I. Introduction

1. Feedback is a way to motivate the respondents to participate in surveys. The feedback could for example be the outcome of the survey, presented in tables or graphs, or result based on the provided data, adapted to the respondent. It can also contain comparisons with data from other surveys, both for the current period and over time. This type of feedback is most relevant in business and public sector surveys, where it can be interesting to make direct comparisons. The same opportunities are rare in individual surveys. Experience shows that feedback is received in a positive way by the respondents.

2. Statistics Sweden collects data on education from the Swedish municipalities. The data is a part of the national monitoring system which is aimed to give an overview of the school system and provide a basis for follow-up and evaluation at both the national and local level. To express the importance of reporting data of good quality, Statistics Sweden has been working with a method to increase the motivation among the respondents by giving them a feedback report on the provided information.

3. This paper will describe how Statistics Sweden works with feedback for surveys on education in the public sector, and the development of a feedback report. We have performed an evaluation of how the feedback is perceived by the receivers. The initial results show that it is highly appreciated and that we should continue to offer it. The evaluation also shows that improvements are still to be done and in December 2013 we plan launch a project with the aim to improve and expand the existing feedback report.

II. The purpose of feedback

4. The goals that we want to achieve by developing the feedback report are:
   - To motivate the respondents.
• To reduce non-responses and shorten production time.
• To increase data quality and reduce the number of re-contacts.

5. The feedback report aims to raise the receivers’ awareness of how the collected data is modified into statistical output. The data and the calculations shown in the feedback report are key figures that later on will be presented in the official statistics. The feedback report gives the receivers the possibility to verify the calculated key figures before publication. We hope that this will lead to a greater sense of responsibility and that it is considered more meaningful to report the data.

6. The feedback report is sent to the respondents of the surveys, often in positions such as school principals, administrators etc. The feedback report is also sent to one or more officials of the municipal administration after the last date of response. The officials get a summary of which schools that have reported their data and a chance to remind those that have not. This way, we believe that the number of non-responses is reduced and that production time is shortened since the municipal administrations, instead of us, remind their schools to respond to the surveys. If many schools have reported their data when the feedback report is released, the municipal officials have better possibilities to make relevant comparisons and quality checks.

7. The officials often have knowledge of internal reorganizations and other circumstances that could be very valuable information for us. Such changes can cause errors that are difficult to discover with our generalized editing. In some cases however, the data reported is in fact incorrect and when noticed, the municipal official can contact the school in question. Therefore we believe that the feedback report will contribute to increase data quality and to reduce the number of re-contacts made by Statistics Sweden.

III. How it works

8. In 2008, the first version of a feedback report was developed. We aggregated a few important collected variables on municipal level and presented them in a web form. The feedback report has since then been developed and refined in several steps. The present version of the feedback report includes a large number of important measures of quality, presented on both municipal and school level.

A. Technical solution

9. Statistics Sweden has invested in the development of generic tools for data collection. The investments make this feedback report possible with no extra development costs, by using the same technical solution that we use for web based data collection.

10. After logging on to our website the receivers can look at tables with aggregated data from the different surveys. The receivers are asked to check the validity and plausibility of the presented data. If needed, they can go back to each survey and resend new or corrected data. We update the feedback report with the aggregated answers at least once a day to make sure that the officials can see that the data has been corrected. It is not possible to make changes directly in the feedback report.

B. Information in the feedback report

11. The first part of the feedback report, containing number of pupils attending the schools, teaching staff and teachers is published during the autumn semester. The second part of the feedback report is published after the spring semester containing for example number of pupils reported on the national tests, and number of pupils with reported grades. The data is presented in a comprehensive way with information from several different surveys. The receivers have the possibility to compare the number of pupils attending a specific school in the autumn semester with how many grades that has been reported after the spring semester.
12. This is an example of a table that we used in the feedback report for the autumn semester 2012. It contains data from both the survey on teaching staff, which is mainly reported by the schools, and the survey on number of students in each school, which is mainly reported by the municipalities’ central administration. The measurement of how many full time teachers per pupil the school has, which is an important key figure used as a measurement of quality in the school sector, is automatically calculated as a help to verify the plausibility of the data.

Example 2.

