

Impact Evaluation of Information Literacy initiatives: Case study of EU Erasmus+ projects in the Western Balkans

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Abstract. *This paper is based on research being undertaken in City, University of London. The paper was initially presented online, due to Covid-19 travel restrictions at the ICISIL 2021 Conference, hosted in Braşov, Romania 11th-12th March 2021. The paper describes research conducted to date on this topic of impact evaluation of Information Literacy initiatives in the Western Balkans and describe a pilot study which investigates the research question, “Can Contribution Analysis (a Theory Based approach to evaluation) be used to evaluate, the long-term impact of European Union Tempus and Erasmus+ projects effectively?” The research is centred on two projects funded by the EU under the Tempus and Erasmus+ programmes which were conducted in the Western Balkans from 2011-2015 and 2015 to 2018. Both projects were focussed on the theme of Library and Information Literacy development. The universities and institutions involved in these projects were from Albania, Bosnia and Herzegovina, Kosovo and Montenegro. The pilot study itself was conducted in Bosnia and Herzegovina during late 2020 and early 2021. The principal focus of this research is to examine these EU Tempus/Erasmus+ projects and establish if Contribution Analysis, a Theory Based approach developed by John Mayne, can be used to evaluate and measure the impact of the projects on the main participants in the project implementation and their impact also on the wider university community and target groups which these projects were expected to affect. The research has developed a Theory of Change which was used to help build the contribution evidence-based narrative of the impact of the projects post ante. The research has availed of key documents, which are employed at the conceptual stages of Erasmus+/Tempus projects at project application phase, such as the Logical Framework Matrix. The research also utilizes other project documents that are a feature of the project during the project implementation, intermediate and final reporting phase. These include project management reports, working group reports, and National ERASMUS+ Office reports, intermediate and final reports. The research has also incorporated partner contributions and data from questionnaires applied in this pilot research in order to link the outcomes, deliverables and causal links of the projects with its intended logic.*

Keywords: Contribution Analysis (CA), Impact evaluation, Theory of Change (ToC), Project evaluation, Information Literacy (IL), Western Balkans, Libraries, Erasmus+

Introduction

The European Union (EU) has been involved in developing Higher Education for over three decades. This started back in the early 1990's with Trans-European Mobility Programmes for University Studies (TEMPUS) programmes which later became part of the overarching Erasmus+ Programme. Tempus and now Erasmus+ have been very active in many regions of the World, from the Western Balkans, Eastern Partnership Countries, South Mediterranean Countries, Territories of Russia (as recognized by international law), Asia, Central Asia, Latin America, Gulf Countries, South Africa and ACP Countries (African, Caribbean and Pacific States).

The EU Tempus programme operated under phases commonly known as phase I, II, III, IV from 1990 to 2013. Tempus projects lasted either 2 or 3 years and each project received funding of between .5 million euro and 1.5 million euro. Different types of projects were funded during this period such as Joint European Projects (JEPs), Structural and Complementary Measures (SCMs) and Individual Mobility Grants (IMGs). The focus of this research will be on Joint European Projects, “*which aim to increase the cooperation and networking between actors in higher education in EU member states and partner countries and help, the higher education sectors propagate its knowledge outside of academic institutions*”(European Commission, 2008).

The exact number of projects implemented under the Tempus programme during the past three decades is not readily available. However, the total estimated funds channeled through the programme over the past 20 years is estimated at 1.4 billion EUR (1990-2010).

