Objective:
The objective of this paper is to show what challenges academic libraries in Norway face, when it comes to evaluation of efficiency, impact and outcomes with indicators as tools for management and decision-making.

Background:
Part of the paper is based on a study of approximately 75 leaders of academic libraries in Norway, and on a report from testing of national indicators, done by five academic libraries.

Method:
Data was collected through an electronic survey.

Results:
The results include the library leaders’ perception of challenges when it comes to goals and quality and how to use them for support of decision-making and management, as well as using indicators for marketing the libraries. Also, there is a discussion on the practical use of the national indicators for academic libraries, based on testing performed at Humanities/Social Sciences-branches of five university libraries.

Conclusion:
The key conclusions include suggestions for development of management skills and tools for the leaders of academic libraries.

Introduction: Use of indicators in Norwegian academic libraries
“The theories and research about use of indicators point to some general requirements for indicators. They must be valid; that is: Measure what is sets out to measure, by answering to a very precise question and nothing else. Also, it must be accurate. It must be useful for decision-making and it must be reasonable easy to get the data.”
(Pors 2007:18)

In 2010 the Norwegian library authorities decided on a set of indicators for academic libraries, for the libraries to be able to both look at development and tendencies longitudinally, as well as to be able to benchmark with other academic libraries within or outside their own organization (Redse 2010).

The Social Science and Humanity-libraries in the four largest universities in Norway (Oslo, Bergen and Tromso Universities and the Norwegian University for Science and Technology) did some testing of the usefulness of some of the indicators, and the results were reported at the QQML2011-conference in Athens (Landoy 2011). In 2012, the University of Agder also joined in the testing, and updated results were reported at the bi-annual Norwegian library meeting in 2012 (Bøhn 2012; Langseth 2012).

In the mean time, the National Library had taken over the responsibility for the indicators, and the Norwegian association for higher education institutions, library group (UHR-B) had also been looking at the indicators. The testing and benchmarking showed that there were problems
with the data and the data collections, and UHR-B appointed a working group to administer a large-scale test where as many as possible of the academic libraries tested four of the former 24 indicators, and also to assess the indicators as tools for decision-making, reporting and benchmarking (Saxrud, 2012).

Bench-marking process and results
In the bench-marking between the Social science and Humanities libraries it became clear that the data collection for the indicators was not easily done. Some of the data were reported in national statistics, and some had to be gathered locally since the unit was not the whole university library but branch-libraries. For some of the indicators that were tested data such as “number of academic staff this library serves” or “number of students served by this library” also had to be gathered, and it was challenging to find the best and similar data for all the libraries that were involved in this.

“On the other hand, this is an indicator that is useful for reflection on our main purpose as an academic library, and it can start us thinking about other and better ways of finding the information we need for making good decisions, in close collaboration with our main stakeholders in the university itself.” (Landoy 2011)

But the results of the tests also showed some remarkable similarities and differences. Some of them could quite easily be explained by historical or geographical factors; others were not so easy to understand.

One example of such a result was the differences in primary users divided on library staff, where NTNU and the University of Agder had around 250 users per library staff, while Bergen, Tromsø and Oslo had around 150 (Bergen) or as low as 100. If we look at this as a measure of effectiveness, of course the differences are interesting. There are however other explanations – how many branch libraries are they divided in? The more branches the more staff will be needed. There is also a suggestion of an impact from differences in the organization of the library, with more or less delegation of core tasks like cataloguing one will find library-staff with these functions also being counted in some of the libraries, and not in others (Langseth 2012).

Another variable tested was the percentage of the acquisition budget being used for electronic information resources. The assumption here was that University of Tromsø library would have the highest amount of electronic resources, as they have for the longest time been the most outspoken about the advantages of electronic material. Tromsø had a high degree, but to our surprise Oslo, Bergen and NTNU used almost as much – all of them around 80 %. Agder, not having medicine and the heavy sciences among the subjects offered by the university used around 65 % of the acquisition budget on electronic resources. (Langseth 2012).

We also looked at the numbers of visits to the library, divided on the number of patrons in the primary user group (academic staff and students of the faculties). This is not an indicator, and has never been, but it is a part of the statistics that is collected every year. This variable will say something about the traffic in and out of the library premises. It can be useful for looking at longitudinal trends in a specific library, or to reflect on differences – how much impact does a coffee-shop have? In the libraries with a coffee-shop close, the number of visitors was higher than in the ones without coffee-shops (Landoy 2011).

The use of national indicators for academic libraries as an obligatory part of the library statistical input in this form is quite new. Library statistics has been collected from each library – academic and public – for a long time, and some indicators have also been available for voluntary use. The
This short overview details a little about testing a few of the indicators that have been developed as indicators for academic libraries as tools for quality development, benchmarking and longitudinal trends and development. Are the academic library leaders equipped to coping with this?

**Academic library leaders and use of indicators: Data and discussion**

In the fall of 2011 an electronic survey was sent out to Norwegian library leaders. The survey included over 250 questions about several different topics, including some demographic questions (age, gender, size and kind of library, how long and in what position the respondent had worked in the library etc). There was also a group of questions about what challenges the library leaders were facing, on behalf of themselves and their libraries.

76 of the 255 library leaders that answered are from the academic libraries. The libraries they report from come in many different sizes and shapes, and the respondents themselves can be library directors, leaders of branch libraries, or project/team-leaders.