Schools that have registred data about national tests and grades, Public elementary school spring 2013

<table>
<thead>
<tr>
<th>School code</th>
<th>School</th>
<th>Number of pupils in year 6 October 15 2012</th>
<th>National test year 6 Number of pupils</th>
<th>Grades year 6 Number of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880000001</td>
<td>School 1</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>1880000002</td>
<td>School 2</td>
<td>74</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>1880000003</td>
<td>School 3</td>
<td>114</td>
<td>112</td>
<td>112</td>
</tr>
<tr>
<td>1880000004</td>
<td>School 4</td>
<td>52</td>
<td>50</td>
<td>Missing</td>
</tr>
<tr>
<td>1880000005</td>
<td>School 5</td>
<td>33</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

13. This is an example of a table that we used in the feedback report for the spring semester 2013. It contains data from the survey on national test results, grades and also a comparison with the number of students measured in the autumn surveys.

C. Who will receive the feedback report?

14. By logging on to a web form the municipalities can register which officials that they want to take part of the feedback report. The municipalities are reminded each semester to update their contact information, and are given the opportunity to change, remove or add persons on their list of receivers. The receivers chosen by the municipality get access to the web form and the opportunity to judge the plausibility of the data.

1 The survey on number of pupils includes variables that make it possible for the municipalities to report the data from their administrative registries. The survey on number of teachers includes such detailed information that Statistics Sweden has to address each separate school within the municipality.
IV. Evaluation

15. During the development of the feedback report, Statistics Sweden wanted to investigate if the feedback report worked as it was intended to. We wanted to know whether it was helpful for the revivers and in which ways we may need to change or improve the service. As part of investigating this, we e-mailed an evaluation form to all municipalities in December 2012. Some of the municipalities have more than one contact person, all of these had the opportunity to comment.

A. What do the receivers think?

16. Out of a total of 290 municipalities, 87 officials from 79 different municipalities answered the form.

- 70 of the 87 respondents answered that they had looked at the feedback report before they received the evaluation form, and thought it was helpful for the reporting.
- 36 of these had no suggestions on how the feedback report could be developed.
- 24 respondents contributed with suggestions for improvement. Some of these also expressed that they think it is positive to get the opportunity to share their views.
- 6 respondents had not looked at the feedback report.

17. The results of the evaluation show that the feedback report is highly appreciated and that we should continue to offer it.

18. We received a lot of positive comments from the respondents. They thought it was easy to check the validity in the reported data, and could also use the summaries for discussions with politicians and officials. It gave them a good overview of all the schools in the municipality and immediately found errors to correct. Some of the respondents expressed that it was positive that the feedback report arrived shortly after they reported the data.

19. A few examples of the answers we got:

- “It’s good that we get the feedback report since it contains information that is constantly requested.”
- “We have looked at and worked through the feedback report, it was brilliant! We could easily make a plausibility-check on the reported data and we immediately discovered things that needed to be corrected”

20. The evaluation also showed that improvements are still to be done. Many of the respondents desired more detailed information including contact information for the different surveys. We also received requests to include more measures for quality controls. In addition, Statistics Sweden’s experiences of surveys on the public sector are that respondents particularly appreciate feedback where their own data is put in relation to a reference point, such as the national average, or an average of municipalities in the same size.

V. The feedback report in the future

21. Statistics Sweden will develop the feedback report to better suit the receivers’ needs, and to become more attractive and comprehensible in order to better fulfill its purposes. We have decided to initiate a project for this, starting with a qualitatively oriented follow-up. With the knowledge we gained from the evaluation we will attempt to clarify the need for development of the feedback report.

22. The project is defined to improve and expand the existing feedback report. In the current situation, only municipal officials are given the opportunity to receive the feedback report for the public
schools. The report has not yet been adapted for non-governmental schools. These schools generally have a higher amount of non-responders than public schools. The feedback report would hopefully be an incentive for the non-governmental schools to report data of good quality in time. We shall therefore investigate whether it is possible to include them in the feedback report. Possible effects on the data collection process will be measured in an experiment embedded in the data collection process of an existing survey.

23. Furthermore, we wish to add more calculations and interesting comparisons to make the report even more appealing and helpful to the receivers. We plan to include aggregated results connected to a point of reference, such as the national average, or the average for other municipalities of the same size.

24. If the project is successful, the next step would be to evaluate whether the method can be used more generally in both business and public sector surveys.