4 IMPROVING QUALITY: THE EVALUATION PROCESS AND THE DECISION TO PLAN ACTIONS FOR IMPROVING QUALITY

4.1 INTRODUCTION

Our goal in SEVAQ is to improve the overall quality of the organisation of e-learning.
Our method and tool is based on the EFQM excellence model of Total Quality management (TQM). We identified a set of performance indicators or quality criteria. We are organising self-assessment using a questionnaire to measure the quality.

The tool delivers as a result of the group of learners different management reports, amongst others the figures on question level, the radar diagram on subcriteria level, and an overview of those questions being critical: considered important and rated as bad quality.
Based on those reports management will take actions to improve the overall quality.

4.2 EFQM EXCELLENCE MODEL FOR THE EVALUATION OF AN E-COURSE

4.2.1. The EFQM excellence model applied in a learning organisation

The EFQM excellence model has its application in the learning organisation. For example the customer focus in vocational education and training requires identification of the needs of customers, such as students and the world of work, development of products and services based on these, and monitoring and analysis of customer results achieved. Results should be used as a basis to improve operations and set new objectives.

The EFQM excellence model has an enterprise wide dimension. The model covers all enabling and all results domain of the organisation.
First we limited ourselves to the type of organisation. We focus on a training organisation or to the learning department of an organisation. So we are limiting the EFQM model to the training /learning activities. We can apply EFQM perfectly on the level of an activity (business line) of a company. All 9 criteria are still required in this case. Our (limited) goal is to improve the performance /quality of "the organisation of the learning activities".

4.2.2 A limited set of EFQM criteria in the SEVAQ model because the evaluation will e carried out by the learner

An organisation's progress towards excellence has to be assessed against the EFQM performance indicators or quality criteria.
To become excellent, the learning department (or organisation) has to balance and satisfy the needs of all relevant stakeholders. But because only the learner will take part in the self-assessment activity, we limited our model of stakeholders to the learning department/ organisation, the designer or the teacher and the tutor.

We limited our model further to those main criteria for which the learner can play the role of assessor. This way only three main criteria remained: the enabling resources, the enabling processes and the (learning) results for the learner. We limited the last one to "learning results" based on the Kirkpatrick model.

4.3 THE MANAGEMENT REPORTS OF THE SEVAQ TOOL

4.3.1 Introduction

The tool delivers different management reports based on the results of the group of learners: the figures on question level, the radar diagram on subcriteria level, and an overview of those questions being critical (considered important and rated as bad quality).
Based on those reports management will take actions to improve the overall quality.

4.3.2 Table of the answers, summarised over the group of learners

This table is delivering the number of learners who entered these values. The results are on statement / question level.

