

# Measuring Open Access in Finland



The Finnish Open Access monitoring efforts are integrated with the national data collection conducted for the Ministry of Education and Culture. The collection of data on research publications encompasses universities, universities of applied sciences, central hospital districts and many of the state research institutes. The quality of the OA data has had problems in the past, but it has improved significantly starting from the year 2016.

## Collecting the data

The publication metadata is collected by CSC – IT Centre for Science from the CRIS of each participating organization. A new automated data collection process was launched in 2016, but while some of the organizations update their data daily, many others still upload their data on annual basis. The data is stored in the Virta service built by CSC, and the de-duplicated publication data can be browsed at Juuli (<http://www.juuli.fi>), a VuFind-based discovery interface developed by the National Library of Finland.

Year of Publication	▲
2016	✓
Open Access	▲
Gold OA publication channel	12,166
Green OA	7,054
Other OA availability	1,084

Starting from 2016, the Ministry has improved the way the OA status information is reported. There are two separate fields for indicating the OA status of each publication. One of the fields indicates whether the publication is OA via a Gold or a Hybrid/Other channel, and the second field is used for indicating whether it has been deposited into a repository (Green OA).

## The national definition of Open Access

The aim of the OA monitoring effort is to get accurate data on the prevalence of legitimate OA within the publication output of the participating organizations. To make this possible, the OA definition used in the data collection has been made as clear as possible:

- The publication should be at least free to read
- Gold/Hybrid and Green Open Access are all accepted
- Embargoes are allowed for Green OA but not for Gold or Hybrid (= no delayed OA)
- Depositing into an institutional or a subject-based repository is OK, but papers available at personal/project websites or at sites like Research Gate or Academia.edu don't count
- The OA version must be peer-reviewed to qualify

## Some further issues with the data

Although the quality of the data has improved, it is still far from perfect. Some of the organizations are clearly putting more effort into the collection and verification of the data than others. At the moment no data is collected on the embargoes, the use of licenses or the APC costs associated with each publication.

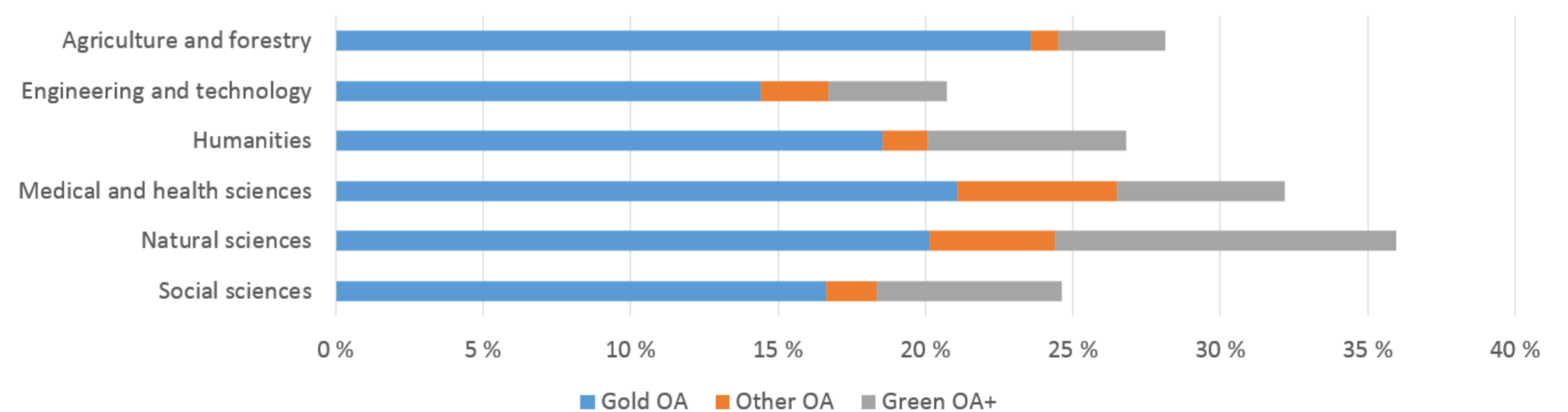


Figure 1: Peer-reviewed articles and book chapters at the Finnish universities in 2016, percentage of OA by field of science.

## Findings from the 2016 OA data

According to the current dataset for the year 2016, 28.9% of all peer-reviewed articles and book chapters produced within the Finnish universities were reported as being Open Access. The share of OA among the peer-reviewed journal articles was highest within the natural sciences (36.0%) and lowest in engineering and technology (20.7%), with humanities, medicine and health sciences, agriculture and forestry and social sciences falling in between them.

