



## **TYPES OF MAPS AND THEIR NEED FOR GEOGRAPHICAL EDUCATION**

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| <b>Article history:</b>                          | <b>Abstract:</b>  |
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| <b>Received:</b> September 11 <sup>th</sup> 2021 | This article describes the types of maps and their need for geographical knowledge, the use of cartographic materials and their symbols in the classroom, the specifics of teaching geography through maps. |
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### **INTRODUCTION**

Today, great attention is paid to the introduction of advanced pedagogical technologies in the education system. Maps play an important role in making geography education meaningful and interesting, as well as in developing students' knowledge, skills, and abilities. . Consequently, students will not be able to consciously assimilate information about various geographical objects without knowing their geographical location. In the process of introducing students to new geographical objects, the teacher should show them on a wall map and teach them to find these objects on an atlas or textbook map and analyze their geographical location.

A map is an image of the Earth's surface that is scaled down and generalized to a plane with symbols. They describe natural and socio-economic events and phenomena [3]. Map (Greek chartes - a sheet or letter papyrus), a map - a mathematically clearly defined, scaled, generalized image of the Earth's surface, other celestial bodies or space. In the accepted system of symbols, the objects located in them are indicated [5].

### **ANALYSIS**

It should be noted that maps are divided into several types depending on the scale, size, content, function and structure of the area depicted in them.

Scale is a fractional number that indicates how many times the distance in space has been reduced when plotted on a drawing, plan, or map. Scales come in three different views: numeric, linear, and nominal.

Depending on the scale of the maps are divided into the following types:

large-scale - from 1: 10000 to 1: 200,000,

medium scale - from 1: 200,000 to 1: 1,000,000,

small scale - less than 1: 1,000,000.

Maps of different scales depict events and happenings with different accuracy. Depending on

what is depicted and the size of the area, they are divided into the following types: star maps, planets and land maps, hemisphere maps, continental and ocean maps, natural geographic land and sea maps, country maps, administrative unit maps, special areas (nature reserves, tourist sites) maps, maps of cities and regions, districts.

According to their content, maps are divided into two major groups: general geographic maps and thematic maps. In general geographic maps, the main components of the geographical conditions of the place are described with the same accuracy: relief, rivers, lakes, glaciers, soil and vegetation, habitats, structure of economic sectors, communication routes, boundaries, etc. Depending on their function, maps can also be divided into "scientific", "cultural and propaganda", "technical", "travel maps", "educational maps" [4].

Symbols are the representation of events and happenings on a map using certain symbols. Using scale symbols, events and happenings are described with real dimensions. With scaleless symbols, events and phenomena that cannot be shown on the scale of maps are described. The direction of the river flow, the types of trees in the forest are indicated by linear symbols. There will also be written, alphanumeric, numeric symbols.

The map describes events and happenings in the following ways:

- character method - describes things, events and happenings that cannot be described on a scale;

- linear method - describes the rivers, roads and boundaries, located mainly along the length:

- Coloring method - used to describe the distribution of events and phenomena over the area (relief, vegetation, soil, climate maps);

- method of equal value lines - describes events and phenomena of the same value (temperature, altitude, population density):



- point method - gives a scattered amount of objects, events and happenings [5].

Geographical maps are images of the earth's surface in a plane that summarizes and minimizes the current state of events and happenings in nature and society. Cartographic projections, symbols, and cartographic generalization (sorting) are typical for a geographical map. A geographical map is a cartographic model in terms of its content, image, visibility, and modernity.

The first feature of a geographical map is the use of cartographic projections to obtain accurate information about the location, planned dimensions and shape of objects on Earth and other planets [7].

The second feature of a geographical map is the use of cartographic symbols:

a) by scaling a part or all of the earth's surface (even on planets) on a scale, the necessary objects that do not correspond to the scale can be represented by non-scale symbols;

b) the map can show the relief of the earth's surface (for example, using horizontal lines) in a plane;

c) not only the appearance of the events and phenomena depicted on the geographical map, but also their internal structure and content (for example, depth, chemical composition of water, velocity, relief of the seabed, flora and fauna, etc.);

g) it is possible to show the distribution of events that are not directly perceived by the sensory organs and the contacts and relationships that are not directly achievable (for example, the angle of inclination of the magnetic needle);

d) it is possible to exclude insignificant aspects, events and details of certain objects and to distinguish their general and basic features [8].

A particularly third feature of a geographic map is that it is possible to select, fill in, and cartographic sort (generalize) and generalize the events and phenomena being described.

It is divided into general geographical and thematic (thematic) maps according to their content. General geographic maps are divided into large-scale, medium-scale and small-scale. But no matter what scale they are depicted in, the basics of the elements that make up their content remain. These are water bodies, relief, soil and vegetation, habitats, roads and means of communication, states and their administrative boundaries, as well as socio-economic elements (industry, agriculture, etc.) [10].

Thematic maps will be dedicated to a single topic. The topic is described in detail, but the geographical basis consists of elements of general geographical maps, ie the geographical basis is

created in accordance with the theme. Thematic geographical maps are divided into two classes - natural geographic maps and socio-economic geographical maps. Natural geographic maps include maps dedicated to geology, tectonics, geophysics, seismology, groundwater (hydrogeology), geomorphology, climate, hydrology, soil, flora and fauna, ecology and other fields.

