

WEB OF KNOWLEDGE

A LOOK INTO THE PAST,
EMBRACING THE FUTURE

Editors

Sara Albuquerque

Teresa Ferreira

Maria de Fátima Nunes

Ana Cardoso de Matos

António Candeias



SÍLABAS & DESAFIOS

Web of Knowledge | A Look into the Past, Embracing the Future

Editors

Sara Albuquerque, Teresa Ferreira, Maria de Fátima Nunes, Ana Cardoso de Matos & António Candeias

Universidade de Évora, Portugal

Proceedings of The International Multidisciplinary Congress
Web of Knowledge: A Look into the Past, Embracing the Future
May 17-19, 2018
Évora, Portugal

Organization



UNIVERSIDADE
DE ÉVORA



CENTRO
HERCULES
HERANÇA CULTURAL ESTUDOS E SALVAGUARDA



Centro Interdisciplinar
de História, Culturas e Sociedades
da Universidade de Évora

UIDB/H5/0005/2019



INSTITUTO
DE HISTÓRIA
CONTEMPORÂNEA



NOVA FCSH
FACULDADE DE CIÊNCIAS SOCIAIS E HUMANAS
UNIVERSIDADE NOVA DE LISBOA

Sponsors



CÂMARA MUNICIPAL
DE ÉVORA

FCT Fundação
para a Ciência
e a Tecnologia



MINISTRO DA CIÊNCIA,
TECNOLOGIA E ENSINO SUPERIOR



Publishing, Distribution and Sales
SÍLABAS & DESAFIOS - UNIPESSOAL LDA.
NIF: 510212891
www.silabas-e-desafios.pt
info@silabas-e-desafios.pt

Headquarters:
Rua Dorelia Carmona, n° 4, 4 Dt
8000-316 Faro
Portugal
Phone: +351 289805399
Fax: + 351 289105433
Orders: encomendar@silabas-e-desafios.pt

Title
WEB OF KNOWLEDGE | A Look into the Past, Embracing the Future

Editors
Sara Albuquerque, Teresa Ferreira, Maria de Fátima Nunes, Ana Cardoso de Matos & António Candeias
1st. edition
Copyright @ Universidade de Évora e Sílabas & Desafios, Unipessoal Lda., janeiro 2019
ISBN: 978-989-8842-41-1

Pre-editing, editing, reviewing and graphic composition: Sílabas & Desafios Unipessoal, Lda.

Cover: Sílabas & Desafios, 2019
Image: Marble head representing Julius Cesar circa 20 B.C. – 10 A.C.
©Museu Regional de Beja, Portugal

All rights reserved. Reproduction prohibited. The use of all, or parts, of the text, figures, pictures, illustrations and graphics, must have the express permission of the authors.

Table of contents

<i>Preface</i>	VI
<i>Conference opening paper</i>	
Fields of Rome. Lusitania, the Mediterranean connectivity, the Roman Empire and the loss of knowledge. <i>A. Carneiro</i>	8
School objects and their contribution to dance education <i>J. Fernandes</i>	12
Cecchetti Diagram: A new present <i>V. Nascimento</i>	16
Understanding a nation's culture through the magazine <i>A Construção Moderna</i> <i>S. Aleixo & P. S. Faustino</i>	20
1920's economic housing in the magazine <i>A Arquitectura Portuguesa</i> <i>S. Aleixo & A. Brancas</i>	24
Mediation to access cultural heritage information: Portugal and Brazil (2006-2016) <i>L. C. Borges, C.V. Freitas, P. Almeida & S. Cardoso</i>	28
Law change and public discussion: from C-section to natural birth in Brazil, a case study <i>R. Queiroz, R. Boschi & J. F. Erdelyi</i>	32
Science et Vie and the Genesis of the Space Race <i>Luís Pereira, Isabel Malaquias & Vítor Bonifácio</i>	36
Under giants: technical challenges and scientific accuracy in exhibits <i>M. G. Soler; M. F. Nunes & M.M. Lopes</i>	40
Digital information and communication technologies: culturalism, literacy, and empowerment in pedagogical practices and in teachers' training of elementary education <i>G. Carneiro, P. Vieira & L. Pesce</i>	45
Building Knowledge from the heart. History of Emotions contribute for History of Education. The love for science in Teachers of High School San Isidro (1835-1900) <i>M. Zozaya-Montes</i>	48
Notes about the history, architecture, and heritage in the railway station of Almería (1892-2017) <i>D. Cuellar & A. Martinez-Corral</i>	52
Philosophical consequences from the Turing Test Undecidability <i>P. Castro</i>	56
IoT, user's information and ethics or who ate my data? <i>K. Luz & C. Gottschalg-Duque</i>	60
The Portuguese schools of engineers in Lisbon and Porto: continuity and discontinuity of the models and the creation of the national and international networks <i>Ana Cardoso de Matos & Maria da Luz Sampaio</i>	65
The legacy of Fotokemika factory as analog photographic world heritage <i>Nevena Ilic, Ana Cardoso de Matos & Teresa Ferreira</i>	70
Photographic ex-votos. Preservation questions on image collections in religious buildings <i>M. Trindade, A. Nogueira Alves, P. Simões Rodrigues & T. Ferreira</i>	74

