

The Mathematics Education into the 21st Century Project
The Future of Mathematics Education
Pod Tezniemi, Ciechocinek, Poland
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The survey of environmental health indexes of schools (educational places) in the villages of Mazandaran province (1382)
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Abstract: Goal: it is apparent that the schools have an important role on educating and development of people schools have always been one of the main focuses of consideration in the societies. The purpose of this study is to survey the health and environmental condition in rural schools of Mazandaran province.

Materials and methods:

This is a descriptive study during which sampling was done from 102 rural schools of Mazandaran for two months the gathered information was also obtained by the use of questioner, measurement and observation.

Results:

There have been 64.7 percent primary schools, 28.4 percent secondary schools, and 69 percent high schools. 33.3 percent of the schools are girls school, 30.4 percent are boy's school and 36.3 percent are coeducational or two shifts of girls and boys. Each class is 3650 square meters on average area. The number of classes in each school is 6 class on average. The mean of each class is 27.8 square meters and the per capita to be 18 students in each class. 17.6 percent of the schools have less than the minimum per capita of the students in each class. 17.6 percent of the schools have separated drinking fountain and washbasin, also, the angle of incidence of 42 percent of classes is not correct.

Argument:

In addition to this fact that most of the studied factors in this research are not standard (like other researches), the measured variance of these variables are too great. This clearly shows that there is no specific planning for production, development and equipment of Mazandaran rural schools.

Key words:

Environmental health, school, village, Mazandaran.

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Introduction:

School is known as a secure place for educating of people. It has important role for preparing health and fruitful life, and the education of people having good behaviour. 26 percent of the population of the Mazandaran province are service receivers of the schools (1). These people, who spend a considerable time at schools, are at sensitive age. This sensitiveness can be argued and examined from different educational, health environmental and other aspects (2). In the same direction, the environmental health of the schools is of high importance (3). Unsuitable environmental and health conditions can make lots of troubles for the students of such environment. Some of these troubles may be revealed after a long period of time (3, 4, 5) for example, not covering the school yards and dusty yards exposes the students to the existing pathogenic organisms of soil like different kinds of fungus infections and etc. Most of the researches that have been done on the environmental health of schools, allocate to urban examining the texts of the thesis's and research projects of Iranian site, all of the researches on school environmental health were done in cities.

This research has been carried out in order to survey the schools environmental health condition (rural educational places) in Mazandaran.

Materials and methods:

This is a descriptive study and it is based on collected samplings. The studied population involves all the primary secondary and public high rural schools of Mazandaran. The number of these rural and urban schools in this province is 5007 altogether that 3294 (65.8 percent) of them are urban schools. First, the dimensions of 100 rural schools were determined considering that the holiday was coming and for preventing the falling of schools buildings. At the end sampling was done from

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102 schools. The samples have been chosen considering the several education levels (primary, secondary and high schools) of the all villages of Mazandaran. In the second stage, the samples of each level of study were chosen according to the school population in different rural educational districts. In the last stage the samples were also chosen according to the several educational levels of that area. The sampling have been done in this study, by environmental health students with the use of questioner th

Results:

In this research, 102 rural schools were visited, 66(64.7 percent) were primary schools, 29(28.4 percent) were secondary schools and 7(6.9 percent) were high schools. 34 (33.3 percent) are girl's schools, 31 (30.4 percent) are boy's schools and 37(36.3 percent) are coeducational or two shifts and boys the mean of the number of the students is 105 ± 66 and the mean of the number of teachers is 10 ± 7 for each school. It shows the per capita of one teacher for 11 students.

