Title: Visual exploration of educational indicators in Morocco

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Project description :

Our project is a web application developed in HTML, CSS and JavaScript, which uses the Chart.js library to generate interactive charts. The main objective of the application is to allow users to view historical data of educational indicators in Morocco in the form of graphs.

Key Features:

1. **Loading data:** Data is loaded from a JSON file hosted on GitHub. The application uses jQuery to make an AJAX request and retrieve the data.
2. **Indicator Selection:** Users can choose from a drop-down list of educational indicators. When an indicator is selected, the chart updates to display the corresponding data.
3. **Choosing Chart Type:** Users can choose from several chart types, including line, bar, radar, donut, and polar charts. The chart is automatically updated based on the selected type.
4. **Filtering by Year Range:** Users can select a year range to display on the chart using a year range slider.
5. **Interactivity:** The application offers interactivity with graphics. When the user hovers over the chart, the corresponding coordinates (year and value) are displayed in a div next to the chart.
6. **Customization:** Charts are customizable with animations and random colors for each data set.
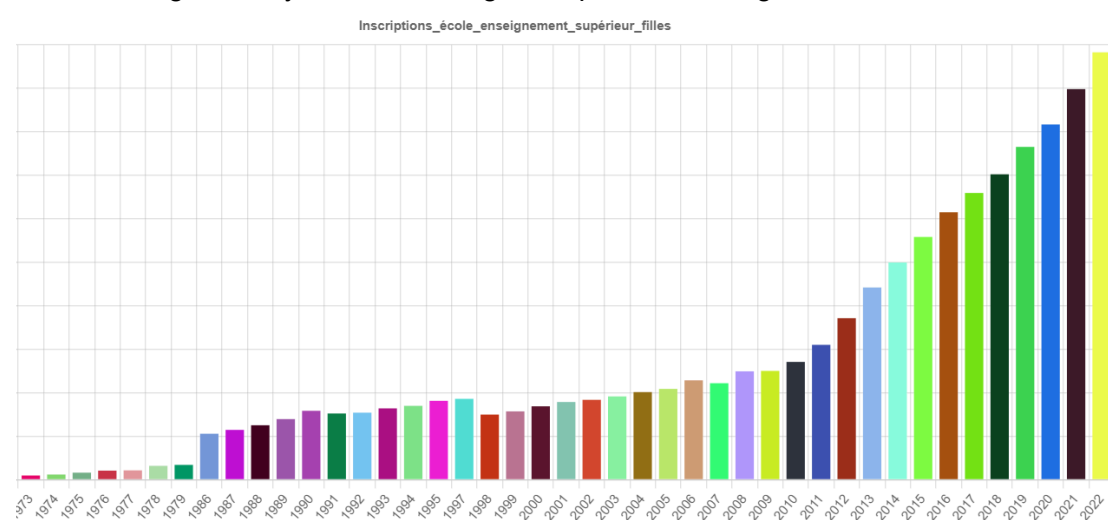
Summary :
In the field of education, data analysis and visualization plays a crucial role in decision-making, research and public awareness. In this paper, we will explore the various contexts and approaches to data visualization in education. By highlighting key indicators such as enrollment, retention and graduation rates, as well as demographic variables such as gender, we examine how this data can be presented in a meaningful and accessible way. Interactive online dashboards provide in-depth data exploration for policymakers and researchers. Finally, the comparisons provide a global perspective on educational performance. By understanding these different contexts and using adapted approaches, it is possible to make educational data more accessible and inspire meaningful actions for improving the education system.
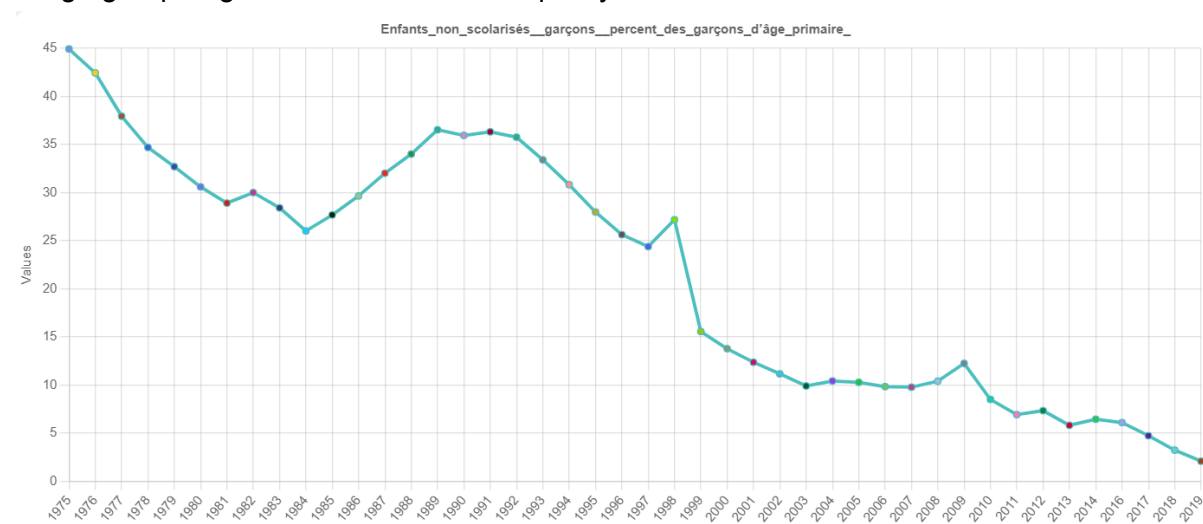
Introduction:
The analysis of the visualization carried out provides a series of educational indicators for Morocco over a period from 1971 to 2022. These indicators cover different aspects of education, such as access to education, school enrollment, the training of teachers and the levels of education achieved by the population. In this analysis, we will examine these indicators in order to visualize and understand the evolution of the Moroccan education system over the decades.