Building Knowledge from the heart. History of Emotions contribute for History of Education. The love for science in Teachers of High School San Isidro (1835-1900)

M. Zozaya-Montes
CIDEHUS, Universidade de Évora, Portugal

ABSTRACT: This research analyses the importance of feelings for teacher's profession during the process of configuration of Liberalism (1835-1880) when the political system faced the primacy of universal public education. It addresses the subject's responsibility for the creation and transformation of Secondary educational system in the XIXth Century in Spain. Focusing on Cultural History, it reveals the importance of emotions to structure the public trajectory of a job, opening a new field of analysis usually forgotten. The approach to teacher's attitudes of San Isidro High School (Madrid) gives a clue to the educational system: the documents they wrote, and especially the administrative dispute between professors Pereda and Santisteban, become expressive of an arena where feelings took the preeminence on teaching. It concludes that during the implementation of Liberalism, emotions were essential to boost science and build a new model of education, on behalf of public cause and Scientific Knowledge.

1. LOVE FOR THE PROFESSION IN A HISTORICAL PERIOD OF CHANGE

1.1. Passion for teaching*

"Love for teaching" was argued constantly by several professors of the most important high school in Spain's capital between 1835 and 1900. That record appears in *Memories of the Instituto San Isidro* from Madrid (ISI), in publications or administrative documents written by teachers.

Nevertheless, Modern Period history books of high school education use to forget about the emotion's perspective, maybe following the classical pretension of being more objective. Positivism has been the current perspective in Education History, which leads to study descriptive and quantitative elements. For example, the theories that teachers taught, the books they wrote, characterize those schools and classrooms or detail laws and official rulings. That panorama is shown with the public profile of the subjects, reflecting a classic *cursus honorum*. So, rarely is written the biography of teachers on daily life, and hardly taken any attention of their feelings and personal emotions. Then, they just look into knowledge of science, but not to the love for science. Constantly a vital part of the subjects is mainly forgotten (Ortega y Gasset, 1941).

1.2. Search for the role played by love

The fact is that it is necessary to recover and interpret correctly the real meaning of emotions in a profession. Especially when teachers themselves gave an insistent record of their feelings, directly linked to the job of teaching. They showed their love for teaching as more valuable than their own curriculum.

So, this study analyses how intensity of emotions of teachers towards its job increased its personal commitment for teaching. Beyond than the employment itself, it focuses in the affective part of a profession.

With this case study I want to elucidate which was the role that feelings played to configure a public job; to make clear the importance of that sensibility for the individual (Febvre, 1941: 5-9); and to enlarge the relevance of perception about feelings, in symbolic terms.

Paying attention to those questions can lead us to discover a fact that has been commonly forgotten in Modern History. However, is essential for the development of teaching science during the process of configuration of the public school while the implementation of Liberalism.

* M. Zozaya-Montes is a Researcher at CIDEHUS-UÉ, (grant ref. UID/HIS/00057/2019 from the Portuguese Foundation FCT). This research began with Projects CEIMES and IBEREDUCA, "Dinámicas de renovación educativa y científica

en las aulas de bachillerato (1900-1936)", Ref. HAR2014-54073-P, IP: L. López-Ocón. Has been made within the project "Prosoparlam", IP: J. Aguirreazcuénaga, Ref. UPV/EHU-MINECO. HAR2014-53974-P.

