

HISTORY OF GEOMETRY TEACHING IN THE EARLY YEARS: Brazil, 19th and 20th century

Maria Célia LEME DA SILVA

UNIFESP (Diadema) / UNESP (Bauru/Rio Claro), Brasil – celia.leme@unifesp.br

In Brazil, projects on the history of geometry teaching in the early years developed by a collective of researchers resulted in the construction of a representation of how geometry teaching for primary schools was organized and consolidated throughout the 19th century to the mid-20th century. (Leme da Silva, 2021).

After the Independence of Brazil (1822) the first public instructions for primary schools were prepared together with the translation/adaptation into Portuguese of foreign manuals. Francœur's book was one of the first references for teaching geometry in Brazil. Only at the end of the 19th century, after the Proclamation of the Brazilian Republic (1889) and the creation of more structured educational models (curricular organization in subjects and by series), we identified the circulation of geometry manuals produced in Brazil, as well as publications in revue pedagogical activities, carrying out pedagogical missions by teachers abroad. The circulation and appropriation of manuals and foreign proposals defined the first programs for teaching geometry at the turn of the 19th century to the 20th century. Reports of international events and universal exhibitions in pedagogical revues, the creation of a pedagogical museum in Rio de Janeiro, pedagogical missions by Brazilian teachers to Europe, make it possible to infer the insertion of Brazil in what Matasci (2015) called the first globalization.

The teaching of geometry in Brazil was indebted to and revealed a long process of interactions and appropriations with different cultures, bringing together varied knowledge, arising particularly from practical activities and the need to measure, draw, and build manually. Three structuring axes were identified throughout the period – design, handwork and measurements – which, despite revealing numerous transformations, constituted pillars of permanence throughout the period in question.

For discussion and analysis, three contexts of Brazilian appropriations from abroad will be taken: (1) the proposal of freehand drawing, from Francœur (France) and later reiterated by Calkins (USA), (2) the proposal of Fröebel (Germany) together with the experience brought by the course of handwork in the school of Nääs (Sweden) and (3) the proposal of the tachymetric method of Lagout and Dalsème (France).

References

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