

Chapter 17

Quality Management for Projects and Workshops



Jens Drummer

17.1 Introduction

When speaking about projects, one has to ask: What is a project? Here one may apply the definition from the Project Management Institute: “A project is a temporary endeavour undertaken to create a unique product, service, or result. The temporary nature of projects indicates a definite beginning and end” (Project Management Institute 2008, p. 5).

The next question is for which one uses a project in the working context? In many areas, the implementation of a project is the ability to implement innovative ideas. Here, the project method has the advantage that usually all the project members identify with the project due to the uniqueness of their interaction to the project.

To ensure a successful completion of a project, it is necessary to check from time to time on the reaching of milestones and also on the implementation of objectives. This is quality management. However, why is quality management in projects so important and how can it succeed? One of the major reasons for the establishment of quality management is the improvement of processes and the results of projects (Brunner and Wagner 2011, 6ff). To ensure a certain quality, appropriate tools and methods are used. Especially questionnaires are often used for the measuring of quality in workshops and projects (cp. Groh et al. 2012, 236ff; Eid et al. 2015, 36f).

Research confirms that the best way to ensure the quality of a project is to define it as an objective of the project (Lock 2013). However, projects always take time, and time is an important resource that needs to be monitored. Often, after some time has passed, a project may become stalled. To avoid such, it may be helpful to evaluate the project in specified periods. This evaluation is a part of quality management

J. Drummer (✉)
Saxon Educational Institute, Ministry of Education, Dresden, Germany
e-mail: jens.drummer@mailbox.tu-dresden.de

and as well increases the visibility, relevance and sustainability of each project (Bruhn 2013, 6f).

Using the example of several projects which were carried out at various universities in Central Asia in the field of vocational teacher training, especially in the context of developing a Master of Education Food Technology M.Ed., the author shows how a quality evaluation can help ensuring the successful completion of a project. While the workshops took place in the period of 2015 to 2016, the framing programme called “USPECH” (which is the Russian word for “success”) consists of 18 projects and runs from May 2015 to December 2016 and is considered as an implementation programme and is linked with the longer-lasting EDUINCA network (cp. Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH 2010).

17.2 Quality Assurance in the USPECH Workshops and Projects

Subsequently it is described how quality assurance in each area, i.e. in the USPECH workshops and projects, was carried out. The first part will focus on the projects’ quality assurance, and in the second part, the workshops are considered.

Ideally an evaluation must be planned from the beginning of each project when the objectives for the project are defined. By then it is possible to derive the content of the questionnaires, and each objective which is to be verified should be addressed by at least two questions in the questionnaire. All questions were uniquely formulated, and when the questionnaire was developed, it was tested first. In the test phase the questionnaires will be issued to persons who are not involved in the projects. Thus it is possible to detect some difficulties which may occur when the subjects are requested to complete the questionnaire, i.e. have to understand the respective questions. Once these difficulties have been corrected, the survey may start (cp. Moosbrugger 2012, 36ff). In the case of this study, standardised and introduced questions were used and adapted for the special case. The complete questionnaire was sent to test persons. They answered the questions from their point of view. After this they gave feedback where they had difficulty in understanding the questions. Based on this feedback, the questionnaires were adapted.

17.2.1 Elements of the Quality Assurance for the USPECH Projects

As first step of the quality assurance for the USPECH projects, a call for submission of project ideas was sent to all potential candidates who previously did participate in projects. The call included the following conditions: (1) the project must be innovative in the field of TVET, (2) the project idea must be performed for the first time,

and (3) the entire project must be completed within 1 year (this period was later extended to 18 months).

From the proposed projects, only those projects which included the best ideas as estimated by GIZ (Gesellschaft für Internationale Zusammenarbeit GmbH - German International Collaboration Association) and seemed to be realisable were selected. Some more extensive project ideas were then discussed with the applicants in order to reduce the extent to a 1-year duration of the project.

To ensure the quality of projects and also to reduce the risk of failure of projects, different questionnaires were used (one for the start, two for intermediate results, and one for the final results) which were completed by all projects.

At the start of the project, all project teams received a questionnaire covering the following contents:

- Objectives of the project
- Milestones and the planned date of realisation
- Project content
- Support needed for successful implementation.

This first questionnaire was completed once by each project team, and based on the answers, the contents of the accompanying workshops were planned. Throughout the period of 12 months, a total of four accompanying workshops for all project teams were conducted by a group of international experts with the project managers as participants.

Each workshop covered a part of the project management as a topic. Thus, participants had received information about each impending project phase step by step. For example, in the first workshop, the participants were informed about important aspects of the project start. Furthermore, each workshop dealt with a specialised topic which was helpful for the implementation of the projects. The topics of the workshops were:

- Use of media in teaching
- Specific didactics in food technology
- Networks in educational context
- Scientific writing.

In addition, the status of the implementation process of the projects was discussed, evaluated and recorded through questionnaires in each workshop.

17.2.2 Findings of the Project Evaluation

In the questionnaire completed at the start of the projects, the respondents were asked specifically about the project objectives and planned milestones as well as the necessary support for each project. This was checked and analysed by the GIZ.

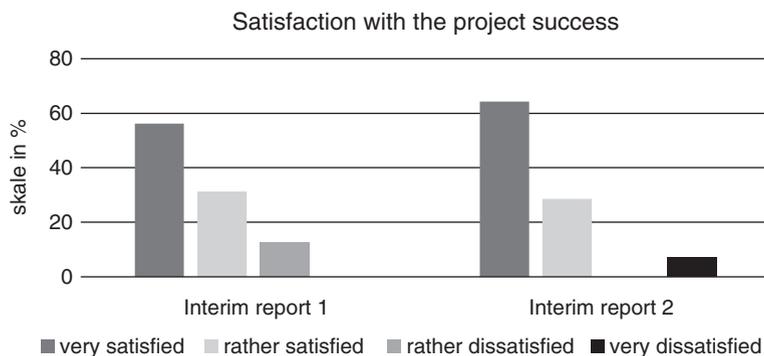


Fig. 17.1 Satisfaction in the project – comparison between the first and second interim reports

Great attention was given to the requirement that the objectives corresponded to the SMART¹ model (Bernecker and Eckrich 2010, p. 226). In some cases the evaluator suggested a discussion with the project group to adapt the objectives, while the theory of the SMART model was a part of the content during the first workshops. A second part of the questionnaire covered the planning of the milestones. It came out that majority of the projects had a very realistic milestone planning and very few projects specified one milestone only. In these cases more important milestones were discussed in cooperation with the project group.

Based on this questionnaire, the actual planning of the workshops was then carried out, and the best possible support was given to all projects and all according implementation activities. Later it was shown that this was also an essential element to the success for all projects.

During the project phase, another questionnaire was used for observing the course of the projects. One aspect of this questionnaire constituted the motivation and satisfaction with the interim results of the projects. It was seen that it was satisfying as one may see that the motivation of project staff did increase over the period of the programme in all the projects. The satisfaction with the implementation of their own projects also steadily increased within all projects (see Fig. 17.1).

Due to the fact that the projects are close to completion at the time of reporting, there is limited opportunity to comment about the completion of the projects. However it was explained to respondents (usually the heads of the project teams) of all projects that they had to finish their endeavour in the planned time. The fact that none of the projects failed has shown that, among other things, continuous monitoring and controlling were helpful (cp. Fiedler 2016, 6ff).

¹ Specific, Measurable, Assignable, Realistic, Time-related.

17.2.3 Ensuring the Quality of the Workshops

To ensure the quality of the workshops, each workshop used a standardised evaluation form which consisted of two parts. In the first part, all participants wrote down their individual expectations at the beginning of the workshop. Only at the end of the workshop had all participants completed the second part of the evaluation form where they were asked about the workshops' quality. This part included a set of questions about:

- The quality of the execution of the workshop (eight multiple choice questions)
- The quality of the results of the workshop (six multiple choice questions)
- The possibility of transferring the knowledge acquired into the workshop towards the projects (two open-answer questions)

The participants received the questionnaire in paper form. In principle, it is also possible to offer questionnaires in digital form, for example, as a form on the Internet. However, to ensure that each participant has the opportunity to complete the questionnaire, the paper format was preferred.

All the evaluation forms were analysed using the statistical software SPSS.² Then the data was descriptive and variance analysis evaluated.

In order to ensure the influence of the findings, the experts who participated in the workshop were informed about the results of the evaluation by using digital documentations. In addition, the participants were informed about the results during the next workshop. With this procedure it could as well be demonstrated that the management of quality is an important part of each projects' activities.

17.2.4 Results of the Workshop Evaluation

Throughout the USPECH programme, several workshops were planned in order to support the implementation of the projects. It turned out that participants' expectation clearly confirmed the expectation of project-wise support. Indeed all respondents chose the respective item in the evaluation form from the second workshop onward.

At the beginning, the expectation was high that participants would refresh already known knowledge (cp. Fig. 17.2). This expectation even increased for the second workshop from 9% to 24% and to the fourth workshop to 54%.

All workshops have been performed a competence orientation which demanded awareness of the specific objectives for each workshop among all participants. In the evaluation this has been addressed in detail. Data shows that from workshop to workshop, more participants confirmed the statement: "The objectives of the workshop were presented". At the first workshop, 70% of all participants did "totally

²Statistical Package for the Social Sciences.