1.3. Liberalism: a crucial moment of change

This study focuses on the ISI Institute, one of the most important High School in Spain together with Cardenal Cisneros of Madrid. Both were recognized as the best of Spain (“first class” bachelor degree institutes), and in fact they shared teachers and facilities with Complutense University of Madrid.

The importance of those pre-university colleges on the scientific world was originated on the historical context: it was the period of the configuration of public educational system in Spain. The end of *Ancient Régime* and the arrival of Liberalism in the 1830’s, meant the beginning of progressive implementations for modernity. Among other changes who differentiate Early Modern Period to Modern Period I can highlight the following: the -early- Constitutional System, the promotion of equal rights and the merge of merit values; the centralization of State’s administration, which established levels of quality and categories of institutes and teachers, with promotion ladders. The most remarkable change was the reorganization of the educational system between 1836 and 1845 (*Mon & Pidal* Laws), as public and presumably universal for all citizens (but not free). Also, the economy was ruled by capitalism and entrepreneurship attitudes, which lead some teachers to establish private schools, even when working at public Secondary School.

When arrived the Constitutional system since 1835 is assumed that new values of Liberalism were playing a particular role on modernization, as works of merit or the credit given by bourgeoisie to work itself. But, in my opinion, more things have to be considered to understand that changing process. Specifically, introducing personal likes and own opinions as if they were measurable criteria to evaluate their public job. I mean, elements beyond scientific quality, as virtues of love or feelings.

2. CASE STUDY ABOUT EMOTIONS

2.1. *Incorporating the love for profession in the curriculum?*

We have observed how feelings were argued as a proof of better performance of a job. *Love for science* was continuously remarked by different teachers in various contexts or sources. It seems like the emotions felt for teaching counted as much as their scientific results in the education matters. Then, affectivity helped to build the concept of the profession. Also, I can consider that those teachers were building an “emotional community” (Rosenwein, 2010:11) about the love for teaching, adding more intensity to the profession with another magnitude.

We can quote some illuminating examples. Phd in sciences professor Bernardo Rodríguez Largo, being

secretary of the ISI, organized a meeting of teachers in 1876. He received all the scientific cloister as “favourite brothers”. In that session he lamented the death of ecclesiastic professor of Latin and Language’s Ciriaco Cruz, who was “well versed as few scholars” in his area of knowledge, remarking that the deceased left good and pleasant memories “of his virtues, science and love for teaching” (*Memoria*, 1877: 6). Also, when professors Benigno Carballo and Mariano Nicolás died in 1864, ISI director Antonio Corte Ruano held a great farewell, remarking “the noble example that both professors gave with its perennial love for teaching, virtue which enhance human being and make him capable of practising all Christian virtues that both deceased possessed” (*Memoria*, 1865: 9).

When teacher of politics and geography Mariano Muñoz Herrera quit school in 1876 due to be elected as MP, he had to reject his charge of auxiliary teacher at ISI, but: “guided by its love for teaching and the ISI Institute, he continued teaching for free the chair of Geography and Statistics that was entrusted to him, with the zeal and working diligence that had characterized him the years before” (Rodríguez Largo, *Memoria*, 1877).

Is possible to follow this love for science in the testamentary legacies, which reveals a deeper meaning to that emotional connection. Design teacher Mariano Borrell energized science by creating an award in 1893 to aid the poor pupils of ISI institute, stating: “In order to provide a clear signal of the zeal that I have always had for teaching, I want to give a small gift to the establishment where -during more than 40 years- I have had the approval of my bosses, the consideration of my colleagues, and the affection of my pupils” (AHP, T.MB, L. 37494, fol. 945v^o-946v^o, 1893).