Each rural school is 3650 ± 5830 square meters on average area table 1 illustrates the mean of the total superstructure and substructure of the schools according to the different educational levels. 10.8 percent of the schools are under the minimum measurement (in terms) of meters). 4.9 percent of the schools are under the percapita of 6-8 square meters for each student. The average number of classes in each school was 6 classrooms with the mean of 27.8 ± 9 square meters and the per capita of 18 students in each classroom. It shows the per capita of 1.54 square meters for one student in each class 17.6 percent of the schools are under the minimum per capita level for the students in the class each school have 4 restrooms and 5 washbasins. It shows the per capita of one washbasin for 24 students and one restroom for 21 students According to the obtained results, 4 percent of the schools have the necessary per capita for washbasin and 5.8 percent of the schools don't have the necessary per capita for the

Table 1. Mean and standard deviation of total area and substructure of the schools according to the educational levels.

Education	Mean & S.D. of the substructure of school	Mean & S.D. of the school area
Primary school	431 ± 303	3703.76 ± 5971.5
High school	637.71 ± 402.6	2874.29 ± 2037.5

In the meantime only 14.7 percent of the schools have separated drinking fountain and washbasin and the drinking fountain is for from wash basin 79 percent of the schools have no work places (workshops) and 81 percent of the schools have no buffets.

79.5 percent of the schools have one floor and others are on two floors. The average distance of each school from the village roan and the main road are 155.72 ± 413 and 325 ± 5931 meters respectively. The angle of incidence of only 58 percent of the classes is from left to the right of the student's desk and the angle of incidence of 42 percent of the classes is correct the teacher's rooms are 24.62 square meters on average area and the per capita is 2.46 ± 12.57 square meters for each teacher only 30.4 percent of the schools have library. These libraries are 15.95 square meters on average area with the per capita of 0.12 square meters for each student. It is also so for from the standard. 38.2 percent of the girl's schools and 4.9 percent of the boy's schools and 13.5 percent of the coeducational or the schools with two shifts, have library.

Also, 18 percent of the primary schools 41 percent of the secondary schools and 100 percent of the high schools have library.

51.5 percent of primary schools, 0.07 percent of secondary schools and 14.2 percent of high schools are two shifts or coeducational. Only in 13.7 percent of the schools, the health advisors are constantly present. In other schools the health advisors visit the schools alternatively.

The presence of health advisors at schools according to the educational primary, secondary and

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high level are sequentially 12 percent, 20.6 percent and 0 percent. The average distance of the board to the first row of the students is 2.078 ± 0.7 meters in each class that is below the standard distance.

In the some direction 68.6 percent of the schools have this distance under the standard level. Other remarkable point of this research is the great variance of the most studied variables. This shows that the studied schools are different with the present standards from many aspects generally; the quality of class is not considered in construction of the rural school and only the quantity matters are considered

Argument:

The result of this research showed that not separating the drinking fountain and washbasin and the use of the nonstandard taps at schools cause lots of diseases. Similar results have been observed in a research that have been done in the kerman schools in 1373, while healthy drinking water is one of the most important basis of health . (6) Crossed joints and incorrect plumbing and common use of taps are the main reasons of the incorrect usage of the healthy drinking water. (7) The obtained results from the other part of this study showed that most of the rural schools of Mazandaran use kerosene heaters. These heaters don't give out heat equally in all parts of the class and because of the reduce of heat in some parts of the class, the students will contact cold stress. The researches show that the reduction of heat causes cold stress. Generally one of the health principles of schools in the heat equal heat exchange with the environment is one of the reasons that impresses the protected heat of the body. In spite of the fact that the average distance of the schools to the main road is several times more than the standard level (500 meters), the distance of 48 percent of the schools to the main road is under the standard level that causes noise and acoustic pollution in the classes. The research that have been done in Norway by Kjartan showed that the acoustic pollution in the areas with the traffic of big machines like trucks , is three times more than the other areas increases the rate of stress and reduce the rate of learning and carefulness.

The most important point of this is the great variance of the most studied variables it means that there is no standard health indexes and the locations of the schools are not standard and the schools are only considered quantitatively and qualitative matters are not considered. This research showed that the revision of the projects in the process of execution is necessary and in the future planning, this basic changes in planning, structure and development of the schools should be considered.

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