

ST-OPEN is an overlay+ journal

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ST-OPEN was established in 2018 [1] and a whole year was required to reach the organizational and technical level to start publishing reports according to plan. Now, in November 2019, we are systematically screening and selecting possible contributions as well as organizing the internal and external peer review process.

Difficult mission

To start a journal, many things need to be in place before the first manuscript is processed. We had to deal with the issues of journal visual design, organization and legal installation of all necessary bodies required by a journal published by a middle-size university. At

the same time, we had to design the journal's website and make it easy for the readers to navigate for information. For a multidisciplinary journal, ranging from humanities to natural and biomedical sciences, this was rather difficult. We organized the content according to the scientific fields defined by the Organisation for Economic Cooperation and Development (OECD) [2] and that of the Croatian National Science Council [3]. We also decided to offer the authors the choice of two citation styles, that from the International Committee of Medical Journal Editors (ICMJE) [4] and the American Psychological Association (APA) [5] to accommodate practices across research fields. The authors are free to decide which style of the two they will use. Of course, they need to consistently use only one style in a single manuscript.

The exploration of the University's repository showed a wide spectrum of practice for a seemingly simple concept of storing masters' theses (as well as other scientific works like bachelors' theses and doctoral theses) in the repository. Some schools make graduation theses fully open, and some only for their librarians or faculty; some allow access only for the individuals designated by the author, some delay the access for an undefined time period, whereas some let the public see the titles and abstracts but not the whole thesis; some use all of these combinations; some have own repositories and some have not yet started

storing the works in the repository. Most of them have stored fewer theses than the number of students who graduated (Gudelj et al., unpublished). As a journal, we cannot rectify the current situation with the repositories because the variety of practices stems from the current legal framework, so we need to work on dealing with such obstacles. The editorial by Damir Juras in this issue delineates the legal grounds of the problem, and suggested a solution which we hope will be accepted at the national level [6].

Overlay+

There is good news, though. The idea to organize an overlay journal for students' graduation theses received surprisingly many compliments and encouragements. Although a good part of were big wishes and small hopes, an extramural view of our present status is best summarized in the editorial of our (first) Advisory Board member, Dr. Elizabeth Wager [7].

However, several experts in scientific publishing pointed to us that our journal is not strictly an overlay journal because we, in cooperation with the authors of the graduation theses, intervene in the texts stored in the University's repository. These interventions are not small, cosmetic or technical, but substantial – we aim to transform theses that are usually 50 to 100 pages long into brief and concise research reports, with substantial alterations in the organization, style and language (from Croatian to English) of the manuscript. We thus decided out journal an **overlay+** journal. We hope that the time and our results will prove us right in taking on this challenge.

University-level science education

Fostering student research and teaching science methodology and skills of preparation and publishing of the respective reports are a challenge for any university program. Although graduation theses at bachelor's and master's level are mandatory in Croatia, only a few schools offer mandatory full courses that cover all phases of research, from hypothesis to publishing [8]. Some schools offer small elective courses and the majority leave that aspect of education to the student mentors. Our experience is that the students look for thesis mentors only at later study years when there is no sufficient time to learn research skills and get experience in thesis writing. This makes teachers reluctant to mentor students and students to look mostly for graduation thesis topics that are easy to complete in a short time. The general outcome is that both students and teachers see the work on graduation theses as a nuisance, and most of the theses do not reach sufficient quality or prepare the student for future encounters with research aspects of their professional career.

We strongly advocate that universities should intensify research education programmes to reach the aim that their graduates acquire the habit of consulting reliable scientific sources of information (i.e. science journals) in their professional work, as well as acquire the skills in presenting their professional and research result clearly, both to the professional community and the public.

Working with students and inexperienced researchers

Our experience is that, even though serious scientific work with many students is not easy [9], it is useful for a significant portion of them. We have previously shown that research teaching may be organized as a mandatory course [10], and that students learn and retain the knowledge of the principles of research [11]. Favourable outcomes can be achieved also with young medical professionals [12] and inexperienced researchers [13]; our unpublished study of 17-hour workshop on planning and writing science revealed that the workshop on average increased the scientific production of the participants for two publications per participant [12].

The editorial process

All said considered, we designed an elaborate editorial process which unites students, mentors and journal's Editorial Board members in all phases of the process, through which we transform a graduation theses a research report together in our **overlay+** journal.

The *selection* of the promising graduation theses is done by the members of the Editorial Board, which includes members of all University's schools and a student representative. All of them organize small local Editorial Boards, which search their school or department's University repository for the suitable theses. Students are invited to consider working with them on producing a manuscript from their theses. The journal is also open for the works of students and researchers who are not members of the University of Split: the OPEN in our name is not only for open access but for the openness to all interested in contributing to promote good research.

The *transformation* of the thesis into a scientific report is performed by the same team (members of the Editorial Bards, students and mentors), under the supervision (close collaboration and advising) of the Editors.

Review process is executed in two phases – intramural review while the article is still in Croatian, and extramural after it is corrected and translated into English.

Translation from Croatian language to English is done by the Journal.

To ensure that the effort of the Journal and all involved in production of the final article is honoured, the authors and the journal editor sign a publication agreement to ensure full dedication of all involved to the successful publication of the article.

Expected impact of the Journal

All journals strive to contribute to the general knowledge, which is difficult to measure. In addition to that overall aim, we have clear goals for the ST-OPEN. We expect to increase the scientific productivity of the University of Split as a part of the world's scientific community. If we grow to transform 5-10% of approximately 2,000 graduation theses per year into good scientific reports, we would consider it a significant achievement. More than such quantitative impact, we expect an effect on the attitude of students towards

research. If 200 students out of 2,000 who graduate per year are engaged in serious work on the transformation of their theses into a scientific article, and another 200 are engaged as internal reviewers, the long-term effect may turn out to be significant. Our modest research on the effects of assistance to the young, less experienced researchers [12] showed that such an editorial effort may bring about not only usable new research reports, but also a long-term change in the attitude and activity of the authors. Doing research and publishing a research article transforms them into researchers or at least professionals who respect scientific work and use relevant scientific sources of data. The experience that an early stage researcher gains through the rigor of writing a scientific report and the review process is precious for the adoption of seriousness, modesty and critical thinking that await the life of any human being, let alone those who decide for an academic career.

Prospects

At present, we do not know the long-term fate of our journal. The encouraging elements are the enthusiasm of the University and all involved in the journal, particularly the members of the Editorial Board(s), as well as the interest of students who came to us with the wish to collaborate. The challenges that remain are a rather low number of screened articles that are of interest to ST-OPEN and reluctance of students to take on a challenge of writing a research manuscript. We are still waiting for the full establishment of the Student Editorial Board and its activities on the promotion of the project among students.

We hope to become an important educational hub at the University, which will influence curricula and scientific production and students' general profile in a way that will be both original and useful.

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