Likewise, professor of Natural Sciences Sandalio Pereda reflected that love within his testament, when donating money to the servant’s ISI Institute, his books and collections to the ISI, or money to the Laboratory of Natural History. With all his work towards that Lab, it passed from 206 objects to 12.000, being the most important of Spain (Simón Díaz, 1952-9: 470-5). Besides, his will of being dressed and shrouded in professor’s suit and with the mortarboard (AHP, T. SP,1885, L. 3552, fol. 321-320r^o), expressed the same love for his profession to posterity. Also, in the ISI Annual Records, he proclaimed his love for educational world and his satisfaction awarding the best pupils. Thus, he remarked that he felt he was “equal to other distinguished professors, maybe not in knowledge – saying with rhetorical modesty- but in zeal and love for teaching” (*Memoria*, 1871: 2). In the speech for becoming a member of the National Academy of Sciences, he remarked that, he was linked to his predecessor on that academic title by “two high aspirations: love of science and protection of

misfortune” (Pereda, 1870: 8). So, he did not argue the knowledge, but the feelings for teaching.

Figure 1. Detail of the Professional Expedient of Sandalio de Pereda. Parallel trajectories during the quarrel. *Teacher’s books of San Isidro High School. AHISIM, 1870-1886*

2.2. Emotions of two teachers revealing a good job.

Those information display how feelings were argued as a scientific proof of improving a good job. The aforementioned situation is better shown when appeared a personal rivalry between two professors, Mariano Santisteban and Sandalio Pereda. Both carried out a kind of administrative hostility. The result was a correspondence directed to the general administration (AGA 1, 2 & 3 *). In all the documents of those three expedients it can be seen constantly how love for teaching was argued as a matter of fact, as a profession pillar.

The conflict was caused because Mariano Santisteban opened a private school in 1868. That was a common attitude since during that period, wages of public Secondary School were small, and sometimes was not paid regularly. Then, they use to teach also in private schools (Martín, 1994: 144) and some of them, as Mariano Santisteban, even funded and directed his private own college. When that happened, the pacific coexistence between both professors finished. Sandalio Pereda wrote to the administration to relate the harassing situation. He said that, before 1868, Santisteban was a very good teacher. He gave to pupils’ free classes and rehearsal of Physics. By then, Pereda even “praised the zeal, interest and activity towards science” of Santisteban. But in 1868 he founded his Polytechnic School, and with “mercantilist objectives for science”, “not guided by his love for teaching”, Santisteban declared an unfair competition to the ISI school because of its own capitalist business.

Afterwards, Santisteban began to say hostile words towards the ISI laboratory material, saying that, from 1861 to 1875 it had not been improved at all. He made a discredit campaign between pupils and their parents. To announce the solution to -what Santisteban called- “that deplorable scientific situation”, he even gave flyers of its own school in the very door of ISI Secondary School. As Pereda said,

*** AGA Archive Documents that we have to thank teacher Leonor González Lastra, of San Isidro School, Madrid.

with that attack Santisteban was denying the “zeal and care that all ISI directors had played to increase the collections of the Natural Sciences laboratory”. Besides, Santisteban said that its own Polytechnic laboratory was the best (when that was materially impossible).

Likewise, Mariano Santisteban “injured” directly Sandalio Pereda, saying that Santisteban “loved science just for science itself”, not as those men who -pointing Pereda- “above science and its progress in teaching media, always put forward their personal interest”. When Santisteban attacked the scientific merit and teaching job of Pereda, he resolved that it was against “my credit and my honour, which I love even more than life itself”.

During this process it is clear that the feelings for science were really important for teachers, even altering its scientific practice. Theories agreed that some emotions are learnt culturally, depending on the social context, and are capable to determine a kind of behaviour (Frevert, 2010, 87-140; Reddy, 1999; 2001). In this case, it is easy to sustain that those strong feelings towards science -even when speaking about a rivalry- were conditioning the action which enhanced the public teaching system. As far as those teachers wanted to show their love for science, they made more merits to be recognized with the status of the pure vocation for teaching.

Figure 2. Detail of the Professional Expedient of Mariano Santisteban. Parallel trajectories during the quarrel. *Teacher’s books of San Isidro High School. AHISIM, 1870-1886*

3. CONCLUSIONS:

3.1. Changing from the heart

We have revealed in these pages how love for teaching was considered an essential virtue for professors, even more than scientific results. Nevertheless, this view of emotions is silenced in common historiography of education in Modern Era. But, why is important this perspective? In our opinion, because it allows to rescue the historical subject and it offers new interpretations about a changing period: