
THE PRACTICE OF E-LEARNING QUALITY ASSESSMENTS

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Abstract

Our research was focused on how learning companies or learning departments are organizing the process of gathering feedback from the learners and how they are using the feedback. A questionnaire can be used for self assessing an e-learning course by the learner. It seems that all respondents are not only using questionnaires but are also using other evaluation methods.

But what is the quality of their questionnaire? A set of quality criteria has been used to evaluate the 152 questionnaires we received that are used in the evaluation activity of our sample of companies and institutions. The quality of the questionnaires has been measured and is also related with the characteristics of the respondents.

1. Introduction to self assessment in e-learning

1.1. How to do self-assessment? Using a questionnaire?

There is no definitive answer to the question “which technique is the right one for my organisation? There is no single “right” way to perform self-assessment. We adopted the questionnaire approach. This technique can be one of the least resources intensive and can be completed very quickly. It is an excellent method for gathering information on the perceptions of people within an organisation. Some organisations use simple yes/no questionnaires, others use slightly more sophisticated versions that use a rating scale. Self-assessment using standard questions designed to get the organisation started thinking in terms of process improvement. In some situations another evaluation method would be more effective, or maybe a mix of more methods can be recommended.

In each case the evaluation will be based upon a set of quality criteria. A set of quality criteria has to be defined for each evaluation activity.

1.2. Quality criteria

Based on the first two levels of Kirkpatrick model, we identified a set of quality criteria that must be part of the self assessment questionnaire to be used for the evaluation of the e-learning application by the learner. We identified a set of 18 subcriteria spread over the 4 main criteria content, delivery and tutoring, technical specification and organisation.

2. Research on the practice of e-learning quality assessment

This research is situated in the SEVAQ project. SEVAQ (www.sevaq.com) stands for self-evaluation of quality in e-learning. The SEVAQ project is developed within the framework of The Leonardo da Vinci Program.

We selected a set of companies (profit and non-profit) and educational institutes who already implement e-learning in their training programmes and we established an enquiry into the quality of existing evaluation tools and methods used by them.

Questions about which and the way to receive feedback have been answered by these organisations. Their own assessment questionnaires were also sent to us. The questionnaires have been evaluated by checking the availability of the criteria as set forward.

2.1. Analyzes of the e-learning evaluation questionnaires

A large number of European profit, non-profit companies and educational institutes in the participating countries asking for their evaluation practice and meanwhile asking to send questionnaires for quality assessment by the learner

192 companies or institutes have answered on the questions and 85 of them sent us their questionnaire(s). We received and 152 questionnaires.

In the European sample more than half of the respondents were educational institutes like universities. A quarter were companies. There are however clear differences between the countries. Some countries like Norway, Lithuania and Portugal have a large majority of educational respondents. In Belgium, the United Kingdom and Spain, at least 50 % of the respondents are companies. The educational institutions are including universities as well as private educational institutions. In France for example, private educational organizations form an important market.

These results on the type of organizations are partly due to the different compositions of the networks and so of the mailing lists of the partners involved.

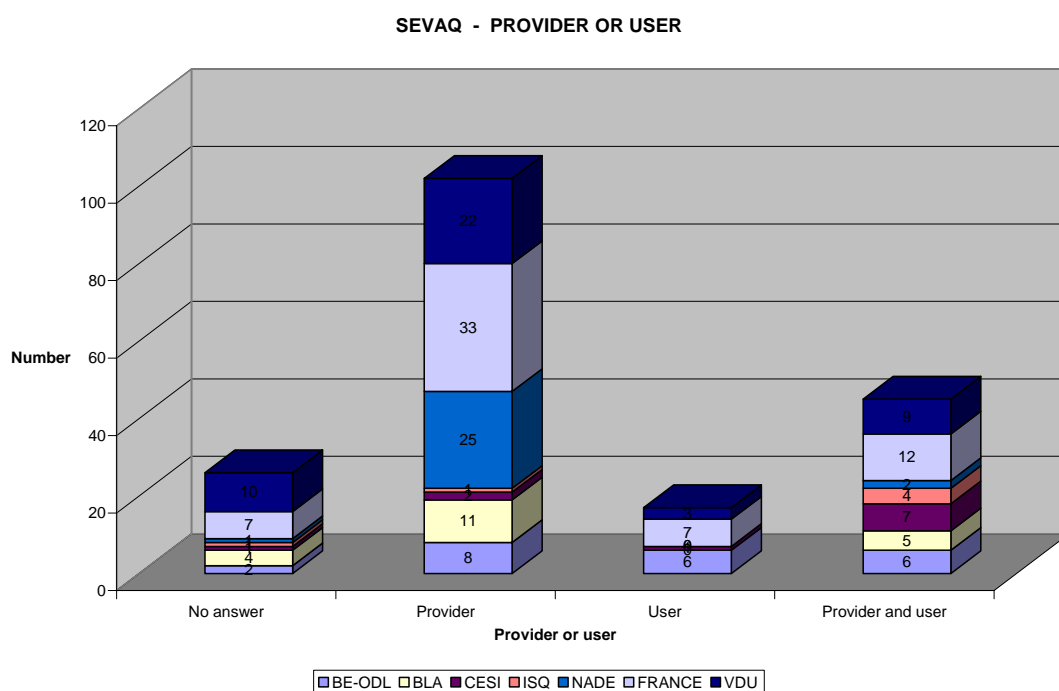


Figure 1. The role of the organizations.

The providers who are the effective target of the SEVAQ research, are most represented in the enquiry (figure 1) and are also interested in the results of this project. Probably the providers are “waiting” for general quality standards for e-learning and an appropriate tool to measure quality.

Two groups are mostly represented in the results: the small organizations of less than 50 employees (34 %) and the large organizations with more than 500 employees (29 %) with some differences among the countries involved. Large organizations are often companies or universities, while the small organizations are often providers of e-learning.

2.2. e-learning evaluation: feedback by the learner

It is not surprising that more than 80 % of the respondents want to receive feedback from the learners. Almost 90 % of the feedback is gathered in a structured way through a written or an online questioning (table 1). Online feedback is being used in about half of the organizations.

We found that organizations are using multiple channels to evaluate: 33% use more than 1 way of evaluation and 15% more than 3 ways. Organizations need different and complementary ways for getting their feedback

Form of feedback	Number	Percentage
No answer	38	20

A written questionnaire	76	40
An online form	93	49
Informal conversation (e.g. during coffee break)	25	13
Telephone conversation	27	14
Other	26	14
Total	285	---

Table 1: The form of the feedback

Almost 90 % of the feedback is gathered in a structured way through a written or an online questioning (table 1). Online feedback is being used in about half of the organizations. We found that organizations are using multiple channels to evaluate: 33% use more than 1 way of evaluation and 15% more than 3 ways. Organizations need different and complementary ways for getting their feedback.

In table 2 we can see that very often more and different methods were used in parallel. This information can help us when discussing about how to organise the evaluation and can support our discussion on which tool will be developed.

Questionnaire	online form	informal	telephone	other (e-mail, chat, video conf)	Total nr of companies	
					nr	%
X					41	22,65
X	X				12	6,63
X		X			5	2,76
X			X		5	2,76
X				X	3	1,66
X	X	X			6	3,31
X	X		X		3	1,66
X	X			X	3	1,66
X	X		X		1	0,55
X	X		X	X	2	1,10
X	X	X	X		9	4,97
	X				59	32,60
	X	X			1	0,55
	X		X		7	3,87
	X			X	8	4,42
	X	X	X		2	1,10
		X			3	1,66
		X	X		1	0,55
		X		X	1	0,55
		X	X	X	2	1,10
			X		2	1,10
			X	X	1	0,55
				X	4	2,21
Nr90 %49,72	113 62,43	30 16,57	35 19,34	24 13,26	181	100,00
NO answer					11	
nr of companies					192	

Table 2: The ways the companies are tracking the feedback from the learners

2.4. Use of the feedback by the organisation

In table 3 we can see that in the questionnaire the feedback in the first place is used to improve the quality of e-learning. Very often the feedback is also made available for the trainer and is used to improve the quality of the evaluation.

Table 3 and 4 are showing that organizations have more than one objective to assess the course.

Number of objectives for evaluation	Number	Percentage
No answer	38	20
Just one use of the feedback	30	16
2 objectives for feedback	52	27
3 objectives for feedback	33	17
4 objectives for feedback	37	19
5 objectives for feedback	2	1
Total	192	100

Table 3: Number of objectives for evaluation

In general 27 % use 2 objectives and 37 % have even 3 to 5 objectives.