Socio-economic maps include population and demography, industry, agriculture, transport, consumer services, environmental protection, political and administrative maps, and more.

The geographical map is divided into world, continental, ocean, individual countries, regions, provinces and district maps according to the described area. According to its function, it is divided into special maps (educational, tourist, navigation, project, etc.) [9].

Narrow-minded maps are called area maps (for example, maps dedicated to one area of the climate), and general climate maps if they are given a complete description of the climate. The content depicted on maps is multi-informative, describing the interrelationships between them and revealing the laws in them, called complex maps.

Some elements of nature; (e.g. winds) are called analytical maps if they show the population (e.g., birth), economy (e.g., cotton yield), and culture (e.g., theaters) of a particular location, their characteristics and characteristics. Synthetic maps are those in which multiple contents are added to a single map, including multiple fields.

Within a geographical map, socio-economic maps are a relatively broadly evolving field. The formation and development of this direction is directly related to the growing role of socio-economic factors in the development of society, the growing regional differences in economic and social processes.

The need for in-depth analysis of dynamic socio-economic phenomena, their territorial differences requires the expansion of research in the field of cartography, the addition of new specific objects and relatively complex processes. For example, joint ventures, joint stock companies, farms, firms, and so on.

## RESULTS

The geographical map allows not only to reflect the location of socio-economic and cultural objects, territorial differences inherent in socio-political processes and events, but also to identify their specific territorial complex laws. On this basis, it is possible to prepare a solid scientific and methodological basis for



forecasting, planning and management of socio-economic and political processes at the national and various regional levels. In this regard, the period requires the creation of new types of maps, such as forecasting, evaluation, planning, design and other maps.

In the process of learning, students must have a good understanding of the symbols that are the language of the map, so that they have a good understanding of cartographic materials and can work with them independently.

It is advisable to use maps that are simpler, easier to understand and read for primary school students, and more complex maps for upper grades. At the same time, in the lower grades, it should be on a scale that has a large scale and accuracy for students to see from a distance. Because in elementary school, maps must be clear and distinct. Students should be able to see the geographical event and presence in them clearly from 5-6 m. To do this, the most important things are displayed on the map. For example, when a river is depicted, its main part and the largest tributaries are shown, while the smaller tributaries are not. You need to choose colors well so that the map looks clear. If the map is beautifully and clearly designed, students will be able to read and understand them easily. Also, the map should not be filled with geographical names. It should only contain entries appropriate to the age and level of education of the students. In primary school maps, geographical names may be written less and larger, while in middle and upper grades their number may increase and their size may become smaller [9].

Once students are well acquainted with cartographic concepts in the primary grades, they will have no difficulty in using cartographic materials in the upper grades. Because the cartographic knowledge acquired in the 5th grade during the 6th grade course "Natural Geography of Continents and Oceans" will serve as a basis for further cartographic concepts. This course provides knowledge about the types of atlases and globes along with maps and their specific features, and if this knowledge is inculcated in the minds of students through maps, atlases and globes, it will be possible to effectively use cartographic materials during the course. Because during the course, the use of maps is required in the process of learning a particular topic. The map not only complements the content of the topic, but also serves to consolidate the acquired knowledge, to understand the interdependence of events. As a result, students will be able to read and analyze maps of each continent and ocean correctly using cartographic materials.

Atlases also play an important role in explaining the science of geography to students and strengthening their knowledge. Atlases are a set of organized system maps that are complete and accurate, based on a single program. Atlases are a collection of maps structured in a specific theme and direction. Therefore, curriculum atlases are published in a separate content and direction for each class. For example, atlases for grades 5-9. Curriculum atlases must meet the following requirements:

- The number of geographical features and events indicated in the atlas should be more than in the textbook;
- The atlas should serve as a reference for students;
- The atlas must contain a list of geographical names;

When working with a map scale, students should be familiar with the levels at which a geographic entity shrinks or enlarges. To do this, you must first have an understanding of large, medium and small scales. They can then determine various geographical features, such as the width and length of the Caspian Sea. Students must also learn to measure distances using a degree grid. It is enough to know the length of the arc 1o. The average length of a 1o arc along the meridian is 111 km. if the distance between two points is 10o, it is expressed in km as follows:  $10 \times 111 = 1110$  km.

The most responsible part of working with cartographic materials is reading them and drawing appropriate conclusions based on them. If students have the above knowledge, skills, and competencies thoroughly, they will be able to perform these responsibilities independently. In doing so, students can write a geographical dictation on a continent or a natural geographic area by studying maps and atlases. For example, they record information such as the geographical location, natural conditions, relief, geographical structure, minerals, climate, soil and vegetation cover, fauna, etc. of a geographical object [8].

## **CONCLUSION**

In general, geography lessons cannot be imagined without cartographic materials, so in each geography lesson it is necessary to use one or another map based on the topics. It should be noted that the correct and effective use of cartographic materials in the correct organization of geography lessons depends on the level of personal abilities, professionalism and creativity of the teacher of geography. The use of cartographic materials in geography lessons leads to



the visual organization of lessons, enhances students' cognitive activity, increases lesson effectiveness, deepens and expands students' knowledge of the subject, increases their thirst for knowledge, teaches curiosity, responsiveness, and most importantly expands the scientific worldview.

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