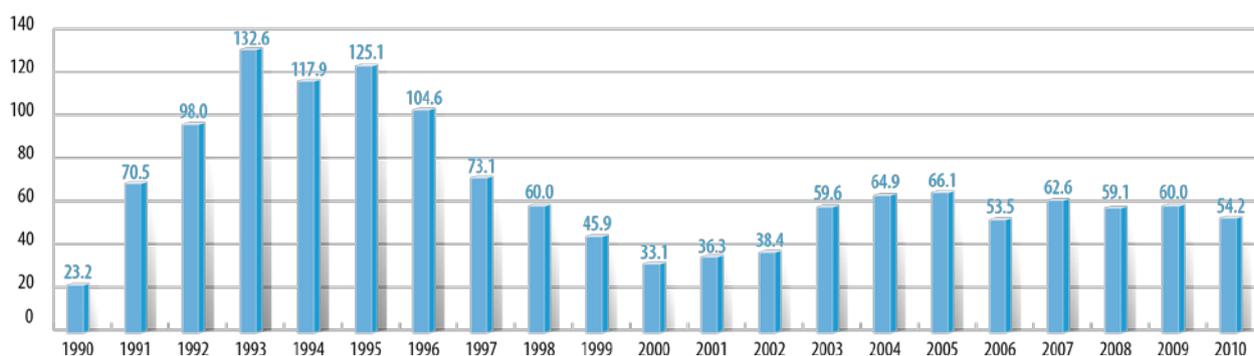


Figure no. 1. Tempus Budget 1990-2010

Source: [McCabeet al.,2011, p.30]

Following phase IV, Tempus ceased operation and along with other major EU programmes run by the EU was absorbed under the overarching umbrella of Erasmus+. Tempus type activities and initiatives continued to be financed under the new ERASMUS+ Capacity Building in the Field of Higher Education (CBHE) component of Erasmus+. Similar to Tempus, CBHE activities are now managed by the Education, Audio-visual, and Culture Executive Agency (EACEA). The EACEA also manage funding under the EU Creative Europe, Sports and Citizenship and Volunteering programmes on behalf of the European Commission.

The focus of this research will be on two projects implemented in the Western Balkans that were funded under the Tempus IV and the later CBHE funding programmes.

Rationale for this research

Contribution Analysis (CA) will be used to determine whether or not, or to what extent these Tempus and CBHE projects may be considered impactful. The potential of this approach for use in the evaluation of other projects will then be assessed. This research aims to investigate ways in which the impact of European Union and similarly EU funded projects can be evaluated beyond the immediate conclusion of the project work. This research may have implications for other EU projects beyond the Library and Information Literacy (IL) field and beyond the Western Balkans region.

The Research Question is;

Can Contribution Analysis (a Theory Based approach to evaluation) be used to evaluate, the long-term impact of EU Tempus and Erasmus+ projects effectively?

Background

The EC along with the EACEA have in the past, commissioned a number of reports and thematic studies to evaluate Tempus projects.

These include:

“The Impact of Tempus III: The impact of the Tempus Programme on higher education development in the Tempus Partner Countries; A Survey” (2008) (Report).

In addition, four thematic studies looked at key areas of reform so as to gather examples of *“good practice and important lessons which could be of particular interest to institutions that are considering conducting similar EU projects in the future within the framework of the Erasmus+ programme”* (Markovic & Lazetic, 2016, p.1). These four thematic studies were as follows:

- *Study of the Achievements of Tempus IV projects in curriculum development in engineering and environmental sciences in Eastern Europe* (Markovic, J. & Lazetic, P., 2016) (15 Projects Curriculum Development).
- *Study of the Achievements of Tempus IV Projects on the internationalisation of higher education in Central Asia* (Hagen, S., 2016) (50 Projects).
- *Study of the Achievements of Tempus IV Projects in university-enterprise cooperation in the Southern Mediterranean region* (Dubosc, F., 2016) (44 Projects).
- *Study of the achievements of Tempus IV Projects in Improving Student Services in Higher Education Institutions in the Western Balkans* (Avramov, D. & Mešić, E., 2016) (24 Projects).

These reports and studies commissioned by the EACEA provide a highly useful insight into the activities of the Tempus project since the early 1990's. The reports outlined the many achievements and accomplishments of the Tempus programme particularly in the areas of modernising higher education in the Partner Countries in the particular regions.

These reports however also highlight many shortcomings and challenges as was outlined in the 2008 report *“the weaknesses of the Tempus programmes differ from one region to the next”* (EC, 2008, p.46). The report also goes on to say *“there is some way to go in terms of providing positive benefits to the wider community especially employers ... more could be done to put in place the mechanisms to support a more dynamic and lasting interaction between universities and their surroundings”* (EC, 2008, p.59). However, a significant shortcoming of these reports is that they fail to measure the actual impact of the individual projects. The reports do list the achievements of the projects and this is well documented. However, listing achievements is not measuring impact. The reports tend towards giving a global overview of the projects describing them in a very general way and what occurred, a *“global picture of achievements and challenges”* (Dubosc, 2016, p.6).