4.3.3 Radar diagram: mean value of evaluation for all selected subcriteria

This radar diagram shows in red the total weighted mean evaluation on question level, and in blue the weighted mean evaluation on subcriteria level for all subcriteria. With this radar you can identify which subcriteria are the weakest and which are strongest ones.
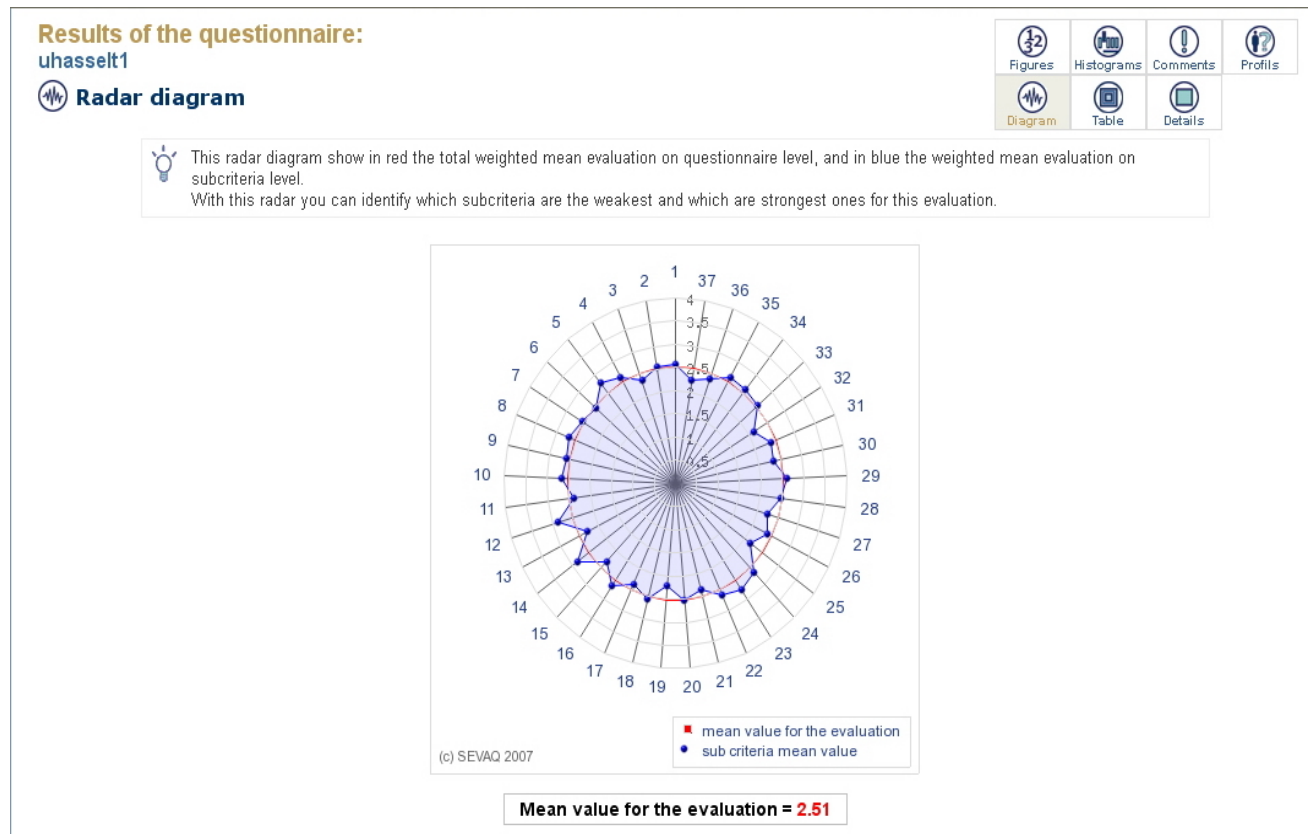
Improvement needed
Subcriteria with result under the mean

3 : Information on the learning provider [2.35]
6 : The physical learning environment provided for online sessions. [2.47]
11 : Maintenance of facilities [2.39]
13 : Learning content [2.29]
15 : Registration process [2.32]
17 : Organisation services and administration [2.38]
19 : Teaching approach/Course design [2.2]
21 : Personalising your own learning [2.36]
25 : ICT Support [2.16]
26 : Online support [2.4]
27 : Group learning support [2.23]
28 : Assessment Process/concept [2.49]
30 : Other areas of assessment [2.34]
31 : Knowledge level on finishing the course [2.4]
32 : Using skills learned on the course [2.15]
36 : Communication Skills [2.4]
37 : Motivation to learn [2.25]

Improvement less or not needed
Subcriteria with result above the mean

1 : Availability of learning opportunities [2.57]
2 : Course prospectus [2.56]
4 : ICT and the learning system [2.61]
5 : System functions to facilitate learning activities [2.79]
7 : Accessibility [2.56]
8 : Maintenance of facilities [2.68]
9 : The environment provided for 'face to face' sessions. [2.61]
10 : Accessibility [2.65]
12 : Availability [2.86]
14 : Guidance in the choice and selection of your course [2.85]
16 : Welcome [2.66]
18 : Course progression [2.58]
20 : Personalising the learner's e-learning course [2.52]
22 : Integration of face to face learning with e-learning. [2.62]
23 : Integration of group learning with self study [2.77]
24 : Use of learning content [2.66]
29 : Assessment organisation [2.6]
33 : Awareness of learning preferences from doing the course [2.55]
34 : Using ICT [2.61]
35 : Learning Management [2.63]

