

Editorial

Our journal arrives at its 9th issue with an extremely important result: its inclusion at QUALIS list, which indicates an initial recognition of our quality¹. We have been included in the Engineering III list and also in our area's (Computer Science) list, both at the B5 classification level.

In spite of the several happy e-mails we received from friends and colleagues, I believe that the classification level at which we were included does not reflect our true quality (which is a lot bigger) and that this discrepancy is due to flaws in the evaluation process, not in our journal.

As stated by our area's committee, the classification is due to the result in JCR, an index that represents the number of references to our papers. This punishes severely new journals, especially those in Portuguese (our case up to issue number 7). According to the evaluation committee, only after years passed and we worked hard on propaganda and on publishing high impact papers that will be referenced, we will slowly increase our standings at JCR.

This statement is imbued with the major problem of the evaluation process, namely the fact that it is based exclusively in numerical criteria. We could discuss the true value of JCR, which we will not do here², because this index is not the problem, but yet the fact that the process is based on one index.

The true value of a journal cannot be measured solely by the impact of the papers it carries. Obviously, this is relevant, especially for the top publications (those at A1 and A2 levels), but to summarize the whole process into a set of indices is to diminish its importance and to waste an opportunity to improve the whole Brazilian scientific journal sector.

The quality of a journal is also measured by several other dimensions. Among them, we can include the true pertinence to the field³, true periodicity, review process (whether it is double blind, the dialog between reviewers and authors, etc), the quality of the reviewers and of the editorial board, the turnover time and several others.

¹ When I was writing this editorial, the QUALIS list had two errors: in the Engineering III list, our ISSN was wrong (1963-5605, instead of 1983-5604) and in the Computer Science list, our name was listed as *Sistemas de Informação (Macaé)*, instead of our correct full name.

² A very interesting reference to a deeper analysis of the true value of this metric can be found at the Web, at the Internet address given by http://www.elsevier.com/framework_editors/pdfs/PerspectivesI.pdf.

³ In order to understand the relevance of this issue, let us give an example. The *Journal of Tribology* (ISSN 0742-4787) was classified as level B4 in Computer Science. Nevertheless, when we look at its own purpose declaration (available at <http://asmedl.org/Tribology>), we can see that it is a journal on the research on fluids and other applications. Its quality is not under dispute, nor is the fact that Computer Science is a multidisciplinary field or the fact that Computer Science is a "middleware" science that will make it be used in several other areas. Nevertheless, does a deeper analysis of this journal warrant its inclusion in the Computer Science list or does it belong to one of the Engineering lists? Perusing its two last tables of contents, I believe that the latter is the true case. I believe that this discussion must be made neither on a case by case basis based on the journal's archives and not on the history of publications by Brazilian researchers nor on some bibliographic index.

Obviously, in order to analyze all these criteria, we need a personal analysis of each journal, a process that is similar to the one the ministry of education uses to evaluate higher studies institutions. One or more referees must interview authors, reviewers and analyze all these aspects (probably in an electronic fashion, in order to minimize expenditures) in order to effectively know the editorial process.

Once in possession of these data, they could be combined with the numeric information in order to create a classification. For that, we have extremely capable individuals that could verify the importance of each aspect and create either weights or other combination methods to generate the final stratification.

It must be clear that this process is more expensive and demands a lot of time from a larger group of people. Besides, it should not be performed at such long stretches of time like today (once every three years) for this a period of time that might be too long for the survival of a new journal. The adoption of new criteria in staff selection, such as inclusion of volunteers or of editors from all national journals (or any other the committee may deem more advisable) is of utmost importance to insure that this more detailed evaluation might become viable.

This editorial is not intended as a criticism on the staff currently involved in the evaluation process. I have full confidence in the ability and the honesty of all members of the journal analysis committee. The problem is that the process is based on faulty premises that can cause a substantial impact on the quality and quantity of national journals.

Before starting an evaluation process, we must perform a strategic analysis of all national needs. Do we need more national journals? If the answer is affirmative, what is the criterion to select them? What kind of publications do we want to motivate? What kind of research is interesting to our country, and how do we want them to be communicated to the audience? Do we want to publish in English or do we want to give incentives to the proliferation of Portuguese? All these questions (and many others) have ideologically opposed answers, which must be selected clearly before creating the classification criterion.

By restricting itself to a single index (either JCR or any other), CAPES effectively decides that other people make strategic decisions to motivate and guide national science. Is that what we really want? In case the answer is yes, let us keep the process as it is. Nevertheless, I believe this question was never made. Hence, any available answer will be an automatic one, not one that results from a true reflection on the paths that national science must follow.

I am deeply pragmatic on this issue. I admit that the observation alters the state of a system. Hence, any quality criteria adopted by CAPES through QUALIS will instantly become a motivator of Brazilian academics. Basically, everyone will prefer to publish in a B4 magazine instead of a

B5, due to the fact that the authors and its graduate programs will be better evaluated.

We can argue whether or not this is correct, with valid arguments both in favor and against this stance. Nevertheless, this is a real behavior and until we can change this concept, we cannot diminish the importance of the classification process.

These thoughts are not due to any eventual impact of this evaluation is our journal, but yet to what we consider to be our true importance in Brazilian science and to the path we believe that Computer Science must follow so that our country achieves a rich and sustainable future.

All these things considered, we state that our posture and our principles remain unchanged. Our goal is to be a quality journal that serves as a communication channel between authors and reviewers, allowing for the latter to use their experience and knowledge to contribute with the former and guide their efforts to improve their research. We believe that this will finally result in higher quality papers and in an intellectual and scientific production that will make our whole country better.

I would like to end this editorial by stating that we do not believe that this is our final destination. We still have a lot to improve and believe that soon all indices and formal evaluation methods will reflect more precisely the true quality of our process. We believe that we will be higher in the evaluation scale and are sure that our efforts towards Excellency will not be neglected after we establish our roots deeper.