**Table 1: Academic library leader’s view of challenges for the future. % rating. Total N=76**

<table>
<thead>
<tr>
<th>Challenges for the future: Efficiency and resource man</th>
<th>High</th>
<th>Some</th>
<th>Med</th>
<th>Less</th>
<th>None</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges for the future: Quality development/man</td>
<td>65.6</td>
<td>21.9</td>
<td>12.5</td>
<td>0.0</td>
<td>0.0</td>
<td>64</td>
</tr>
<tr>
<td>Challenges for the future: Management by objectives</td>
<td>51.8</td>
<td>32.1</td>
<td>10.7</td>
<td>5.4</td>
<td>0.0</td>
<td>56</td>
</tr>
<tr>
<td>Challenges for the future: Economy</td>
<td>40.4</td>
<td>40.4</td>
<td>10.5</td>
<td>7.0</td>
<td>1.8</td>
<td>57</td>
</tr>
<tr>
<td>Challenges for the future: Marketing, demonstrating library’s value/ impact</td>
<td>67.2</td>
<td>22.4</td>
<td>8.6</td>
<td>1.7</td>
<td>0.0</td>
<td>58</td>
</tr>
<tr>
<td>- By use of statistics and indicators</td>
<td>44.1</td>
<td>39.0</td>
<td>15.3</td>
<td>1.7</td>
<td>0.0</td>
<td>59</td>
</tr>
</tbody>
</table>

When asked about the challenges for the future, academic library leaders saw the economy as the most pressing challenge. “Efficiency and resource management” is also important, and “Marketing and demonstrating the value and impact of the library”. The list of possible challenges in the survey was extensive, and for this paper only a few with special focus on efficiency, quality and management by objectives have been chosen. The challenges from this selection that seem to be least pressing for the academic library leaders are “Management by objectives” and “use of statistics and indicators” for purposes of marketing and demonstration of impact and value.

**Table 2: Academic library leader’s degree of knowledge of tools for leadership. %. Total N = 76**

<table>
<thead>
<tr>
<th>Degree of knowledge of management by objectives</th>
<th>High</th>
<th>Some</th>
<th>Med</th>
<th>Less</th>
<th>None</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of knowledge of benchmarking</td>
<td>6.9</td>
<td>39.7</td>
<td>27.6</td>
<td>12.1</td>
<td>13.8</td>
<td>58</td>
</tr>
<tr>
<td>Degree of knowledge of Balanced Scorecard</td>
<td>5.2</td>
<td>25.9</td>
<td>22.4</td>
<td>25.9</td>
<td>20.7</td>
<td>58</td>
</tr>
<tr>
<td>Degree of knowledge of use of statistics/indicators</td>
<td>0.0</td>
<td>11.8</td>
<td>5.9</td>
<td>13.7</td>
<td>68.6</td>
<td>51</td>
</tr>
</tbody>
</table>

academic libraries have reported to and through their own institutions, as well as to the national statistics for decades.
In table 2 we see how the library leaders assess their own degree of knowledge of different tools for leadership. These are just a few of the tools that were presented and they could choose from. Some also chose to skip the question, or to answer “Don’t know/Not applicable”. Among the ones that answered, the highest degree of knowledge was for the use of statistics and indicators, while the degree of knowledge of more specific terms of “benchmarking” and “Balanced Scorecard” were considerably less. Less than 15 % of the leaders replied that they had little knowledge of statistics and indicators, while almost 85 % said the same for their knowledge of Balanced Scorecard and 45 % for benchmarking.

How will the leaders handle the challenges of management in the future? One would assume that the self-observed lack of knowledge of management tools within benchmarking and management by objectives at the same time as the different National Library Authorities emphasizes the use of indicators for inter- and intra-library comparisons would lead to a need for further education among the library leaders.

**Table 3: Academic library leader’s agreement with statements about need for further education. %. Total N=76**

<table>
<thead>
<tr>
<th>Statement</th>
<th>High</th>
<th>Some</th>
<th>Med</th>
<th>Less</th>
<th>None</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack further education in target management</td>
<td>6.3</td>
<td>12.5</td>
<td>29.2</td>
<td>29.2</td>
<td>22.9</td>
<td>48</td>
</tr>
<tr>
<td>Lack further education in marketing</td>
<td>12.0</td>
<td>26.0</td>
<td>20.0</td>
<td>20.0</td>
<td>22.0</td>
<td>50</td>
</tr>
</tbody>
</table>

But the message from the respondents as seen in table 3 is clear: “No, only a little, and mainly for marketing.”

There were no specific questions about needs for further education in statistics and use of indicators, and as seen in table 2 a majority of the respondents reported high or some knowledge of use of statistics and indicators. Still, it is worrying that 35 % that report that they need some further education in marketing, when we see that marketing and demonstrating impact are perceived to become major challenges for academic libraries.

**Conclusion**

Norwegian academic library leaders, along with their colleagues in other countries, are under an increasing pressure to provide the institutions they serve with information about the value and impact of the library to the academic community (ACRL 2010). This is clearly perceived by the respondents to the survey from 2011. The use of national indicators can be one of several answers to the need for comparable data within and between libraries. At the same time, the testing that has been done of one of the first sets of indicators shows that more work has to be done, both in finding the correct data of good quality; as well as understanding what conclusions can be drawn from the different indicators.
References