What is Information Literacy

There are many definitions and explanations of what exactly is Information Literacy, however universally there is no common definition; there is a common understanding of sorts. IL is often linked with related literacies such as media literacy, internet literacy, digital literacy, computer literacy, technological literacy. However, as explained by Eisenberg (2010), information literacy is the “unifying” overarching literacy within which these other literacies fall under.

Perhaps the most relevant definition of Information Literacy that has most resonance for this study which emerged in recent years is the definition from the Chartered Institute of Library and Information Professionals (CILIP) in the United Kingdom (UK) and their high level definition of Information Literacy launched in 2018.

“Information literacy is the ability to think critically and make balanced judgements about any information we find and use. It empowers us as citizens to reach and express informed views and to engage fully with society” (CILIP, 2018).

This definition is important to this research for a number of reasons and the keywords to be found in the definition will play a key role in measuring the effect and outcomes of the selected library and IL projects that the research attempts to determine.

Information and Media Literacy

The term 'information literacy' was first coined by Paul G. Zurkowski in 1974 who proposed to the U.S. National Commission on Libraries and Information that there was a need for Universal Information Literacy. Zurkowski envisaged an information literate individual, as anyone who had learned to use a wide range of information sources in order to solve problems at work and in their daily lives. Zurkowski's definition continues to have validity over 40 years later.

In his address by video link at the 10th LILAC Conference held in Sheffield Hallam University, England, in 2014, Zurkowski reiterated the assertions he made in 1974 and went on to declare that information overload could now be a problem for democracy and may *"increase the power of the mighty and decrease the power of everyone else"* (Zurkowski, 2014).

Zurkowski goes on to explain that IL skills are required in homes, factories, offices, schools and in governments. This will enable democratic forces to deal with corruption and the undermining of democracies. Such disinformation efforts manage to disrupt citizens consideration of the alternative policies and hence they will be reduced in their power. Information Literacy can empower average citizens to navigate through the information overload problems and get to the answers they need thus empowering them in the vital matters of their lives and countries (Zurkowski, 2014).

The Alexandria Proclamation on Information Literacy and Lifelong Learning states the following about the importance of information literacy for lifelong learning;

"Information Literacy lies at the core of lifelong learning. It empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion of all nations"(IFLA, 2005, p.3).

The Proclamation goes on to highlight the critical difference that Information Literacy and Lifelong Learning can make in Society and the change it can bring to people's lives:

"Lifelong learning enables individuals, communities and nations to attain their goals and to take advantage of emerging opportunities in the evolving global environment for shared benefit. It assists them and their institutions to meet technological, economic and social challenges, to redress disadvantage and to advance the wellbeing of all"(IFLA, 2005, p.3).

In the past number of years, there has been a growing number of academic, organizational and governmental attempts to link Information Literacy with Media literacy. The focus is on the citizen and information, regardless of how the individual receives the information. It would seem then a logical progression to investigate the synergies between the two terms and hence in recent years, attempts have been made to consolidate them and the concept of Media and Information Literacy (MIL) was formed. This would seem a logical next step as both literacies set out to empower people through access to information and knowledge.

MIL recognizes the role of information and media in our everyday lives. It promotes at its core freedom of expression and information and *"empowers citizens to understand the functions of media and other information providers, to critically evaluate their content, and to make informed decisions as users and producer of information and media content"* (UNESCO, 2017). Information Literacy and Media Literacy have

traditionally been seen as separate and distinct fields. However, with the proliferation of information through a vast array of media some old and some new, the merger of the two was inevitable.

Measuring Social impact

It is generally accepted that measuring social impact is a difficult undertaking. This is because there is no single methodology to be used due to the complexity of different programmes. Measuring social impact takes time, resources and patience. Deciding the “right” indicators or most relevant indicators to use can be challenging and there are different types of evaluations and requirements, and hence it is difficult to stick to one tested method. The evaluations which have been conducted thus far of Tempus and Erasmus+ projects do not focus on gauging impact. Significantly, they are limited beyond the completion of the project work. In order to demonstrate impact, one has to present evidence of attribution or contribution, what happened could not have happened by other reasonable means or other influencing factors other than the action. In order to undertake this research, two projects based in the Western Balkans have been evaluated to act as sample for the purpose of this research. Both projects are library related and have strong relevance to information literacy. These projects were conducted in the Western Balkan region between the years 2012-2015 and 2015 to 2018.