These results show that organizations often have several objectives for evaluation. This conclusion is well illustrated in the next table in which the combination of objectives is displayed.

archive	available for trainer	improve quality e-learning	improve quality evaluation	other	total	
X					2	1,13
X	X				4	2,26
X		X			3	1,69
X			X		1	0,56
X				X	1	0,56
X	X	X			6	3,39
X		X	X		3	1,69
X		X		X	2	1,13
X			X	X	1	0,56
X	X	X	X		37	20,90
X	X	X		X	1	0,56
	X				5	2,82
	X	X			19	10,73
	X		X		7	3,95
	X	X		X	1	0,56
	X	X	X		28	15,82
	X	X	X	X	3	1,69
		X			19	10,73
		X	X		19	10,73
		X		X	5	2,82
			X		7	3,95
				X	3	1,69
61	111	147	106	17	177	100,00
34,46	62,71	83,05	59,89	9,60		
<i>NO ANSWER</i>					4	
Total					181	

Table 4: Ways of using the feedback by the companies

3. Assessment of the questionnaires of our respondents

3.1. Global results

Criteria	Mean
1 Content	2.2
2 Usability and delivery	2.0
3 Technical specifications	1.6
4 Organization	2.0
General mean	1,95

Table 5: The mean scores of the 4 criteria

The mean scores of the 4 criteria tend to the low end and are located beneath the mean on a scale of 1 to 5. The overview shows that in the sample of questionnaires the content issues score relatively best and the technical specifications worst.

The lack of questions about technical issues surprises us a lot, because technical matters are always strongly involved in e-learning: subscribing, password management, use of plug ins, firewalls, internet connection capacity, etc. Every of these issues can go wrong and can turn the learning process into a frustrating experience.

3.2. Results related with type of company/institute

The evaluation is expressed as a score in the scale of 1 to 5, 1 being not or very limited available and 5 being excellent. Per criterion I calculated the mean of the individual scores of the sub criteria.

The details can be found in the following table:

Main quality criteria			content			delivery / tutoring			technical specific			organisation			
size of organization	type	role	bad	mean	good	bad	mean	good	bad	mean	good	bad	mean	good	
< 500	profit	provider	6	3	1	6	4	-	8	2	-	9	1	-	
		user	-	-	-	-	-	-	-	-	-	-	-	-	
		p & u	2	-	1	3	-	-	3	-	-	3	-	-	
	non profit	provider	4	1	-	3	1	1	3	1	1	2	2	1	
		user	-	-	-	-	-	-	-	-	-	-	-	-	
		p & u	-	1	-	-	1	-	-	-	1	1	-	-	
	education	provider	15	11	2	15	12	1	22	6	-	14	10	4	
		user	-	2	-	2	-	-	2	-	-	2	-	-	
		p & u	3	1	-	4	-	-	4	-	-	4	-	-	
> 500	profit	provider	1	-	-	1	-	-	1	-	-	1	-	-	
		user	6	1	-	4	3	-	5	2	-	4	1	2	
		p & u	2	1	-	2	1	-	3	-	-	3	-	-	
	non profit	provider	2	-	-	2	-	-	2	-	-	1	1	-	
		user	-	-	-	-	-	-	-	-	-	-	-	-	
		p & u	1	-	-	1	-	-	1	-	-	1	-	-	
	education	provider	5	9	-	7	7	-	13	1	-	11	3	-	
		user	-	-	-	-	-	-	-	-	-	-	-	-	
		p & u	2	1	1	3	1	-	4	-	-	4	-	-	
total				49	31	5	53	30	2	71	12	2	60	18	7

Table 6: evaluation of questionnaires for the main criteria and in relation with the size, the type and the e-learning role of the companies

1 ≤ Mean value ≤ 2,2: bad
2,2 < mean value ≤ 3,8: mean
3,8 ≤ mean value ≤ 5: good

The questionnaires seem to be of bad quality. The first criterion “content” and its sub criteria are included in most of the questionnaires, although it is not complete (low score). The questionnaires of the providers are of higher quality than those of the users.

The educational institutes are doing better than the companies. The same can be said of the smaller companies/organisations are doing better than the bigger ones. But the last conclusion can be explained as being the indirect consequence of the fact that the smaller companies are mostly providers and the bigger ones are mostly users. And we concluded already that providers quality is higher than users quality.

Conclusion

There is no definite answer to the question “which evaluation technique is the right one for my organisation?” Often the questionnaire and the online form are the most famous evaluation tools. But we can see that very often more and different methods were used in parallel.

We see that the feedback is used primarily to improve the quality of e-learning. Very often the feedback is also made available for the trainer and is used to improve the quality of the evaluation.

The questionnaires we analyzed are of bad quality. Only the first criterion “content” and its sub criteria are included in most of the questionnaires, although still not complete.

The questionnaires of the providers are of higher quality than those of the users and the educational institutes are doing better than the companies.

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