Scientific quality assurance I: Research assessment and new metrics

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The meeting started with the participants forming 5-person groups to prioritize issues for the following group discussion. The following categories of issues were identified:

Group 1: Subject-specific measurements required?

Group 2: Consolidation of metrics across different sources (IR, publisher site etc).

Group 3: Types of interaction / influence creation of social network of an object?

Group 4: Different indicators to assess research.

Group 5: Data standardization with a focus on specificity of metrics and metrics for non-articles.

Two clusters of issues were subsequently discussed in more detail:

1. Standardization of usage data recording and aggregation:
   a. Need for standardized model of usage data types and their instantiations, e.g. a taxonomy or ontology of usage types and their mapping to the various mechanisms to record the required data fields.
   b. Infrastructure recommendation and practices. The proposal by Bollen et al. (JCDL2006) was discussed: http://tinyurl.com/2zzb2p
   In addition, the results from the Knowledge Exchange workshop on Institutional Repositories were communicated: http://tinyurl.com/2y8hoo
   c. The involvement of standardization institutions, e.g. ISO standard for usage definition, KE as agent for recommendations, extension of COUNTER standards to focus on article level data suitable for metrics beyond simple statistics.
2. Metric issues:
   a. Subject specific measurement: Can we propose generic metrics, indexes that fit all domains, or do we need discipline specific metrics.
   b. Addressing the abuse of metrics in assessment exercises:
      i. Simplistic normative approaches by governments (setting of indicators and metrics) – often over-simplified (e.g. Norway, Croatia)

        ii. RAE criticism of metrics for Humanities (book science), Arts STM will be metrics based (raw metrics like IF)

       iii. Multifaceted approach, Institute for Research Information and Quality Assurance: http://www.research-information.de/

c. Considering other factors in assessment:

        i. Time spans are important, e.g. in tenure decisions and performance evaluations.

       ii. Existing and new metrics can be used in a complimentary manner.

       iii. The need for metrics for new types of scholarly material (data …).