It is important at this juncture to define the term “impact” in the context of this research and also in the context of evaluation and results-based management of projects. For the purpose of this research the term impact will be defined as the *“positive and negative, primary and secondary long-term effects produced by a development interaction, directly, intended or unintended”* (OECD DAC, 2010, p.24).

It is critical that careful attention is given to capturing the intrinsic value of projects and not only to focus on the economic dimension when attempting to measure impact. Attention must also be given to the nature of the impact, which one is trying to measure. The European Commission (cited in ESF, 2012) emphasise the need to divide impact into two distinct groups: scientific and societal. Societal impact can be divided into several categories and it is important to know which category is the target for assessment when measuring impact, as different methods and approaches to impact assessment will require different methods (European Science Foundation, 2012). ESF (p.7) proceed to highlight that Societal impact can be divided into several categories (European Commission, 2010; Delanghe & Teirlinck, 2010 cited in ESF, 2012) as follows:

- Scientific impact: contribution to the subsequent progress of knowledge, the formation of disciplines, training and capacity building.
- Technological impact: contribution to the creation of product, process, and service innovations.
- Economic impact: contribution to the sale price of products, a firm’s costs, and revenues (micro level), and economic returns either through economic growth or productivity growth (macro level).
- Social impact: contribution to community welfare, quality of life, behaviour, practices and activities of people and groups.
- Political impact: contribution to how policy makers act and how policies are constructed and to political stability.
- Environmental impact: contribution to the management of the environment, for example, natural resources, environmental pollution, climate and meteorology.

- Health impact: contribution to public health, life expectancy, prevention of illnesses and quality of life.
- Cultural impact: contribution to understanding of ideas and reality, values and beliefs.
- Training impacts: contribution to curricula, pedagogical tools, qualifications.

Methodology

This preliminary research is focused on the use of Contribution Analysis, Theory Based methods of evaluation. Contribution Analysis is a Theory Based method of evaluation which tests the effect on the action by testing assumptions at each level of the theory of change through a series of building blocks which achieve the overall goals (Mayne, 2012).

The involvement of stakeholders in the Western Balkans cannot be underestimated; in fact, they are central to helping assess the contribution of social impact as it is these bodies and their domains which are being assessed. Involvement of domains and their stakeholders in evaluation design and practice is near to a necessity for assessing and achieving social impact (Spaapen & van Drooge, 2011). Contribution analysis is a qualitative method and a structured approach to understanding to what extent an observed action is a consequence of a particular activity as opposed to other factors. Theory-based approaches will be used in this research to consider these factors and to concentrate the focus on the underpinning assumptions, Theories of Change (ToC) implicit or explicit in a programme design with the aim to test these.

These approaches seek to identify 'why' and 'how' changes take place in a project, by identifying, articulating and testing the ToC that links the results chain of a project (from outputs to outcomes and impacts) (Church & Rogers, 2006). The changes could result in positive or negative results.

A Theory of Change logic was constructed for the Pilot study of this research to measure the intention of projects (e.g. Awareness and implementation of Information Literacy (IL), Library related activities) as set out in the Logical Framework Matrix (LFM) of the original project application. This was then compared with the Theory of Change to measure what happened, when and how (Example: Were the IL programs implemented successfully as intended in the original project application?).

Why? Why Measure? Why Evaluate?

A question many organisations must ask themselves is: Why? Why Measure? Why Evaluate?

This will depend on the organisation, resources available, timeframe, potential benefits and is it important to know why? The EU have been funding these Tempus and CBHE projects for over three decades and hence demonstrating impact may not merely be an option, it may be seen as an obligation.

Methodologies for Measuring Impact Considered

The particular methodology to be used to evaluate project will depend on the purpose „for data collection and analysis is determined by the subject and purpose of the evaluation” (DANIDA, 2012, p.20). This research considered several impact evaluations tools and techniques. While some may be beneficial, they were deemed inadequate for this research due to the type of projects, evaluation post ante and other factors.