4.3.4 Table of critical questions

This table is delivering a summary table of critical questions/ statements by giving the percentage of learners quoting the question/ statement as important and giving it a bad evaluation. A question/ statement is considered to be critical when more than 40% of the learners have evaluated the statement as being important and at the same time evaluated it as of bad quality. A question/ statement is considered to be very critical when more than 60% of the learners did so.

127 - Tools were provided for communication with other learners such as email and chat rooms.	53.85 %		Critical

24 - Use of learning content

132 - Additional learning resources such as case studies, were provided for further study.	46.15 %		Critical
133 - A glossary of learning terms was built in	44.44 %		Critical
134 - Terms and conditions for using the learning resources were included.	46.15 %		Critical

8 - Learner Support

25 - ICT Support

137 - Internet training was available if required.	55.56 %		Critical
138 - Training in using computer-based and online learning activities was available if required.	70.00 %		Very critical
139 - Instructions and guides for using e-learning facilities were provided.	80.00 %		Very critical

26 - Online support

140 - There was a question and answer facility available online.	27.27 %		OK
141 - Your questions were answered within 24 hours.	50.00 %		Critical
142 - Online study support was planned and regular.	58.33 %		Critical

27 - Group learning support

149 - You were encouraged to work with other learners.	62.50 %		Very critical
150 - You were given help in getting the most out of activities with other learners.	63.64 %		Very critical
151 - The assessment process was effective.	80.00 %		Very critical

9 - Assessment of learner's knowledge

28 - Assessment Process/concept

152 - Assessment was relevant to the objectives and content of your course.	33.33 %		OK
153 - Assessment was related to the learning outcomes of your course.	36.36 %		OK
154 - Your teacher/tutor was involved in the assessment process.	44.44 %		Critical

29 - Assessment organisation

157 - The assessment process took into account you personnal behaviour during the online course (your overall participation, your compliance to study planning, etc ...)	66.67 %		Very critical
158 - You agreed your end of course online assessment with your learning provider.	50.00 %		Critical
159 - The course was good preparation for the assessment.	33.33 %		OK

30 - Other areas of assessment

We start with the RADAR DIAGRAM. The overall mean score is 2.51. The mean score per subcriteria can be seen also in the diagram and in the list of criteria. You can see e.g. that subcriteria 25 and 27 have scores: 2.16, 2.23, being scores lower than the overall mean value. We conclude that the subcriteria 25 and 27 are critical subcriteria. They are belonging to criteria "learner support" in the main criteria "learning processes".

4.4.3 Practice: critical subcriteria and critical questions

It is possible to obtain more information about why those subcriteria 25 and 27 are critical.
For each subcriterion we have formulated some statements covering the topic of the subcriterion.
In the table we can read the results on criticality of the individual statements. It means that many learners find them important and at the same time have evaluated them as being of bad quality.
We go to the table and see which questions for the critical subcriteria with low score are very critical.We see that in our case questions /statements 138, 139, 149, 150, 151 are very critical.

4.5 TAKING DECISIONS

The self-assessment process allows the organization to discern clearly its strengths and areas in which improvements can be made and culminates in planned improvement actions that are then monitored for progress.

Based upon the diagram and the list of the critical subcriteria where improvement is needed, and after analysing the corresponding statements in the table, a list of critical learning activities can be created and put in descending order of priority to be improved.

This way the results of the analysis based on the management reports delivered by the SEVAQ tool will guide the decision maker in identifying the learning domains to be improved and in taking decisions on starting up improvement projects, including actions, and making investment decisions.