## QUALITY ASSURANCE AND EVALUATION IN ERASMUS+ PROJECTS, A CASE STUDY Thorleif Hjeltnes<sup>1</sup>, Thorleif Hjeltnes<sup>2</sup>, Anne Fox<sup>1</sup>, Tor Atle Hjeltnes<sup>1</sup>, Knut Arne Strand<sup>1</sup>, Monica Storvik<sup>1</sup>

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#### Abstract

In 2016 we looked at the effect of internal evaluation of educational EU projects as a way to improve the quality of the project, regarding both the process and the outcomes. We compared the three projects; iQTool - a project producing tools to secure quality in e-learning, Understand IT – a project in the area of digital competence of VET teachers and dCCDFLITE – a project making a MOOC for a global audience in entrepreneurship training.

In this follow up, work in progress paper, we have developed a methodology to study the effect of evaluation in an ongoing Strategic Partnership Erasmus+ project, called 9-Conversations. In 9-Conversations the main focus is to develop an app to help refugees adapt their entrepreneurial skills to their new countries. The paper builds on evaluation theory and on the Concurrent Design approach used to implement the 9-Conversations project. There are big differences between Erasmus+ projects and earlier educational EU projects, not only in terminology, but also in reality. In Erasmus+ there is a focus on Intellectual Outputs, i.e. outcomes, instead of the traditional Work Packages. Evaluation and quality assurance is consequently a hidden activity as part of project management. The question we ask is – how will the new terminology and organisation in the Erasmus+ project compared with former Socrates projects affect the quality of the project.

This paper starts with an introduction chapter where we present our background for internal evaluation of EU projects. Next, we give a short presentation of the purpose and the aim of the 9-Conversations project, which is used as a case in this study. Then, we discuss our approach regarding the execution of such evaluations. Finally, we present the most important contribution of this study, i.e. a methodical approach for evaluation of projects such as 9-Conversations.

In the next study, we plan to interview one or more Erasmus+ evaluators, National Agency Advisors and project coordinators. As part of 9-Conversations and our use of Concurrent Design in this project, we will further develop the evaluation and quality assurance processes. Combining external interviews with empirical data from our study, we hope to be able to give some advice on internal evaluations of Erasmus+ projects and more generally to shed light on Erasmus+ projects in general.

Keywords: Evaluation, international project work, CSCW.

### **1 INTRODUCTION**

In 2016 we looked at the effect of internal evaluation of educational EU projects as a way to improve the quality of the project, regarding both the process and the outcomes. We compared the three projects; iQTool - a project producing tools to secure quality in e-learning, Understand IT – a project in the area of digital competence of VET teachers and dCCDFLITE – a project making a MOOC for a global audience in entrepreneurship training [1,2].

In all these Multilateral Lifelong Learning (LLL) projects the project evaluation was defined as a separate Work Package and evaluation activities were connected to a quality assurance (QA) plan with evaluation criteria both related to Work Packages in the projects and their outcomes, as well as the overall project management. All partners were involved in evaluation and QA activities and one or more evaluation reports were produced. The evaluation normally involved external evaluators or reference groups, especially regarding quality assurance of outcomes. A number of days was set aside for evaluation purposes and the evaluation was an important and visible activity in each project.

In Erasmus+ Strategic Partnership projects the term Work Package no longer exists [3]. Work in these areas is primarily allocated to Project Management, Intellectual Outputs, Multiplier Events or Courses. Intellectual Outputs (IOs) defines the innovative products that will be produced as outcomes from the projects, and a number of days are allocated to each of the IOs. The evaluation and QA activities in

the project is embedded under the heading Project Management and Implementation. In the application, like 9-Conversations [4], the applicant has to answer the following questions: "How will the progress, quality and achievement of project activities be monitored?" and "How will you evaluate to which extent the project reached its results and objectives? What indicators will you use to measure the quality of the project results?" The applicant has to consider carefully the scope of the evaluation activities to be able to afford it, since it is covered by the cost for management which is fixed, independent of the size of the project.

Evaluation has both theoretical and practical aspects. In this work in progress paper we will not go into much detail regarding the theoretical aspects of evaluation. As in the previous paper [1] we have taken into consideration the work recommended for EU project evaluation as described in "A Project Manager's Guide to Evaluation" from 2005 by Jenny Hughes and Loek Niewenhuis [5] and the guide is used as the main source of reference. More theoretical insight can be found following the references of this guide.

