On the 15th of May 1891, the Pope Leo XI-II presented to the Catholic world his encyclical “De Rerum Novarum” which stated and defined the position of the Catholic Church with regard to the “Industrial Revolution” which was quickly approaching. At that time the Church realized the need to quickly accept the changes, to take on the new responsibilities, and to review the philosophies and the doctrines regarding the new social, political, and cultural conditions which the modern world imposed.

I borrowed unduly the title of the encyclical by Leo XIII just to confirm a priority and prompt need of change which today has to be followed also by the university world.

In the last months we have been able to ascertain that the political world and the government, firstly, made laws on priority topics concerning the university and in particular on the recruitment of the future teaching personnel, on the examination rules, on the validity of the scientific research, on the “impact factors” which will condition the carrier promotions, and on the resources addressed to the Academies/Universities devoted to research.

Following the new laws and decrees which continuously come out what has changed and what will concretely change in the university “main mind”? How much those new provisions will influence either the educational path of our students or the selection of teachers qualified for the new changes, and in which way the new provisions will impose the research lines which could be modern and competitive with the state-of-the-art methods and technologies?

By paraphrasing the history I can tell you that: “to posterity the arduous sentence”. At the moment we could follow what we watch and we prepare our university habitat for the changes which are not more postponable and which we are obliged to accept according to the society we are living in.

In 2008, in February I went to the University René Descartes-Paris V where I saw a perfect synergy between actions and purposes addressed to exploit the potentialities which the ‘web revolution’ offered to the university institutions.

The French students/teachers enjoyed some room inside the university server where they could input, catalog, and keep all the documents, the bibliographical researches, the thesis, the publications, the images, the scientific/clinical images and their personal comments starting from their first university year; all of that documentation could be viewed and corrected by the student/teacher for 24 hours a day and from any personal computer without any geographical limitations.

Moreover, the students/teachers were periodically invited to follow the training courses on how you can plan and make the bibliographical researches on Internet, and, more precisely, in the field of the main current web search engines regarding medicine-
dentistry. Then the University of Paris “turned page” and planned again the needs of the Academy according to the social and technological changes and to the new opportunities offered.

At that time I was wondering and today I am wondering: according to the new Internet potentiality, what the Italian University world is planning and is doing, or better, what should be done?

Firstly, it is important to be aware that the scientific research, the medicine, the dentistry and all the academic world, from Australia and from Ecuador, speak just one language: the English one. Then the English language should be institutionalised, as the official second language to be used starting from the first training steps as it already happens all over the world both for the teachers and for the students.

Planning some courses of mandatory training on how to “interface” with the web and with the search engines for scientific and bibliographical contents. PubMed and Cochrane are the Internet web sites/data bases most known and visited for the bibliographical research, but their potentialities are very often just partially or minimally exploited. Generally speaking, the Italian students which access the medical data bases of the web, as PubMed, they do not know the criteria for the search and for the exclusion, the MeSH to be included in the search field, the strings (which limit the bibliographical research) to be indicated, such as AND/OR/ADD etc. Using some simple words, the student - and often the teacher – is not prepared to formulate a correct query (with a limited and precise field of research) in PubMed. For a better understanding I would like to make an example: if my query in PubMed concerns the adhesive interface among fiber pin, adhesive/composite core cement, dentin and the resistance of the adhesive link with the test “pull-out”, it will not be possible to simply include in the search field the words “fiberpost”, “dentin”. With a query formulated in that way PubMed, very probably, will give me as a result from 10,000 to 20,000 bibliographical references which just after an endless and stressful selection will be reduced to a smaller number such as 10 references, or even less, which could reach our research parameters and then what we are truly looking for.

How should we formulate our query? Fiber-post AND/OR post AND self-adhesive luting cement AND/OR pull-out test. Thanks to that query PubMed will surely give us a much lower amount of bibliographical references (from 50 to a maximum of 100) and will effectively shorten the selection/reading and validation times for the bibliographical references and for everything connected to the research of printed or digital full text articles in the relevant digital library.

It is intuitive that the above described example is not quite exhaustive in comparison to the unlimited potentiality which PubMed or Cochrane can concretely offer to the user.

A bibliographic/scientific research, therefore, can not put aside a good knowledge of how to formulate a correct query, of how to apply the criteria of research and exclusion, of how to use the syntax to include the “limitations” to the research such as the years limitation, the periodical, the key words, the MeSH construction till the most complex “AND”, “OR”, “NOT”, “#”, etc. Therefore, the bibliographical research has to be attentively analized, planned and “saved” inside
the same web site before performing the true research, keeping into account that the data bases such as PubMed allow us memorize, archive and find all the “palimpsests” of our researches in any moment.

Once you get the preliminary data from the data bases and once they have been saved on our personal computer or into our directory on the university server, then it will be possible to consult the digital library of his own university, very easily also staying at home, and it will be possible to download all the full text articles in PDF format files.

The most of the Italian digital libraries subscribed to different sets of universal periodicals (i.e. EBSCO-Science etc.) which contain numerous periodicals of the same sector; therefore it will not be difficult to find publications from the *Tokyo Dental Bulletin* or from the *Acta Odontologica Chilena*.

Not too much years have passed from the time I used to go (as a student) to the library of the *Università Cattolica di Roma*: after a long and stressful research in the paper archive - where I could or could not find that particular article - only after having purchased the coins for the photocopier machine, and after having queued for some time I could go home with my greatly desired article. Then please turn page and accept the true function of the words, we could ideally be close to Leone XIII and concretely write our “Rerum Novarum” of the university always considering that if the Italian University is still at the starting point, some other universities, in Europe, are already ‘on the podium’ to receive the golden medals.

Cordially and professionally

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