At the university level the amount of reported OA publications varied from 24.4% to 52.3% of the total publication output. The amount of overlap between Gold/Hybrid and Green Open Access was higher than expected. Only about 40% of the articles that the universities reported as being openly available via Green route were originally non-OA publications. The share of additional OA provided by self-archiving (Green OA+) varied from nearly zero at some universities to 28.7% of the total peer-reviewed article output at the University of Jyväskylä.

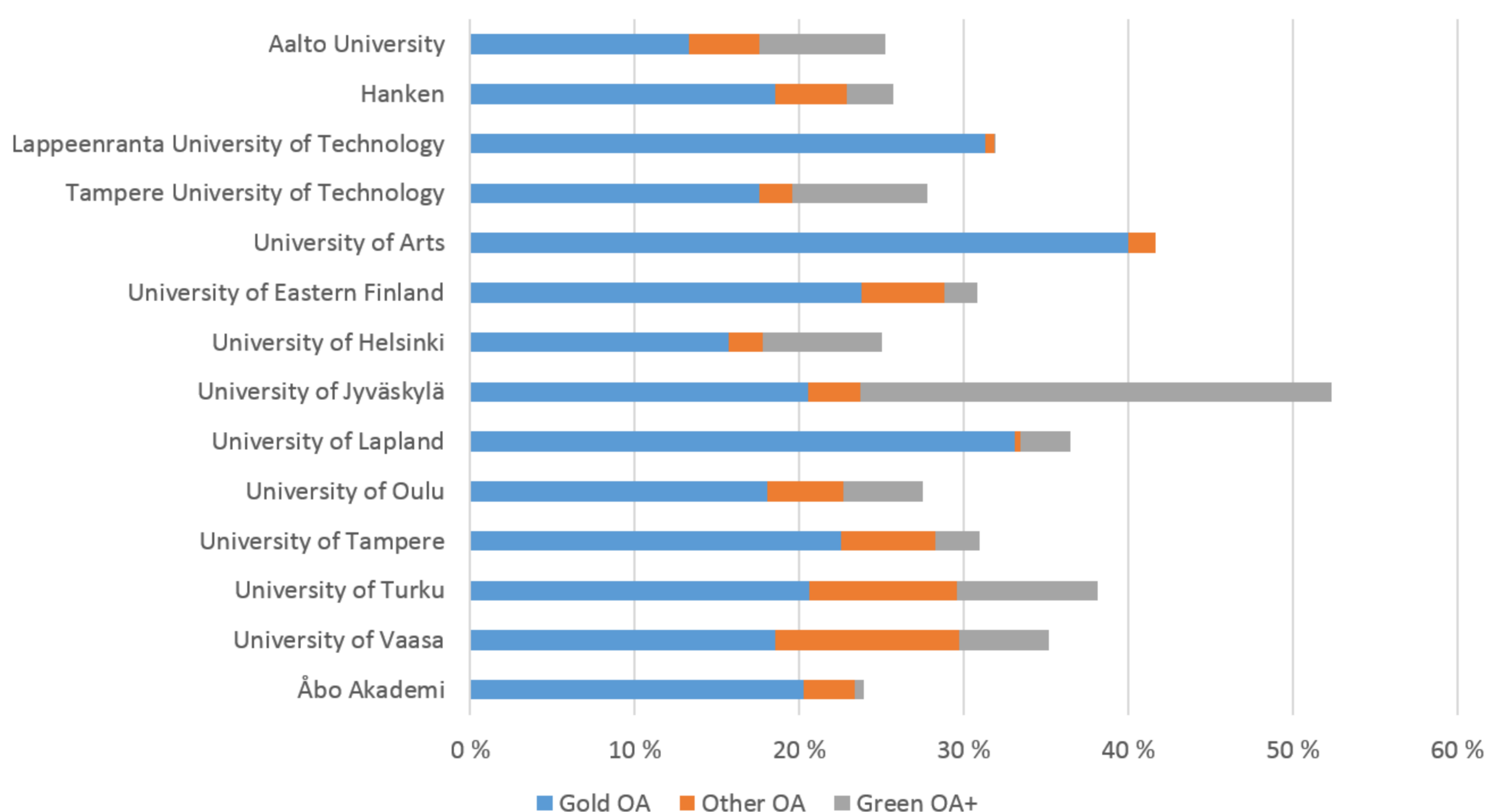


Figure 2: Different types of OA at Finnish universities in 2016, peer-reviewed articles and book chapters.