Both in the LLL programme and in Erasmus+; projects are evaluated using criteria such as relevance, quality of project design and implementation, quality of the consortium and impact and dissemination [6]. The projects that are funded are those with the highest overall score. LLL projects have a list of Work Packages and a list of results or outputs, while Erasmus+ projects only have Intellectual Outputs, limited to only innovative outputs. To help the Commission every project has to do a self-evaluation delivered as an interim report (normally after one year) and a final report. The reports describe all the activities and compare the financial status with the budget and attached to these reports are all deliverables produced in the projects. In [5] these reports are classified as *accountability*, and aim to justify the existence of the project.

An equally important motivation for doing project evaluation is about project *improvement*. As said in [5] the evaluation is "part of a development process – a 'torch' that helps illuminate problems and recognize good practice". In LLL projects, the evaluation Work Package or *activity* and *output* put requirements on the project team to devise a procedure that must be passed. In Erasmus+ projects the evaluation activities becomes invisible and are embedded in Project management and implementation, and have to share the limited resources with all other management work and costs.

We agree with at least three of the motivations for doing evaluations listed in [5]:

- Find out what is and is not working in the project (before too many other people do).
- Improve the staff's work with participants by identifying weaknesses and strengths thus contributing to the staff development process.
- Improve your personal credibility and reputation by adding to existing knowledge in the field in which you are working (e.g. in terms of what does and does not work in your type of project with your kinds of participants as well as in terms of outcomes.)

Our initial observations are that there are significant differences between LLL projects and Erasmus+ projects in the way they are organised, and that the role of evaluation as a quality assurance and improvement tool seems to be less focused and important in Erasmus+ compared with LLL projects.

The question we ask is – how will the new terminology and organisation in the Erasmus+ project compared with former Socrates projects affect the quality of the project.

In EU projects collaboration between several institutions at different levels, and often also companies, in at least three countries are required [7,3]. Often one should include both new and former partners. The work of making an application has to be done at great risk, since the EU will only pay for the projects with the best scores. To reduce risk, many projects are developed by "experts" in project writing instead of a truly committed team of participants. There is normally no time or money to have working meetings as part of the writing process. The budget for each partner is so small that in every case the project work can only be supplementary to other ongoing tasks and activities.

The effect of the above procedure is that each project has to do some initial or start up activities, before the real work in the project can start. We have to develop a "common ground" for the project as described by concepts of joint activity by Clarc [8]. I.e. the project members have to go through the project thoroughly to establish a common understanding of the project objectives, the activities, and the outputs to be delivered. An important part of this process is the exchange of professional knowledge and experience among the project members. We need to create trust among them. This common knowledge and trust is very important later on, when we move from a face to face meeting to net based meetings using tools for CSCW – Computer Supported Cooperative Work [8]. The evaluation of the initial meeting should be a starting point here.

Our findings in our previous study [1] indicates that using a Concurrent Design [10,11] approach, both for project management and for development of outcomes, helps to activate the whole team jointly in all the results across the whole project instead of each partner only taking care of Work Packages or Intellectual Outputs with a partner specific lead role. Active use of evaluation can be very helpful to achieve a more holistic project approach. In the planned case study our primary aim is to look at the implementation of the CCD process for the 9-Conversations project and look at what promotes or inhibits such a solution in Erasmus+ Strategic Partnership projects, compared with Multilateral LLL projects.

## 2 THE PURPOSE AND AIM OF 9 CONVERSATIONS

In this section we will present the purpose and the aim of the 9-Conversations project [4] which is used as a case in our forthcoming study. We will also reflect on ways to collect data from Erasmus+ evaluators, National Agency Advisors and project coordinators to be able to draw some more general conclusions of how to implement good quality in Strategic Partnership Erasmus+ projects.

### 2.1 9-Conversations – the case

9-Conversations is a two-year Strategic Partnership Erasmus+ project that started on the 1.10.18. Information about the project will be published continuously at the web site https://9conversations.no. The partners in 9-Conversations come from Norway, Denmark, Lithuania, Italy and Greece. The aim of the project is to raise awareness about the ways in which refugees can set up a business in different partner countries, providing a training that takes into account both the specific national requirements for running your own business and the general principles of setting up and running a small business. The target group of the entrepreneurship offer are participants that already demonstrate a potential or have experience of running a business and who have finished a language course in their host country.

The 9-Conversations project builds on the results from the previous project, dCCDFLITE – Distributed Concurrent Design Framework for IT-Entrepreneurship [2,12]. 9-Conversations interplays with the 9 building blocks in the Osterwalder Canvas [13]. For this particular target group, a method with a high degree of visibility like the Osterwalder Canvas, helps the conversations. Another approach is to encourage group work, and above all help the refugees to establish networks with useful stakeholders like banks, distributors, marketers and suppliers, hence the sub-title: *Network building for self-employment of refugees*.