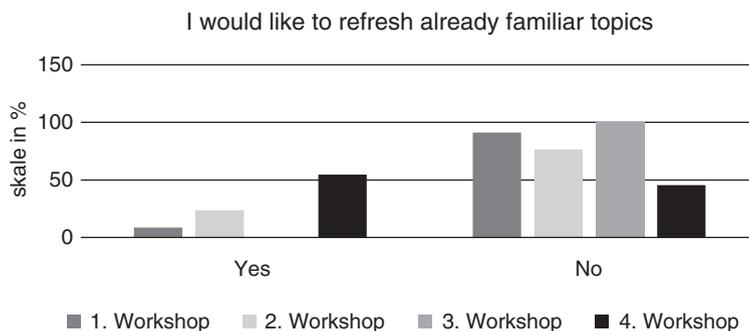


Fig. 17.2 Refresh already familiar topics – comparison between the workshops

agree”, while at the last workshop, 92% of the respondents answered that way. The author suggests that this is connected with the fact that all workshop leaders did receive the results of the evaluation.

Another item focused on participants’ satisfaction with the relationship between theory and practice. Along with this item, an increase in the number of participants who responded “totally agree” has been clearly observed.

In the last part of the evaluation form, factors including the growth of competence in teaching were measured. Results showed that the work focused by the lecturers also led to an increase in skills among participants. Here it was measured that in the third workshop, 58% of the participants did show a considerable increase in competence for teaching, while at the fourth workshop, 100% of the participants showed such growth.

17.3 Summary

Overall it can be concluded that the instrument of quality assurance led to improved quality standards in both projects and workshops. Importantly – which has also been shown – the projects did profit from specifically planned supporting workshops with a partial focus on project management and quality development. Data collected confirms these workshops assisted the projects both at the organisational and a substantive implementation. Through appropriate planning of each project phase, it becomes possible that the projects may be completed in time and within the budget planned.

In relation to the theory of quality management for projects, the presented findings underline the statements of Groh et al. (2012) and Curlee and Gordon (2010) that the support of projects is one of the most important parts for a successful execution and completion. Through the use of quality control, all workshops are expected to be completed as scheduled, due to the accompanying support. Thus, at an early

stage, difficulties were detected, and corrective action was taken. Ensuring the quality has significantly contributed to the overall success.

References

- Bernecker, M., & Eckrich, K. (2010). *Handbuch Projektmanagement*. München: Oldenbourg Wissenschaftsverlag. Retrieved from <https://doi.org/10.1524/9783486700541>
- Bruhn, M. (2013). *Qualitätsmanagement für Nonprofit-Organisationen: Grundlagen – Planung – Umsetzung – Kontrolle*. Springer eBook Collection/Business and Economics. Wiesbaden: Springer Fachmedien.
- Brunner, F. J., & Wagner, K. W. (2011). *Taschenbuch Qualitätsmanagement: Leitfaden für Studium und Praxis* (5., überarb. Aufl.). *Praxisreihe Qualitätswissen*. München, Wien: Hanser.
- Curlee, W., & Gordon, R. L. (2010). *Successful project management strategies of complexity*. New York: Wiley. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/9780470949986.ch5/pdf>
- Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH. (2010). *Programme professional education and training in Central Asia*. Retrieved from <http://www.eduinca.net/>
- Eid, M., Gollwitzer, M., & Schmitt, M. (2015). *Statistik und Forschungsmethoden: Mit Online-Materialien* (4., überarb. und erw. Aufl.). Weinheim: Beltz. Retrieved from https://content-select.com/media/moz_viewer/552557c4-9408-49cb-b991-4cc3b0dd2d03.
- Fiedler, R. (2016). *Controlling von Projekten: Mit konkreten Beispielen aus der Unternehmenspraxis – Alle Aspekte der Projektplanung, Projektsteuerung und Projektkontrolle* (7. Auflage). Wiesbaden: Springer Vieweg.
- Groh, P. E., & Benes, G. (2012). *Grundlagen des Qualitätsmanagements: mit 45 Tabellen und 228 Lernerfolgskontrollfragen* (2nd ed.). München: Hanser Verlag.
- Lock, D. (2013). *Project management* (10. ed., Tutor's ed.). Aldershot, Hampshire: Gower.
- Moosbrugger, H. (2012). *Testtheorie und Fragebogenkonstruktion: Mit 66 Abbildung und 41 Tabellen* (2., aktual. und überarb. Aufl.). *Springer-Lehrbuch*. Berlin: Springer.
- Project Management Institute. (2008). *A guide to the project management body of knowledge (PMBOK guide)* (4th ed.). PMI global standard. Newtown Square: Project Management Institute.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