Sample of the methods considered for this research are listed below:

- Third Sector Organisations (Impact analysis framework)

- Logic Model
- Social Return of Investment (SRoI)
- Value Chain Logic Model
- Theoretical Framework
- Cost Benefit Analysis (CBA)
- Social Reporting and Auditing
- Outcome Mapping
- Social Impact for Local Economics (Simple)

The Western Balkan Projects

The main objectives of the EU projects under review in this research focused on Library Development and developing Information Literacy skills and programs. The objectives of these projects are clearly outlined and documented at the outset project application stage. All applicants must complete a Logical Framework Matrix for each project as part of the application process. The LFM for these projects play a significant role in this research, as a key tool in assessing the contribution projects have made. The objective of this research is to use the evidence available to construct plausible Contribution Analysis and Theory of Change and a result chain (of causal packages) leading back to the intended objectives of the LFM.

Scope

The projects that are the subject of this study are as follows:

The EU funded TEMPUS project *Developing Information Literacy (IL) for lifelong learning and the Knowledge Economy in Western Balkans countries* (RINGIDEA) which ran from 2011 to 2015.

And

The ERASMUS+ CBHE *Library Network Support Services* (LNSS) project which was active between the years 2015-2018.

This research also refers to other projects under the remit of the EACEA in the main empirical study. These are CBHE projects in which the author has also been involved but in other geographical regions other than the Western Balkans. Although outside the Western Balkans the benefits of measuring impact may influence these projects also.

Project 1 TEMPUS (RINGIDEA)

Title of Project:

Developing information literacy for lifelong learning and knowledge economy in Western Balkan countries (RINGIDEA)

Project Duration:

October 2011 - October 2015

List of Project Partners:

Limerick Institute of Technology, Limerick, Ireland
 Transilvania University of Brasov, Brasov, Romania
 University of Crete, Rethymno, Crete, Greece
 Agricultural University of Tirana, Tirana, Albania
 University FAN S NOLI of Korçe, Korçe, Albania
 University of Bihać, Bihać, Bosnia and Herzegovina
 University of Mostar, Mostar, Bosnia and Herzegovina
 University of Tirana, Tirana, Albania
 University of Pristina Kosovoska Mitrovica, Mitrovica, Kosovo
 University of Montenegro, Podgorica, Montenegro

University of Sarajevo, Sarajevo, Bosnia and Herzegovina
The National and University Library of Kosovo, Pristina, Kosovo
Middlesex University, London, United Kingdom

Project 2 ERASMUS+ Capacity Building (LNSS)

Title of Project:

Library Network Support Services: modernising libraries in Western Balkan countries through staff development and reforming library services [LNSS]

Project Duration:

October 2015 - October 2018

List of ProjectPartners:

Limerick Institute of Technology, Limerick, Ireland
Transilvania University of Brasov, Brasov, Romania
The Pyramid Group, Ulm, Germany
University of Crete, Rethymno, Crete, Greece
Agricultural University of Tirana, Tirana, Albania
University FAN S NOLI of Korce, Korce, Albania
University of Montenegro, Podgorica, Montenegro
University of Pristina Kosovoska Mitrovica, Mitrovica, Kosovo
University of Pristina, Pristina, Kosovo
University of Sarajevo, Sarajevo, Bosnia and Herzegovina
University of Mostar, Mostar, Bosnia and Herzegovina
The Cantonal and University Library of Bihać, Bihać, Bosnia and Herzegovina

Developing the Contribution Narrative

Participatory approaches seek to engage the beneficiaries and stakeholders who were directly involved in the project's implementation, planning, monitoring and evaluation process, so as to establish the why, how, who, what, for who (Campilan, 2000). Participatory methods such as interviews are used in this research. It is important to assess the impact of the project on the intended beneficiaries and to get local stakeholders' input and to provide information about their experiences which is *"the single most valuable source of insights' on the impact of an intervention"* (Menkhaus, 2004, p.10).

Vital also is the need to collect research on beneficiaries' experiences and opinions on the initiatives that have impacted on them as it is the local communities that can provide evidence of cause and effect (Menkhaus, 2004). These methods are important in this research so as to establish the Contribution Analysis and the ToC.



Figure no. 2 Participatory approaches

Source: [Author's own research].