Discussion:

Morocco's educational indicators reveal several interesting trends. First of all, it is encouraging to see a steady increase in the enrollment rate of girls in higher education. Over the years, the number of girls enrolled in schools and higher education institutions has increased significantly, demonstrating an improvement in girls' access to education.

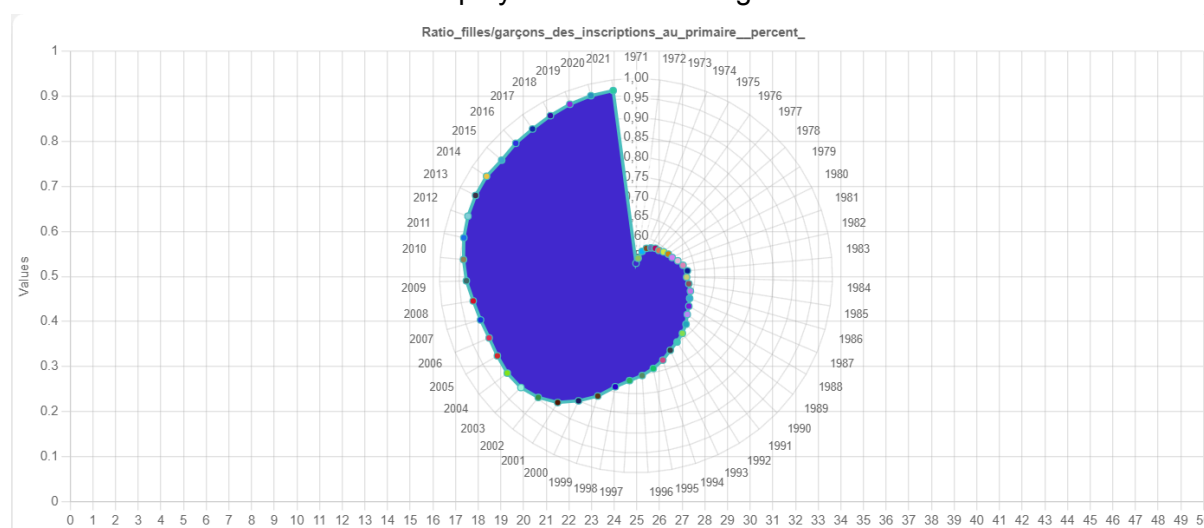Inscriptions_école_enseignement_supérieur_filles

However, there are still challenges ahead. For example, the percentage of adolescents out of school remains a concern, particularly for boys of lower secondary school age. This highlights the need to put in place additional measures to ensure that all children, regardless of age group or gender, have access to quality education.