The pedagogical approach is to enable both self-directed learning and study group learning based on the Nordic tradition of study circles. The project also aims at implementing Universal Design for Learning (UDL) [14], to ensure maximum accessibility to the materials by the participants.

Finally, the project has identified the mobile phone as the main platform for "course" delivery. The argument for this decision is that the target group often have their own mobile as their only digital device, and that it will function as a learning resource both in a group learning situation as well as for personal learning.

The 9-Conversations project is organized in the following way:

*Project Management* – including Quality Assurance and evaluations – a fixed amount of 500 Euro per month for the project coordinator and 250 Euro per month for the other partners. Number of days / hours are unspecified.

A set of Intellectual Outputs (IO):

- Business start-up FAQ for the partner countries (IO-1) 20 to 30 questions
- Adaption of EntreComp framework (IO-2) the EU Entrepreneurship reference framework
- Integrating EU skills Profile into entrepreneurial training (IO-3)
- Course materials development (IO-4) with micro-credentials (badges)
- 9-Conversations Pilot course (IO-5) not approved by the EU Commission
- Facilitation Guide (IO-6)
- 9-Conversations The app (IO-7)

Each IO has one of the partners as a *lead partner*. Even though every IO has a specific output type, they will all be interdependent but also be input to or integrated in the final IO, the app.

The non-approval of IO-5, the Pilot course, deviates from earlier LLL projects. The implications of the rejection are as yet unclear and have to be investigated as part of the forthcoming research – how will the project team cope with this "hole" in the project?

The project will be managed using a CCD approach. A quality assurance plan is under development and will be used to evaluate the quality in each IO by a set of criteria. Section 3 contains a more detailed description of how the CCD is implemented and can be used for the case study. A first version of the QA plan is also available.

### 2.2 Erasmus+ project general data collection

The stakeholders of Erasmus+ EU projects are several. From the EUs point of view, the EU funding must help the EU achieve its goals. With reference to the proportionality principle [6], small projects are expected to provide "exchange of best practices" among partners and participants, while larger projects with many partners are expected to "impact on education and training systems" in Europe. Other stakeholders are National Agencies and their advisors, expert evaluators, and finally project coordinators and participants. There is also a demand for effectiveness and transparency, i.e. a cost-effective process with a standardized digitalisation of the application and evaluation process, and the follow-up process when the project is running, by using the Erasmus+ Mobility Tool+ as described in the MT+ Beneficiary Guide [15]. The specification of cost items is largely standardized and progress is documented in MT+ both by collecting data of events, budget use and by templates for interim and final reports.

In the forthcoming project we will supplement the case study with questionnaires and structured interviews with a small number of stakeholders; National advisors; Expert evaluators and project managers. The aim is to uncover how the difference between the earlier way of organising LLL Multilateral projects and the new way of organising Strategic Partnership projects in Erasmus+ affects the quality of the project outcomes. In section 3 we have worked out a set of questions that will help us shed light on the quality issue.

# 3 THE PROJECT'S APPROACH TO QUALITY ASSURANCE AND EVALUATION

In this section we will present the Concurrent Design method approach and the tools for managing and implementing the 9-Conversations project (the case) with focus on evaluation and quality assurance, both regarding the running of the project as well as quality assurance of the IOs.

Secondly, we will present a set of questions to be used for questionnaires and interviews with stakeholders.

### 3.1 9-Conversations and the Concurrent Design approach – the case

In this project, we use a Concurrent Design (CCD) approach. In general, with the use of CCD, we try to get better results by focusing on the people who are producing the outputs, the process they are going to use to produce the outputs, and the necessary tools needed to produce the outputs [16]. However, traditional CCD is based on the fact that the project participants meet physically for intensive cooperation sessions. This contrasts with the preconditions for our project, where we depend on conducting online cooperation sessions since the participants are spread over large parts of Europe. In order to succeed with online sessions, we have greater challenges in relation to communication, collaboration, coordination and awareness among the project participants [17]. To deal with these challenges we have experienced that an important success factor for online collaboration is the tool support [10].

