Table 1: The DARTS Framework

Dimension	Attributes include	Description
Discoverable	- Indexed by search engines - Sufficient, good quality discovery metadata - Links - Persistent unique identifiers - Explicit rights statements - Open and widely used standards (for all of the above attributes)	This may be the most fundamental baseline condition of open (meaning that if an object is not discoverable, it is not open). However, there is a wide range here, including open with bad metadata or links and no or faulty identifiers. Use of expert curation is a best practice in ensuring discoverability.
Accessible	- Free (in terms of cost) to all users at point of use, in perpetuity - Downloadable (binary) - Machine-readable (binary) - Timeliness of availability (spectrum)	Generally drives whether we currently consider something to be open, although many variations exist (taking into account embargoes and other conditions).
Reusable	- Usable and reusable (including commercial uses) - Able to be further disseminated - Modifiable	Openness is advanced by having fewer restrictions on reuse, dissemination and modification.
Transparent	- Peer review - Impact metrics - Transparency in the research process (based on the Center for Open Science TOP Guidelines), including data transparency (metadata and level of availability), and software (including version and operating system/hardware) - Research design and analytical methods (plus software and versions), including citation standards, pre-registration of studies and of analysis, and replication - Author transparency (funding source, affiliations, roles, other disclosures such as conflict of interest)	Serves the research lifecycle, given that outputs of research become inputs. Some of the factors that affect transparency include the software used, inclusion of data, the transparency of the peer review process and analytical methods, and more.
Sustainable	- Technically sound hosting infrastructure - Long-term financial plans in place - Commitment to sound legal and ethical principles	Financial sustainability is essential for medium and long-term use. Consideration must be given to the method by which content will be hosted and curated and services be supported. Sustainability plans might rely on existing funding sources (e.g., government, foundation, or NGO support) but without incurring an increase in such reliance (or ideally with a decrease in such reliance). Alternatively, sustainability could be achieved with a reasonable business plan.

Source: **OSI 2016 and OSI 2017.**