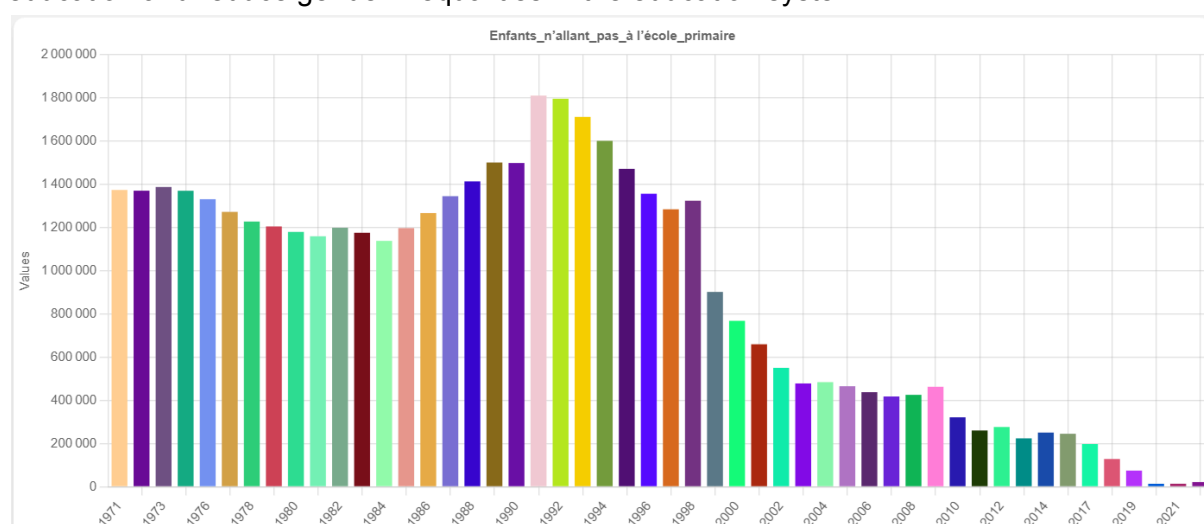Enfants_non_scolarisés__garçons__percent_des_garçons_d'âge_primaire_

Regarding the educational levels achieved by the population, it is encouraging to see an increase in the percentage of women aged 25 and over who have obtained a university degree or equivalent qualification. However, efforts remain to be made to increase the level of education of the entire population, particularly with regard to the completion of lower secondary education.

Another key indicator is the percentage of students in vocational courses in secondary education, mainly girls. Over the years, we have observed a significant increase in the

participation of girls in these sectors, which indicates a positive development towards greater diversification of education and employment choices for girls in Morocco.

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Another indicator is the girls/students ratio, which is an important indicator for assessing gender equality in access to education. We observe a positive evolution of this ratio, because of the policies and initiatives that have been put in place. in place to promote girls' education and reduce gender inequalities in the education system.

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The graph shows a significant decrease in the number of children out of school in primary education between 1970 and 2021. In 1970, there were around 1.4 million children out of school, compared to 13,854 in 2021. This decline is due to several factors, including increased efforts by governments to enroll all children in school, improving the economic situation in the country and increasing awareness of the importance of education.

Conclusion:

In conclusion, the analysis of educational indicators reveals both encouraging progress and persistent challenges. Although improvements have been made in terms of access to education and the level of education achieved by certain categories of the population, much remains to be done to guarantee quality education for all.

It is essential to continue investing in the Moroccan education system, with a focus on eliminating gender disparities and improving the quality of education provided. It is crucial to emphasize that adequate investment in education is essential to improve the quality and access to education in Morocco. This will require special attention to disadvantaged groups, such as out-of-school adolescents. and those who fail to complete lower secondary education.

Using these educational indicators as a basis, policymakers, educators and stakeholders can work together to develop policies and programs that promote equal educational opportunities and improve educational outcomes for all Moroccan citizens. .