of difficulty. In the 9th classes, the level of difficulty in the sections of I, III and IV is similar, as it ranges from 31 to 33 percent. In the V section, the level of difficulty is about 40 percent. The highest results were observed in the sections II and IV and it is about 60 per cent. The average level of difficulty in sections I, III and IV in the 11th classes is higher than that of the 9th classes and is approximately 40 per cent.

In the section II and IV the level of complexity is higher in the 11th classes. The level of complexity in sections VII-XI ranges from 45 to 65 percent in the 11th classes. The exact percentages are reflected in the graph. The comparative analyzes of the results indicating the answers in different sections of Azerbaijani History are reflected in Graph 1 (9th classes in 2004 and 11th classes)

Graph 1.



The analysis of results demonstrated that the level of difficulty in the 11th grades was higher than that of the 9th grades. The comparative analysis of the results of the 9th grades demonstrated that in both classes the pupils responded to the questions on prehistoric communities, especially on topics where logical thinking and general understanding were required as well as harvesting, mattock agriculture, the relations between hunting and cattle-breeding, agriculture, handicraft, the difference between family and tribe, comparison between the members of family and community, changes in the governance of communities, etc. very well. For instance, we can see it in the example below:

Determine logical order :

1. Prehistoric communities
2. Homo abilities
3.

- A. Azikh man
- B. Harvesting and hunting
- C. Discovering of fire
- D. Tribal communities
- E. Consumer economy

A pupil who studied the subject properly can determine that “harvesting and hunting” and “the appearance of consumer economy” were not after the appearance of “Homo abilities” but before. Homo abilities appeared after prehistoric community, afterward tribal communities appeared. People got fire first during prehistoric community. The right answer is D. Approximately 60 percent of pupils responded to this question.

The analyses of graphs demonstrates that some part of the 9th and 11th the pupils responded to the questions of the first section very weakly. It is quite natural. Because the questions in this section were based on the relation between courses. In order to answer the questions on the feudal societies of Atropatena and Albania and their characteristics, a feudal state and its comparison to a slavery state, the essence of natural economy, feudal decentralization in different periods and its reasons and consequences, the main impacts of social-economic and cultural development of Azerbaijan in Middle Ages, famous statesmen and politicians, Azerbaijan as a battle-field at different ages, the battles in these wars, social-economic reforms, and its impacts, Azerbaijan National (People’s) Republic, Azerbaijan Republic – regaining of independence, the strengthening of national state, the problems in the crossing of the XX-XXI centuries, etc., you should study all materials completely.

The comparative analyzes of the third graph demonstrates that the common weaknesses of the first and third sections are repeated in the fourth section (Azerbaijan in XVI-XVII centuries) 43,4 per cent of the pupil of the 11th experimental classes responded right to the questions and tests on fourth section (the economic background for the centralized feudal state in Azerbaijan, the different positions/standpoints of different groups, the end of the process of the centralized state, the social economic condition of Sefevi state, the changes in statehood and governance, international factor and etc.). One of the main reasons why the pupils responded to the questions and tests weakly is low level of digesting/understanding study materials.

The results demonstrate that the 9th and 11th experimental classes answered to the questions and tests of the sixth section better. It was found out that the pupils studied the topics on Azerbaijan in the first part of XIX century better. The later analyzes proved that if a pupil had studied the previous terms and concepts and study materials well he/she responded to the questions and tests better.

The pupils of the 11th experimental classes responded to the tests on the tenth and eleventh sections better (the Soviet Azerbaijan; Azerbaijan 1945-1991; the regaining of independence of Azerbaijan; internal and external political issues; the strengthening of totalitarian regime in Azerbaijan; the attempts of improving political system; the deportation of Azerbaijanis from the Western Azerbaijan (Armenia); the establishing of new industrial fields and centers; agriculture and obstacles in front of its development; economic difficulties; transition to seven-year, eight-year, and ten-year education systems; the establishing of Azerbaijan National Scientific Academy and television; “perestroika” and Azerbaijan; the anti-Azerbaijan policy of the USSR; the forms of the dissemination of freedom ideas; the independency of Azerbaijan; foreign policy towards providing the territorial integrity of Azerbaijan; the new stage of democratic development; the foreign policy strategy of Heydar Aliyev and Ilham Aliyev; and etc.). The level of understanding the next stage depends on how a pupil studied the previous materials. The responds demonstrate it one more time. 60,2 per cent of the 11th experimental classes responded right to the tests on the tenth section, 60 percent of the 11th experimental classes responded right to the tests on the eleventh section.

The analyzing of the answers demonstrates that although the pupils responds well to the question on distinct facts and events, they faces with difficulties during responding to the questions on the essence of process and events, the relations between reason-consequence, comparing processes and events, determining their common and distinct features, summarizing different processes and events

and making conclusions. They had difficulties to identify reason-consequence relations, when the pupils were shown the distracters of reason-consequence relations on the studied materials.

In the third and fourth tables, the comparative analyzing of graphs demonstrates that despite there were some improvements in the results of 2004 and 2006 unfortunately, we cannot see the considerable changes between these results.

The pupils had more difficulties to answer the question on which they studied at the beginning of the semester rather than they studied later. The pupils of the 11th classes responded better to the questions on modern history new to the end of the second/final semester. The main reason for it is that these topics are related to our today's life and the plenty of information on democratic state-building processes in Mass Media.

We think that the heavy of burden of excess information, the scientific and methodic mistakes in the text-books on Azerbaijani History, the small number of historian creative teachers who are aware of the new text-books and programs and being older of the most teachers affect the quality of education.

At the end, we can summarize the results of our monitoring like this:

1. The main advantages of the test method are that the number of the questions and the level of complexity are equal, the forms of tests are different and test method provides equal opportunities for those who are examined.
2. Testing pupils from early classes facilitates to develop the special skills and abilities of pupils and allows to determine and to evaluate their outlooks, skills and abilities.
3. Test method allow to determine topics which pupils understand better and worse and according to what a teacher can ask more questions or explain the mistakes of pupils to them.
4. It helps to determine to what it should be paid more attention
5. Tests on Azerbaijani History assist determine weaknesses in the development of pupil, to reduce weaknesses, and to build strengthen self-confidence and self-understanding in pupils.
6. Tests on Azerbaijani history encourage pupils to increase their knowledge, to think independently and to convey their thoughts more confidently.
7. The research and experience demonstrate that the implementation of test methods in teaching Azerbaijani History provides objectivity and leads to develop logical thinking in pupils.
8. The implementation of test methods in teaching Azerbaijani History reduces subjectivity in the assessment of pupils.
9. Test methods allows to evaluate the knowledge of pupils which they gained from the huge materials shortly, conclusively and concrete phrases.

According to what was said above we think that test methods have great role in increasing the quality of education as well as in the teaching of Azerbaijani History. Test methods also play important role in the formation of personality of pupils. Therefore, the History teachers of public secondary schools have to know teaching methods and be able to use test methods on scientific and methodic basis.

Recommendations:

1. Teaching programs on History must be developed
2. Scientific, methodic and technical mistakes must be eliminated from the text-books on Azerbaijani History
3. In order to increase the quality of studying of Azerbaijani History, teaching methods must be changed, traditional teaching methods must be converted to new interactive teaching method. The comprehensive using of new teaching methods in teaching Azerbaijani History can encourage pupils to study the subject more willingly and to increase the level of teaching. New

teaching method can help pupils develop their logical thinking and apply theoretical knowledge properly.

4. The history teachers of the public secondary schools should use the methodical materials of "Abituryent" journal which is published by SSAC regularly during teaching.

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