This research uses key documents, which were developed at the conceptual stages of Erasmus+/Tempus projects, such as the LFM developed at the application stage and other documents employed during the project implementation phase, such as project management reports, working group reports, intermediate report, NEO reports, the final report and partner contributions and data from questionnaires to link the outcomes and deliverables and causal links of the projects with its intended logic. The selection of the key objectives and components from the LFM and linking them with the ToC were given careful consideration to ensure that the precise questions regarding what is to be investigated and what is to be measured was applied. As this research involved a number of stages and steps, the need to triangulate results were important in both the analysis of feedback and the analysis and refinement of data.

Preliminary results and discussions

Benefits of the Research

The two Western Balkans projects are the testbed to answer the research questions. By evaluating these IL and Library projects this research will be able to assess the contribution (if any) the projects have made in the Region. It will then be in a position to assess the potential of using this Contribution Analysis for evaluation of other EU and similarly funded projects.

Openness and Transparency are key communication principals used by the EU to communicate with its citizens and stakeholders. Demonstrating the impact of Tempus and Erasmus+ projects will help strengthen relationships with EU member states, by demonstrating accountability to the citizens of Europe and Partner Countries. This research may have implications for other EU projects beyond information literacy, and beyond the Western Balkans region. The ability to demonstrate the impact of these EU funded projects in the Western Balkans will have a far-reaching effect on other projects and other regions. It will also help change the way projects are monitored and valued in the future. It will also impact on the way the EU and EACEA monitor, evaluate and measure the impact of the Erasmus+ projects, far beyond the Western Balkans.

Work schedule Pilot Study & Main Empirical Work Stages

In order to test the methodology of the research and the use of the contribution analysis along with ToC, a pilot study applying to the six-step framework based on Mayne's methods of contribution analysis was conducted in one of the Western Balkan countries (Bosnia and Herzegovina) during the latter part of 2020 and early 2021 using the same stakeholder group which will be used in the empirical body of the research. This group is comprised of staff from the Partner Country Institutions in the project such as academic staff, librarians, project management and administrative staff who had an integral role in the projects and hence were familiar with them. The empirical research may include some of the people involved in the pilot study however where possible this will be avoided.

Contribution Analysis (based on Mayne's Six Steps Framework) was used to gather the evidence required to make the causal link between the projects and their impact (Better Evaluations 2019). Contribution analysis aims to demonstrate the contribution a project or programme has made, to particular outcomes through reaching an understanding of why the observed results have occurred, and the role of the projects, internal and external factors in their realisation. CA also perceives that other influences may have played a role in the final results, and hence in some way played a role in the final outcome, it is important to determine the effect of these influences.

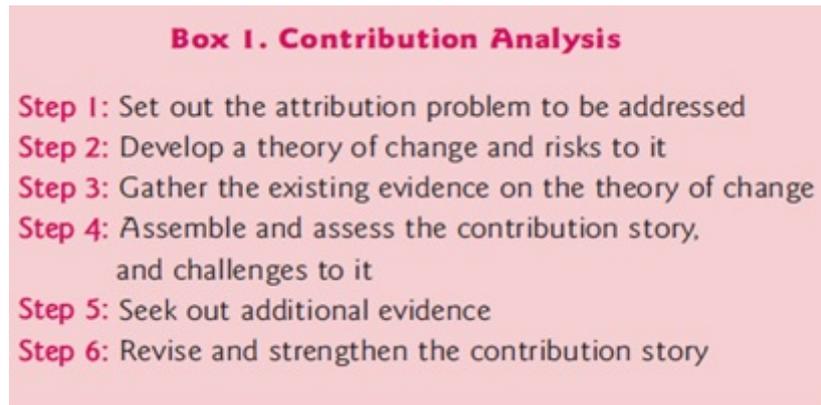


Figure no. 3. Contribution Analysis
Source: [Better Evaluation 2019].

It should be noted that Mayne’s Contribution Analysis is a relatively new approach to evaluation and „*those who have made use of CA have usually modified these steps to best suit the circumstance they face*” (Mayne, 2012).

