

Academic workload calculator

What problem we have?

In university (in our case in the Institute of Education) there is the need to do four types of work: teaching and supervision, research and development, leadership (roles of the head of a department, institute, programme manager, project, etc.), and serving the society (publishing popular articles, public talks, etc.). It is quite hard to measure workload in these four dimensions but it is needed by the ones who have to balance the workload between people in a unit (at a level of a workgroup, department, institute). In order to that in a more transparent and objective way we have developed in the Institute of Education criteria for calculating workload (attached). Currently we are testing these during year 2017. In order to do that, we need to collect a lot of data manually from different databases (Study Information System, ETIS, WoS, timesheets of the projects) and combine it with some additional manually collected data (what administrative and leadership tasks the people have, what public presentations or articles in media they have, etc.). It is a lot of work and manually people may make mistakes in putting this data together. However, it is needed to avoid the situation where some people have a heavy overload and the others are actually working part-time but have a full time position. We need to make staff-related decisions for hiring new staff, for letting some people to go, for re-allocating some work, etc. For that we need an academic workload calculator.

What is the academic workload calculator?

It's an electronic tool (definitely web-based tool for computers but it might be good to use it in smart phones and tablets a well) that 1) collects information from different databases, 2) allows to add data about some information that couldn't be found from databases or otherwise (e.g. by googling), 3) allows to adjust the formulas for calculating workload, 4) allows to adjust the automatically collected data by some people with given rights, 5) makes analysis of this data, and 6) provides output that shows workload in different dimensions on the level of a person and a unit (the unit level should be adaptable and someone should have the administrator rights to give access on different levels; for example, the head of the institute should see the information on the level of the institute, on the level all departments separately, but also on the level of every particular person while the regular staff member should see only his/her own data). In addition, the position (professor, associate professor, lecturer, research fellow, etc.) should be taken into account in calculations – it should be possible (by the administrator) to adapt the expected workload in case of these positions (the formulas for specifying what is 100% in each case and what is expected in each dimension).

For calculations this calculator should collect information from different databases. For example, it should extract from study information system how much work has been done by a person in different courses. There should be taken into account how many study groups there are in a course, how many students there are in each group, how many ECTS credits this course gives, and how the workload for the course is divided between the teachers of this course (initial calculation based on the hours of every teacher but there should be available the possibility to change this division by the person in charge of this course to take into account the workload for managing or developing the course). In a similar way data about supervised students (practice, theses, attestation of PhD students) should be collected. About research work data from ETIS should be extracted – how many publications in different categories (1.1, 1.2, 3.1) have been published, how many authors there are in these from the Institute of Education (a fixed list of people). In this case, again the first author of the paper should have the possibility to adjust the workload between different authors but by default it might be divided equally between the authors. However, there is also needed data from timesheets of the projects. Finally, there is some information that probably should be added manually, e.g. how many public speeches someone has had (if this cannot be found by a google search), if someone has a role of programme manager, a role as a head of a department, etc. All this data should be used in a formula that shows a percent indicating workload on a level of a person or a unit (department, institute). There is needed the sum but also workload in four dimensions and their sub-dimensions (e.g., teaching, supervision of practice, supervision of theses).

Which users would need it?

There are two types of users: 1) the staff members who add some data and check correctness of information about themselves or estimate the changes in workload they have, 2) the heads of the institutes, departments, etc. who have to look the unit level to see the changes in workload of the unit, the balance between people, etc. to make staff-related decisions and take actions based on that (to decrease/increase salaries, to add/remove tasks, to hire new people or let some people to go, to ask some people to learn new skills in order to continue in a full time position, etc.). It should be possible to look back and forward with this calculator – to analyse the past and predict future needs.