To help us with progress, coordination, awareness, mutual understanding, communication and collaboration in our project, we use a tool we have developed to back the CCD approach in project work. This tool is a Sharepoint site that gives the project participants a better overview of the project. In this project site, the partners can contribute, and find and add all kinds of information that is relevant to the specific IOs and the running of the project. In this project site the project participants can find dates and deadlines, preparation issues and agendas for all the meetings, events and activities during the project. There is also a document library in this project site, where all relevant documents and all

produced materials are available for all partners. All documents are available for co-writing, so that we always work on the same and latest version of each document. This also makes it easier to follow the progress in each document and in each IO in the project.

The project site is an important tool for achieving effective online collaboration with continuous focus on quality assurance (QA) and evaluation. Here are some of the benefits we expect to achieve in this regard:

- The project site will serve as a Single Point of access, i.e. the participants should go to this project site and be able to navigate to all relevant project resources. In this way, we ensure that all project participants have access to the same information, that they get the opportunity to give feedback on others' work in progress and thus ensure that the quality is the best possible.
- The project site gives project overview. The participants must necessarily relate to a lot of information in such a project, but the project site gives a good overview, which initially contains information about the projects participants, upcoming project's activities, the results we aim to produce, and the tools we will utilize. This also helps the project participants understand the working process that we intend to follow in the project.
- Coordination of the participants can be even more challenging when they are distributed and it
  is therefore even more important to have appropriate tool support. Facilitation and
  collaboration by "walking around" can be very useful when participants are co-located, but this
  is impossible in a distributed setting. However, navigating in a project site where all project
  resources are available is considered to be a good alternative. The project participants gain
  awareness of others' contributions and can adapt their work in relation to this, in order to
  achieve the best possible quality.
- Initial training of the project participants is important in order to establish a common understanding of the project with regard to collaboration and how it should take place, which results to achieve, and how to evaluate the work to ensure the desired quality. It has proven to be useful to discuss about project challenges based on a project site that also visualizes the process we are going to implement. The fact that the learning material actually is a by-product of the initial project phase also contributes to effectiveness and efficiency.
- Storage of information Since the project site is a Single Point of Access we can establish structures that ensure that all necessary information (new ideas, to-do actions, decisions, etc.) can be stored and retrieved, i.e. catch up on what's happening during the project. In this way, we avoid neglecting central things along the way, which indirectly contributes to quality assurance.

In addition to the tool itself, the working process we use in the project is also very important [16]. To achieve expected quality the process must be well integrated with the tools, and contain an appropriate level of evaluation activities. For this project, we have planned a process with partner meetings each month during the entire project period. Most of the meetings will be online and all project participants must attend each meeting. The meetings are according to the CCD-method arranged as cooperation sessions. This is cooperative sessions where we do an actual job together in the session, i.e. not just summarize work that has been done so far or discuss about work that has to be done in the future. These cooperation sessions help all the partners contribute better in all the IOs and it helps the whole project group to get a better overview and understanding of each IO and the project in total. At the end of each cooperative session all the partners collaborate to make the agenda for the next partner meeting. The leaders of each IO must put relevant subjects or tasks regarding their IO on the agenda for the next session and ask all the other relevant partners to prepare before the next meeting. In this way everyone has to take responsibility for their own IO, but also prepare and contribute to other activities and IOs in the project. As part of the process, we also focus on evaluation and quality assurance as the project progresses. At the end of each session, oral evaluation is typically conducted among the participants. This is followed up by a survey that all participants must answer and the results from this survey are distributed to all project participants, via the project's website, in retrospect.

## 3.2 Quality in Erasmus+ Strategic partnership projects compared with LLL Multilateral projects

Both Erasmus+ and LLL projects are loosely coupled projects. To manage these types of projects and to develop deliverables with high quality is generally challenging. In the forthcoming research we will do an investigation both by a questionnaire and in depth interviews with people with experience of both approaches to see how quality assurance fits in with the overall project work.

Since the one aim of our work is to help new projects to increase quality we would like to find answers to the following questions:

In your view, what aspects of the Erasmus+ project help you and the other partners to focus on the quality of the process and outcomes? Rate the following in order of importance from 1 as least important to 7 as most important.