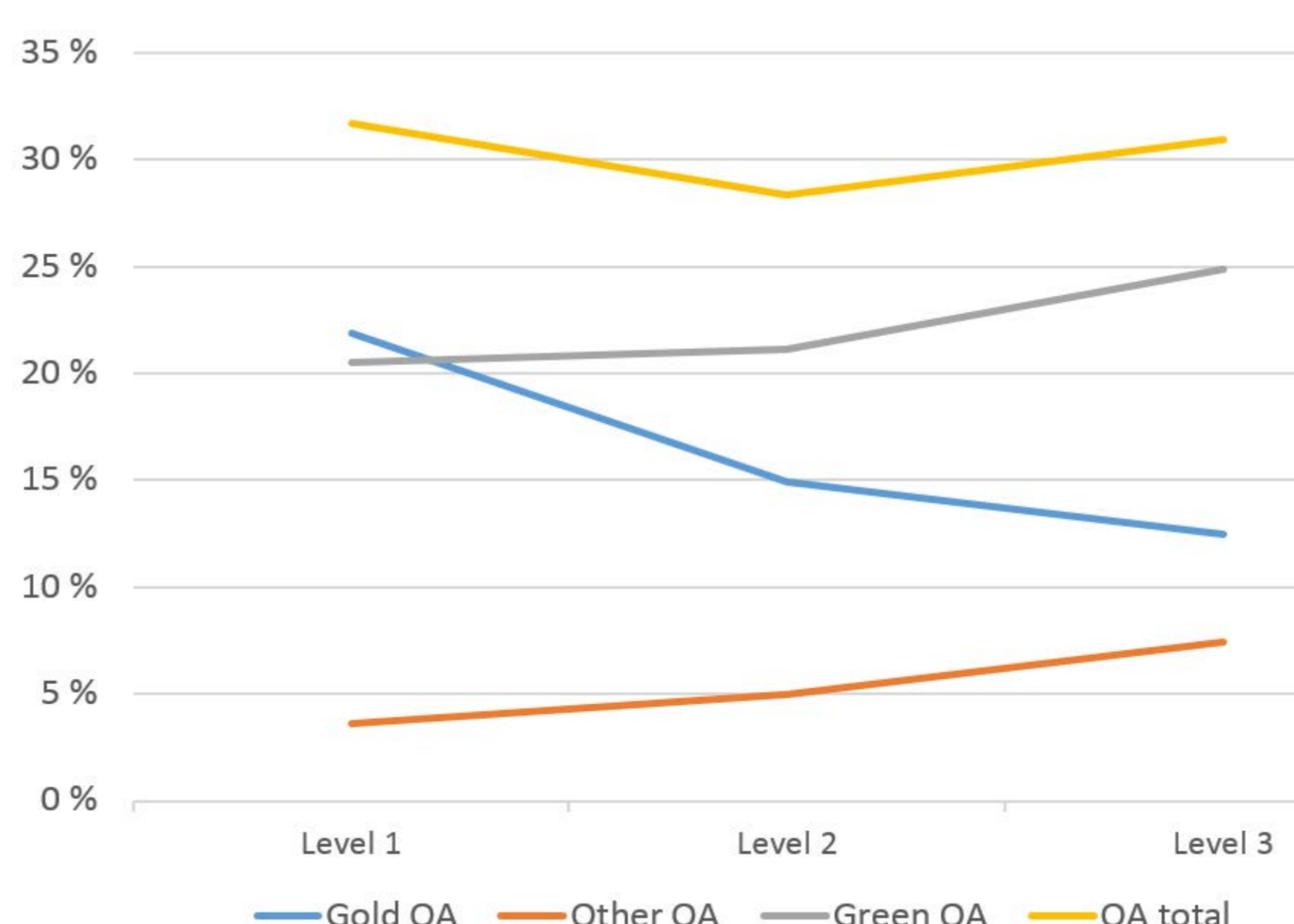


Figure 3: Peer-reviewed journal articles at Finnish universities in 2016, the share of OA vs. Publication Forum ranking of the journals.

## OA and Publication Forum

Publication Forum is a Finnish national rating and classification system to support the quality assessment of research outputs. The three-level classification rates the foreign and domestic publication channels of all disciplines as follows:

- 1 = basic level (80% of publication volume)
- 2 = leading level (15%)
- 3 = highest level (5%)

According to the 2016 publication data, the share of Gold OA is highest at level 1 and lowest at level 3. On the other hand, the share of Green and Hybrid OA is highest at level 3.