# Implementation of the 2012 upper secondary school curriculum in Mexico: a 21st-century framework enquiry

*Implementación del currículo 2012 de la escuela media superior en México: Una investigación con el marco de habilidades del siglo XXI*

*Implementação do currículo do ensino médio de 2012 no México: uma investigação com a estrutura de habilidades do século XXI*

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# Data Management Plan

**Article Title**

**Is Mexico ready to implement a 21st-century framework at upper secondary school?**

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**Abstract**

The data provides information for the analysis on how the new upper secondary school curriculum in Mexico captures 21st-century skills. The data is used to map the new upper secondary school curriculum using the Core Skills Model based on the deep pedagogic framework to observe whether it includes the relevant elements to enhance 21st-century skills development. The data is used to value whether the curriculum provides a framework that specifically incorporates learning competencies, standards and strategies that support the development of each 21st-century skill in a balanced way (Barrot, 2018). The data is used to value if the NC provides equal weight to the development of each 21st-century skill.

**Keywords**

Curriculum; 21st century skills.

**Specifications Table**

| | |
|---|---|
| **Subject** | Education |
| **Specific subject area** | Curriculum analysis with emphasis on 21$^{st}$ century skills |
| **Type of data** | Table<br>Figure<br>Matrix |
| **How data were acquired** | The Education Ministry in Mexico launched a New Curriculum with a graduate profile and education plans s by discipline: Mathematics, Experimental Sciences, Communication, Social Sciences, and Humanities. The New curriculum is available online. I use the official documents to create a list of the descriptions and include them as rows at matrices. I use the Core Skills categories as headings (columns) to compare them Curriculum and 21$^{st}$ century skill framework. The analysis consists of observing whether each item of the new curriculum corresponds, relates or answers the description of what has to be developed within the 21st-century skills Core skills model. |
| **Data format** | Raw and Analysis in Excel format<br>With the matrixes created as well as the results of the analysis. |

| | |
|---|---|
| **Parameters for data collection** | The data is constructed based on the New Curriculum at upper secondary school and the core skills model of the British Council. |
| **Description of data collection** | Documents are available online. |
| **Data source location** | New Upper Secondary School Curriculum and Core Skills model: Both publicly available.<br>City/Town/Region: Mexico City<br>Country: Mexico |
| **Data accessibility** | Repository name: Mendely<br>Data identification number: 10.17632<br>Direct URL to data: Hernández-Fernández, Jimena (2020), "New Upper Secondary Curriculum Full analysis", Mendeley Data, V2, doi: 10.17632/49zz8kmbjv.2 |
| **Related research article** | Author's name, Is Mexico ready to implement a 21st-century framework at upper secondary school? International Journal of Educational Research, Under revision. |

**Value of the Data**

- The data is useful as it can serve as guide to value the 21$^{st}$ century emphasis of a curriculum

- Curriculum developers can use the data to map the 21st century emphasis of a curriculum

- Data serve to analyse and compare frameworks with in the curriculum

**Data Description**

There are matrices listing each of the new upper secondary school curriculum in Mexico aspects: graduate profile descriptions and education plans descriptions by discipline: Mathematics, Experimental Sciences, Communication, Social Sciences, and Humanities to compare them with the CS model. The matrices list the new curriculum descriptions as rows at each matrix and use the Core skills Model categories as headings (columns). The analysis

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consists of observing whether each item of the new curriculum corresponds, relates or answers the description of what has to be developed within the 21st-century skills CS model.

It is assigned a value of "1" whenever an item of the graduate profile is aligned to a particular aspect of a Core Skill. In other words, assigned "1" when the graduate profile item and discipline descriptions match a particular aspect of a 21st century skill. Conversely, it is assigned a value of "0" when there is no correlation between items of the graduate profile with the particular area of a core skill. Once the process is completed the values are added up per item. I sum up all the allocated values of 1 or 0 for each item of both the graduate profile and disciplinary plan. It is important to clarify that each item of either the graduate profile or 21st century skills may have a different number of descriptions. Therefore, an overall weighted value is used to show how aligned or misaligned the certain aspect of the new curriculum is to each of the CS.

## Experimental Design, Materials, and Methods

Each matrix provides a weighted sum of values. Each matrix is evaluated as a whole using a colour scale, where the areas with the highest value (i.e., the most balanced) are marked in "green". Likewise, the areas that have lowest values (i.e., the least balanced) are marked in "red". As such, there is a scale in between which shows three intermediate colours that go from lighter green, yellow and orange. The allocation of colours in the table is wholly based on the weighted values at each matrix. In other words, neither the values themselves nor the assigned colours can be used as a means of comparison between the graduate profile and the different disciplines.

## Acknowledgments

## Competing Interests

The authors declare that they have no known competing financial interests or personal relationships which have, or could be perceived to have, influenced the work reported in this article.

## References

Hernández Fernández, J, & Rubio, D. (2017). *An alignment analysis of the British Council´s Core Skills and the Mexican Education Model*. Retrieved from Mexico: https://www.britishcouncil.org.mx/sites/default/files/170512_csreporteen.compressed.pdf