- 1. Having a designated partner with responsibility for QA
- 2. Having a quality plan from the beginning of the project
- 3. Quality assurance is embedded in the project work processes
- 4. We have a formal external quality assurance expert panel
- 5. We are all professionals and always act to the highest standards without needing a formal framework
- 6. Completing the interim and final reports is enough to ensure high quality
- 7. Having a strong and competent project coordinator

### 4 CONCLUSIONS AND FUTHER WORK

In the Lifelong Learning Mulitilateral project dCCDFLITE, - making a MOOC for a global audience in entrepreneurship training [2], we used the Concurrent design approach for project management and evaluation with a positive effect on quality, compared with earlier projects [1]. In the new project 9-Conversations, which is an Erasmus+ Strategic Partnership project, the organisation of the project has changed with the introduction of Intellectual Outputs instead of Work Packages, where only innovative output can be developed in an IO, while all other supportive, dissemination and quality assurance tasks are hidden as part of Project Management without any specific days allocated. There are great similarities between 9-Conversations and dCCDFLITE, i.e. it is an entrepreneurship project; an app to support learning will be developed and the Concurrent Design approach will be used. These similarities give us the opportunity to look at the effect of the organisational changes from the Lifelong Learning project set up compared with the new Erasmus+ set up.

To support or disregard our findings we plan to interview one or more Erasmus+ evaluators, National Agency advisors and project coordinators. 9-Conversations have to develop the evaluation and quality assurance processes within the Erasmus+ set up. Our hope is to be able to give some advice on internal evaluations of Erasmus+ projects and more generally to shed light on Erasmus+ projects in general.

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#### REFERENCES

- [1] T. Hjeltnes, A. Fox, T.A. Hjeltnes, "Internal evaluation of educational EU projects," in *INTED2016 Proceedings*, pp. 7962-7972, 2016.
- [2] B. Hansson, A. Fox, T. Hjeltnes, "dCCDFLITE distributed Concurrent Design Framework for eLearning in IT Entrepreneurship", A Lifelog Learning, Erasmus Mulitilateral application, National Agency Sweden, 2013. Retrieved from https://9conversations.no/dcoument-library/
- [3] European Commission, "Strategic Partnership in the field of education, training and youth," Erasmus+ Programme Guide", Version 1: 24-10-18, pp. 101-124, 2019, Retrieved from https://www.siu.no/content/download/9010/70302/file/Erasmus+%20Programme%20Guide%20 2019.pdf
- [4] T. Hjeltnes, A. Fox, "9 Conversations Network-building for self-employment of refugees", A Strategic Partnership application, Diku (SIU), 2018. Retrieved from https://9conversations.no/dcoument-library/
- [5] J. Hughes, L. Niewenhuis, "A Project Manager's Guide to Evaluation," Evaluate Europe Handbook Series Volume 1, pp. 1861-6828, 2005, Retrieved from http://www.pontydysgu.org/wp-content/uploads/2008/02/EvaluateEuropeVolume1final.pdf
- [6] European Commission, "Erasmus+-Experts-Briefing-Sheet", 2018. Retrieved from https://9conversations.no/dcoument-library/
- [7] European Commission, "Lifelong Learning Programme (LLP) Guide 2010. Part I: General Provisions", 2010.
- [8] H. Clarc, "Using Language," Cambridge University Press, 1996.
- [9] G. Klein, P.J. Feltovic, J.M. Bradshaw, et. al, "Common ground and Coordination in Joint Activity", Organizational Simulation, New York: Wiley,2005.
- [10] K. A. Strand, T. Hjeltnes, T.A. Hjeltnes, M. Storvik, «Articulation of Distributed and Collaborative Design of Entrepreneurial Courses," *INTED2014 Proceedings*, pp. 7962-7972, 2014.
- [11] K. A. Strand, A. Staupe, "The Concurrent E-Learning Design Method", Proceedings of Global Learn Asia Pacific 2010, AACE.
- [12] D. Stamatis, B. Hansson, T.A. Hjeltnes, M. Lachlan, "A distributed Concurrent Design based e-Learning approach to Entrepreneurship Education," *Proceedings of ICEIRD, 2015.*
- [13] The Business Model Canvas [Internet]. Retrieved from http://www.businessmodelgeneration.com/canvas/bmc
- [14] T.E. Hall, A. Meyer, D.H. Rose, "Universal design for Learning in the Classroom: Practical Applications". *Guilford Press*, 2012.
- [15] European Commission, "MT+ Beneficiary Guide", Erasmus+, 2018. Retrieved from https://webgate.ec.europa.eu/eac/mobility/media/Mobility%20Tool+%20Guide%20for%20Beneficiaries.pdf
- [16] K. A. Strand, A. Staupe, og T. A. Hjeltnes, «Principles of Concurrent E-Learning Design», 2013, pp. 48–75.
- [17] K. A. Strand, A. Staupe, og G. M. Maribu, «Prescriptive Approaches for Distributed Cooperation», i World Conference on Educational Multimedia, Hypermedia and Telecommunications, 2012, bd. 2012, pp. 1011–1020.