

NSDL Web Metrics

'Web metrics' is a term that describes various methods for analyzing traffic to and through a web site. While web metrics are promoted as being of interest to commercial sites seeking to maximize sales and advertising revenue, they are also useful for non-commercial and not-for-profit sites, where they can support web site usability studies, identify user demographics, and track trends in site usage.

For the first years of the NSDL program, individual projects carried out their own web metrics. Practices among projects that did record web metrics varied considerably, and there was little standardization in tools and measurements or sharing of analyses and results. Since April 2005, Core Integration has contracted standardized cross-project third-party web metrics from Omniture (omniture.com). So far, these services have been implemented for nsdl.org, DLESE, SERC, and several Pathways Projects (note that these projects are still free to implement their own web metrics tools and analyses).

Web metrics for NSDL projects as reported by Omniture can be considerably lower – perhaps as much as 60-70% lower – than the web metrics collected by individual projects. This is because Omniture maintains a strict and standardized definition of what a visit to a web site entails, and excludes visits from bots, crawlers, and other indexing software. The unit of analysis adopted in Omniture analysis is that of the 'visit,' which Omniture defines as:

The number of times a visitor browses to your site. A visit begins when a person first views a page on your company's Web site, and lasts until that person stops all activity on the site for a period of 30 minutes (Web analytics general industry standard). The industry assumes that, given the length of time, the person likely closed their browser and reinitiated a separate "visit." A unique visitor could be responsible for multiple visits (or sessions) during a day, month, and year.

NSDL Core Integration believes that the unit of the visit is a preferable metric to page views or hits, as a visit is often composed of multiple page views (that is, a visitor may view more than one page on each visit), and a page view may in turn be composed of a number of hits (including one hit for the page, and one hit for each image on the page). A single visit may thus include a large number of hits.

Traffic on the NSDL portal site, nsdl.org, has been measured by Omniture since April 2005. As of April 2006, nsdl.org appears to be receiving *approximately* 14,000 visits per month (i.e. approximately 170,000 visits a year), and that the trend is upwards. Omniture web metrics have been introduced to the Pathways projects only in November 2005, and continue to be introduced as new Pathways become operational. Preliminary analysis suggests that traffic across NSDL sites (see list below) is of the order of 110,000 visitors/month (i.e. approximately 1.3m visits a year) and is trending upwards.

Future directions

The Omniture web metrics offer a lot of potential for NSDL. They provide a reliable, standardized, program-wide view of NSDL use, and thus provide the basis for more complex and comparative measurements across and between different Pathways projects.

In order to extend the utility from the Omniture web metrics, discussions are underway with Teachers' Domain (the Pathway project that is part of WGBH, Boston), regarding the development of tools and services to support the aggregation and visualization of cross-project Omniture data. Teacher's Domain is a particularly suitable test-bed for this work, as the Pathway's traffic constitutes a significant proportion of the overall traffic being monitored by Omniture. Initial discussions with Teachers' Domain have centered about the development of

data overlay tools and software, based on the data sets/categories already being collected by Omniture, that would permit the simultaneous visualization and comparison of data from different NSDL projects. Such tools could also serve as guidelines for refining the data sets currently requested from Omniture.

NSDL Projects With Planned, or Partially- or Fully-Implemented Omniture Web Metrics

Core Integration (nsdl.org)
ComPADRE
CSERD
DLESE
Math Gateway
Middle School Portal
NEEDS
SERC
Teachers' Domain

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