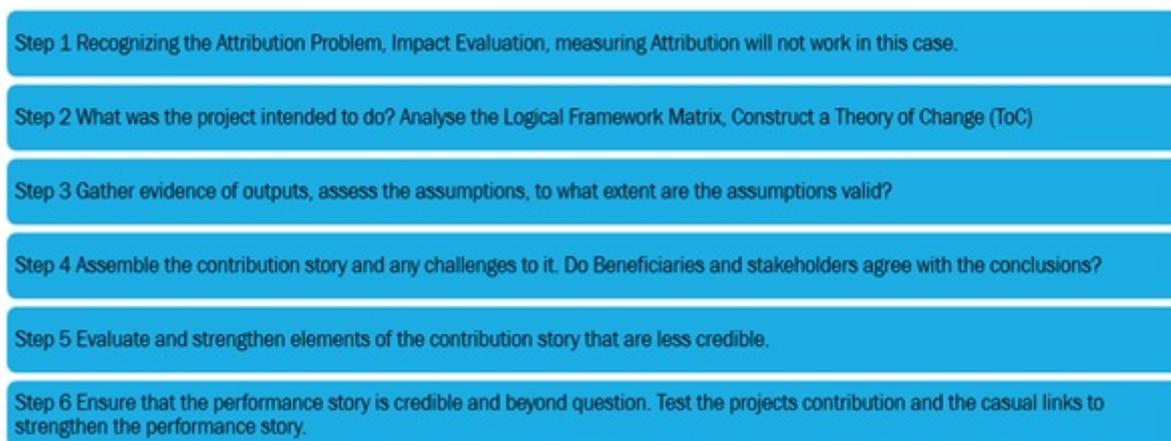


Figure no. 4. Mayne’s Six Steps in Practice
Source: [Better Evaluation 2019].

Progress to date

This research has achieved some promising results to date, Mayne’s Six Steps of Contribution Analysis has also been applied in the pilot study research and this process is now also concluded. Evidence of outputs has been gathered, and assumptions were assessed. Elements of the contribution story were evaluated and strengthened to ensure credibility and were examined.

The attribution problem has been assessed. As is common with project evaluation or attempting to measure the effect of projects, attribution is difficult to prove outright. This makes determining causality more elusive, and being able to definitively state that X caused Y or that the projects caused the outcome more challenging. Contribution analysis is more suited towards determining the effect or influence a project has had or the contribution it has made to the outcomes and results. The research has also developed a Theory of Change which was used to help build the contribution story and an evidence based narrative of the impact of the projects. Evidence taken from the

various project documents including application and implementation documents, reports, outputs assumptions have also been identified and the contribution narrative has been successfully assembled with challenges addressed and less credible elements interrogated effectively to ensure reliability of the performance description. The ToC and the Contribution Analysis narrative for the pilot study has been presented to participants in Bosnia and Herzegovina during a number of interviews to test the assumptions and amend the contribution analysis narrative accordingly based on the evidence gathered. This meant that elements of the performance description were evaluated and strengthened with amendments to the narrative made where required in light of evidence as disclosed by the participants. Finally, the project contribution and the casual links were tested rigorously to enable strengthening of the performance description and contribution narrative in line with the sixth and final step of Mayne's Six Steps Framework for Contribution Analysis.

Conclusion

The pilot study has demonstrated that analysis of data sources including, various project documents and reports, and participatory involvement in the form of interviews and questionnaires used for the purposes of this research whilst somewhat laborious at times to analysis, does provide credible evidence-based consequences to develop the contribution narrative. The contribution, evidence-based narrative developed by this research, has shown encouraging signs that use of Contribution Analysis as a method of impact evaluation applied in Tempus, Erasmus+ and similar projects is potentially viable.

A strong causal claim in Contribution Analysis research, would be that the projects (Interventions) were a principal contributory cause of the observed results. In other words, the project was (or were not) a necessary component of a package of causal factors that together were sufficient to contribute to an observed result (Mayne, 2015). This component and causal claims will be further tested in the next phase of the research.

The main empirical study of this research will concentrate on the participants and the universities in the other Western Balkan countries who participated in the Tempus and CBHE projects that are the focus of this research (Albania, Kosovo and Montenegro). The next phase of the research will concentrate on conducting the six-step process of Contribution Analysis and building a ToC for the two projects. This will in effect require a much larger scale analysis of data and will involve substantially more participants for interviews and testing assumptions. The combined analysis incorporating the results from Bosnia and Herzegovina will then be conducted in late 2021 and early 2022 and it is envisaged that the research will be concluded late 2022 with final results published thereafter.

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